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The role of death technologies in grief: an interdisciplinary examination of AI, cognition, and human expression

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Introduction: In an era where technology is increasingly mediating human experience, grief too is being reshaped. This study explores how emerging death technologies like AI-generated voicebots alter our understanding and processing of loss. Using the character of Dimple Ahuja from *Mismatched Season 3* as a narrative lens, the paper examines the emotional and cognitive shifts that occur when individuals use artificial simulations such as the ‘Dadbot’ to stay connected with deceased loved ones.

Method: The study adopts a qualitative, phenomenological approach, analysing selected scenes and dialogues from *Mismatched Season 3*. The fictional narrative is treated as a cultural artefact that reflects real-world emotional dilemmas. A textual analysis is combined with insights from cognitive neuroscience, psychology, and ethics. The author’s autoethnographic reflections enrich the interpretation, grounding theoretical discussion in lived experience.

Results: Findings suggest that the ‘Dadbot’ offers temporary comfort by simulating presence, allowing Dimple to feel emotionally connected to her deceased father. However, it also risks fostering emotional dependency, delaying the acceptance of loss, and interfering with neurobiological healing processes such as neuroplasticity and emotional regulation. Psychologically, the simulation supports avoidance behaviors, while ethically, it challenges notions of memory authenticity and consent.

Discussion: Simulated grief technologies present a complex duality: they provide solace but risk disrupting the natural mourning process. From a phenomenological perspective, tools like the ‘Dadbot’ blur the lines between presence and absence, reality and simulation. The study concludes that while AI can support grief navigation, its use must be ethically designed and emotionally grounded, ensuring that technological continuity does not replace the irreplaceable truth of loss and love.

KEYWORDS

death technology, implications, psychology, grieving process, neuroscience, humanities

1 Introduction

As social beings living in terms of connections, emotions and feelings, the death of a loved one is among the most profound and universal experiences, leaving an indelible mark on the lives of those left behind (Doka, 2016). Grief, while deeply painful, is not merely a process of mourning but also a transformative journey one that fosters personal growth, emotional evolution, and a redefinition of one’s world (Alves, 2013). However, the complexity of grief requires exploration through multiple perspectives. Psychological insights reveal how loss impacts emotional processing, neuroscientific studies highlight the brain’s adaptations to loss, and humanities approaches examine how cultural and ethical dimensions shape our collective

response to death. These lenses as a whole offer a comprehensive framework to understand the intricate human experience of loss.

Grief, at its core, is about navigating the tension between holding on and letting go, it involves a complex interplay between memory, presence, and absence. This duality persists throughout illness and into bereavement (Bouchal et al., 2015). Memories of the deceased can evoke both pleasant feelings of presence and painful reminders of absence, depending on the context (Debus and Richardson, 2022). Psychologically, people traverse unique and often nonlinear paths through denial, anger, bargaining, depression, and acceptance, as outlined by Kübler-Ross (1970). These stages highlight the emotional struggles inherent in loss and the ways people attempt to reconcile their pain. From neuroscientific perspective, grief triggers significant changes in brain function, particularly in areas like the amygdala, hippocampus, and prefrontal cortex, which regulate emotion, memory, and decision-making (Freed et al., 2009). Neuroplasticity, the brain's ability to adapt—plays a critical role in integrating the loss, allowing people to rebuild their lives over time (Salzman and Fusi, 2010; Msawa et al., 2022). From a humanities perspective, grief is deeply embedded in rituals, storytelling, and ethical considerations. Culturally, mourning practices have provided communal frameworks for processing loss, preserving memory, and making meaning of life and death. Understanding bereavement as both an individual and collective process, rather than solely a medical condition, allows for a more nuanced appreciation of grief's cultural and personal dimensions (González-Arias, 2024).

In today's world, the emergence of death technologies has introduced a new dimension to this timeless human experience. Tools such as digital avatars and AI-driven chatbots offer simulated interactions with deceased loved ones, promising a sense of continuity and comfort. The use of AI-driven chatbots in grief support and continuing bonds with the deceased. These deathbots or griefbots utilize the digital footprint of the departed to simulate conversations (Luna and Jiménez-Alonso, 2024). While they may help develop habits of intimacy and maintain connections with the deceased (Krueger and Osler, 2022), concerns about ethical implications and potential individualization of bereavement exist. Advanced simulations, such as video call capabilities or humanoid representations, blur the line between reality and illusion, potentially delaying the acceptance of loss and fostering emotional dependency. These tools, as groundbreaking as they are, challenge the natural process of grieving and the authenticity of human connections, raising profound psychological, neuroscientific, and ethical questions (Luna and Jiménez-Alonso, 2024).

The Netflix series *Mismatched* Season 3 (2024) provides a compelling narrative framework for exploring these themes, particularly through the character of Dimple Ahuja and her creation of a death technology called the 'Dadbot'. Dimple Ahuja's lived experience as an adolescent navigating the loss of her father adds a personal and relatable dimension to this analysis. As both the creator of the 'Dadbot' and a bereaved individual herself, Dimple Ahuja's journey highlights the complex interplay between grief, technology, and human resilience. Her character portrays the duality of a mourner and innovator providing an insight that is rare indeed into the motivations, conflicts, and ethical issues while designing a technology to reincarnate a loved one virtually.

The 'Dadbot', designed by Dimple Ahuja, is an AI tool that simulates the voice of her deceased father and the responses of him, enabling her to bridge a sense of connection with him which will be gone forever if not. It shows how she wants to bridge the gap between absence and presence, and her denial of not letting him go. Especially, seeking solace in times of acute grief. Her personal journey raises crucial questions:

1. Can technology really ease the pain of loss, or does it risk the bereaved in an artificial loop of denial?
2. What are the impacts of such a tool to reconcile oneself with its ability to distort the process of mourning?

The choice of analysing Dimple Ahuja's character and the 'Dadbot' is crucial for a few reasons. First, the story of her lived experience serves the purpose for analysing the paper from phenomenological perspective that helps in understanding grief. Dimple Ahuja's loss and her creation of the 'Dadbot' reflects the emotional, cognitive, and ethical tensions inherent in attempting to replace the deceased. Her story shows the balance between finding solace and facing the finality of loss. Secondly, as both as a person who lost her father and the creator of death technology, Dimple Ahuja's character development bridges the personal and technological aspects of bereavement, providing a precise view into the values and concerns of designing tools that deal with memory and grief.

This study explores the implications of death technologies, through psychological, neuroscientific, and humanities perspectives. The death technology analysed here is 'Dadbot', it is a deathbot which the protagonist Dimple Ahuja named after her deceased father, it helps her to interact with him post death. Psychologically, the research analyses how grief shapes Dimple Ahuja's emotional journey and the ways in which the 'Dadbot' influences her coping mechanisms. Neuroscientific perspective, looks into how the brain processes simulated interactions with deceased loved ones and the potential disruption of adaptive memory integration. From a humanities viewpoint, it questions the ethical and cultural connotations of grief along with the philosophical tensions between authenticity and simulation.

Though grief is painful, it also holds a significant value for growth. It redefines the mourner's identity, provides resistance, and gives a better understanding of life's impermanence (Bellet et al., 2018). Death technologies can complement this process by providing temporary solace but might have lifelong impacts, if not used responsibly. However, these tools remain to assist the mourner and not as a substitute for the deceased. As Dimple Ahuja's story illustrates, the transformative power of grief lies in its authenticity, i.e., in its ability to embrace loss, preserve the memories of loved ones, and find meaning in their absence.

As society continues to evolve intersection of grieving and technology, it is crucial to approach these advancements. This article illuminates the complexities of mourning in a technologically mediated world.

2 Literature review

Grief is an extremely complex and multifaceted emotional response to loss, encompassing a range of psychological, physiological, and social reactions (Fisk, 2022). Research highlights that grief varies from one person to the another, depending on personal, cultural, and contextual factors (Boerner et al., 2015). One of the standard models for understanding grief is Kübler-Ross's (1970) five stage model which consists of denial, anger, bargaining, depression, and acceptance. This model remains significant but recent studies have emphasized the non-linear nature of grief and the significance of individual differences in grieving styles (Harris and Winokuer, 2019). The dual-process model by Stroebe and Schut (1999) further expands on this understanding, describing grief as a dynamic oscillation between loss-oriented and restoration-oriented coping. This framework explains interplay between actively mourning the loss and adapting to life changes.

Psychological theories are critical in understanding the emotional and cognitive dimensions of grief (Hamilton, 2016). Those who view grief as an opportunity for growth or reflection may navigate their mourning more effectively, whereas people with negative appraisals may experience prolonged grief symptoms (Hall, 2014). This aligns with research emphasizing psychological resilience as a protective factor in coping with loss.

Neuroscience has made significant progress in analysing the brain's response to grief. A network of brain regions activated during grief, including the anterior and posterior cingulate cortex, prefrontal cortex, insula, and amygdala (Silva et al., 2014). The activations within these areas explain the emotional sensitivity and impaired cognitive functioning experienced during loss. Neuroplasticity or the brain's ability to reorganize itself has been identified as a key mechanism in responding to loss over time (Msawa et al., 2022). Engaging with memories of deceased loved ones through traditional rituals or emerging technologies, has been shown to impact positive neuroplastic changes that support recovery of emotions (Odom et al., 2018). However, over-reliance on simulated interactions, like those that AI-driven tools offers risks disrupting this natural adaptation and healing process.

Grieving behaviours are deeply influenced by cultural norms and traditions, which provide communal frameworks for grieving (Smid et al., 2018). In contemporary society, the rise of death technologies, such as AI chatbots and digital avatars, has introduced new avenues for mourning and memory preservation (Meitzler et al., 2024). However, these technologies disrupt traditional rituals by individualizing grief, raising questions

about their compatibility with the pre-existing cultural practices. Although, such tools provide comfort people by simulating the presence of lost loved ones, they challenge the communal and ritualistic aspects of mourning that have historically supported emotional healing (Elder, 2019) (Figure 1).

The integration of technology into grief paves way for significant ethical challenges. Baudrillard's (1981) concept of hyperreality suggests that advanced simulations blur the lines between reality and illusion which traps its users in an artificial emotional loop. This concern is relevant in the context of Mismatched, where Dimple Ahuja creates a 'Dadbot' to simulate her deceased father's presence. The 'Dadbot' raises questions about the authenticity of grief and the emotional risks of substituting genuine mourning with technological interventions. Without ethical concerns, there is a high risk of tools to commodify grief by turning deeply personal experiences into profit-driven ventures (Lemma, 2024). These technologies may hinder the natural grieving process by fostering denial and dependency make it hard to accept and experience (Voinea, 2024).

Phenomenology is a qualitative research approach that seeks to explore lived experiences, emphasizing subjective interpretations and the meanings people feel through the events of their lives. Originating from the works of Husserl (1931), phenomenology has been applied across disciplines, including psychology, sociology, media studies and cultural studies to investigate the complexity of human feelings and emotions. Fictional characters serve valuable tools for phenomenological exploration, as they represent human emotions and struggles in

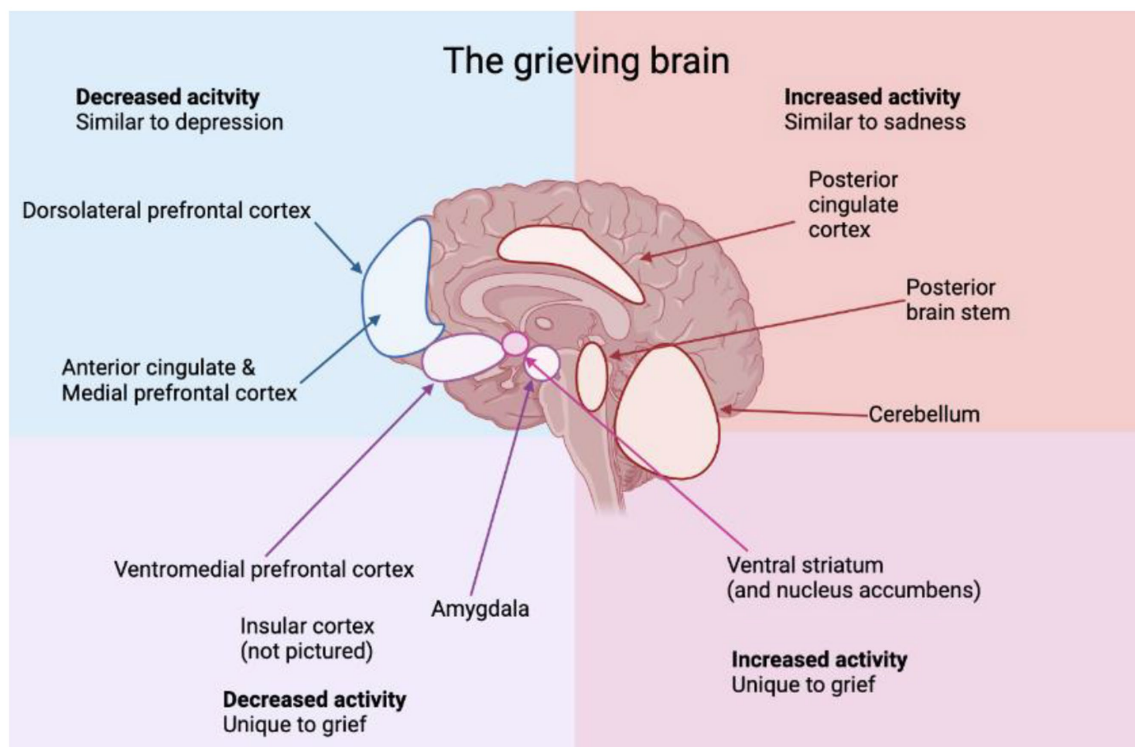


FIGURE 1

The grieving brain can be divided into four categories depending on whether the activity profile is similar to or different from sadness and depression (Buelow, 2000).

ways that resonates with audiences. According to film characters, although fictional, are constructed to portray relatable experiences, making them valid subjects for phenomenological inquiry. These characters reflect universal themes such as grief, loss, and resilience (Gupta, 2022). Dimple Ahuja, the protagonist in *Mismatched*, is an example for this. The lived experience of losing her father and creating a deathbot for herself provides a source for exploring the intersection of grief and technology. Dimple Ahuja's story can give insights into how people handle emotional avoidance, denial, and the ethical complexities of engaging with simulated versions of their loved ones. One of the strengths of fictional characters is their ability to create deep emotional responses through authentic portrayals (Gupta, 2022). Dyer and Kolic (2020) states that intricately carved fictional characters create a shared space for audiences to process their feelings and reflect on their own lived experiences. For example, Dimple Ahuja's journey resonates with viewers who have experienced loss, as it captures the tension between seeking comfort and confronting the reality of mortal life. Dimple Ahuja's creation of the 'Dadbot' also highlights the universality of grief and the psychological tendency to hold on to connections with the deceased. Her character reflects common struggles with emotional dependency, withdrawal, and denial, making her a relatable and powerful subject for phenomenological analysis in this research.

3 Methodology

Qualitative research design is used with phenomenological approach to explore the integrations between psychological, neurocognitive, and humanities and grief in terms of death technologies as portrayed in Dimple Ahuja's journey in *Mismatched*. The study aims to understand the lived experiences of people going through loss and engaging with technological interventions, to bring about subjective realities and emotional depth.

The primary data for this study is derived from selected episodes of *Mismatched* Season 3. Textual analysis, focusing on an in-depth examination of dialogues and actions is conducted. The series was released on December 13, 2024 and is available for streaming in regional and international languages with English subtitles. Specific scenes that depict Dimple Ahuja's interactions with the 'Dadbot' are analysed to explore thematic content and emotional context. Key timestamps are utilized to identify pivotal moments of emotional reflection and technological engagement. The analysis follows a detailed transcription process, with dialogues and contextual moments systematically coded into categories that reflect key thematic areas: the psychological implications of grief, neurocognitive changes induced by death technology, and the cultural and ethical dimensions of simulated continuity.

To add depth to the analysis, autoethnographic reflection was incorporated. The researcher's personal experiences with grief, particularly the loss of father, provided a phenomenological lens for contextualizing theoretical insights. This introspective narrative enhanced the empathetic understanding of grief and supported the integration of theoretical frameworks into the analysis.

3.1 Procedure to do the analysis

Step 1: Selection of data (episodes where Dimple copes with grief and interacts with the Dadbot).

Step 2: Transcription and textual isolation of relevant dialogues.

Step 3: Thematic segregation (e.g., denial, detachment, projection onto AI).

Step 4: Cross-analysis with neurocognitive literature and grief psychology frameworks.

Step 5: Interpretation of themes using phenomenological methods.

To add depth to the analysis, autoethnographic reflection was incorporated. The researcher's personal experiences with grief, particularly the loss of father, provided a phenomenological lens for contextualizing theoretical insights. This introspective narrative enhanced the empathetic understanding of grief and supported the integration of theoretical frameworks into the analysis.

3.2 Core analysis of dimple Ahuja's journey with the 'Dadbot' in mismatched (2024)

3.2.1 Psychological analysis of dialogues and context

3.2.1.1 Dimple Ahuja's emotional withdrawal and disconnection

Dimple Ahuja isolates herself, focusing solely on the 'Dadbot' project. Her response to Rishi shows emotional withdrawal, a common symptom of grief where people distance themselves from others. She then tells Rishi, "It's great, you will love it. But I will tell you about it when it's ready." (Akarsh Khurana, Episode 6, 27:01). Grief, as outlined in Kubler-Ross's Five Stages of Grief (Kubler-Ross, 1970), often begins with denial and anger. Dimple Ahuja's withdrawal represents her attempt to manage overwhelming emotions by focusing on the 'Dadbot' as a coping mechanism. Psychologically, this is consistent with avoidance behaviours, where people use external distractions to suppress internal pain (Walker et al., 2022). Death technology like the 'Dadbot' provides an outlet for such avoidance by creating an artificial continuity of presence. While distraction can be an effective short-term strategy for acute pain management (Birnie et al., 2017), its long-term use may be problematic. This suppression often prevents the integration of loss into one's emotional reality, delaying essential healing processes like emotional regulation and acceptance.

3.2.1.2 Over-reliance on the Dadbot

Dimple Ahuja describes the Dadbot's ability to simulate her father's presence through his voice and programmed responses to Harsh. "When you lose someone, you love, this app helps you talk to them, and guess what? They can talk back. Like they can reply. And I have programmed it completely with, like, uh papa's voice." (Akarsh Khurana, Episode 6, 13:37). This highlights the psychological stage of bargaining, where people seek to retrieve their control back for an unbearable loss. In this context, the 'Dadbot' allows Dimple Ahuja to construct a simulated reality where her father's presence persists. From a grief-technology perspective, this taps into the human need for attachment as described in Bowlby's Attachment Theory in 1981, which suggests maintaining bonds with loved ones but the illusion of

interaction facilitated by the 'Dadbot' risks deepening denial and denying acceptance. Psychologists are of the opinion that avoiding traditional grieving practices such as emotional expression, community support, or therapy in favour of artificial connections could lead to prolonged grief disorder (PGD), characterized by a persistent inability to adapt to loss (Crunk et al., 2017).

3.2.1.3 Concerns about emotional dependency

Dimple Ahuja plans to enhance the 'Dadbot' with video capabilities to make the interactions more immersive. "Obviously, we must add voice calls, but I'm going to put video calls also." (Akarsh Khurana, Episode 6, 13:03). The addition of video calls as planned by her pose a significant ethical and psychological dilemma. The visual hyperrealism of such features tends to create an even stronger illusion of continuity by reinforcing the user's emotional dependency (Renfree et al., 2016). This breaks their healing process making them get trapped into an illusionary world. According to Baudrillard's the concept of hyperreality, these technological advancements blur the boundary between reality and simulation. From a psychological perspective, this nurtures an unhealthy reliance that deters natural grieving. The lack of physical cues inherent in human relationships like touch or spontaneous emotions makes the relationship fundamentally unbalanced, further disrupting the mourning process. (S Francis-Smith, 2014). Adding to that, over-reliance on such immersive death technologies risks fostering avoidance of the painful yet necessary acceptance of loss, prolonging emotional stasis (Masur and Wertheimer, 2021).

3.2.1.4 Sid's perspective on mourning

Sid emphasizes the dangers of Dimple Ahuja's dependence on the 'Dadbot' and the need for emotional acceptance. "Ahuja, you are not waiting for your dad; you have brought him back. And I am worried that you may start thinking that he is back for real. Your dad is not coming back. You have to accept it and move on." (Akarsh Khurana, Episode 7, 8:49). Sid's dialogue reflects psychological principles of grieving which includes the necessity of acceptance, the final stage of grief. Death technologies like the 'Dadbot', while offering comfort might challenge by interrupting this process by enabling users to bypass or defer this essential step. Sid's caution addresses the potential for people to become entrenched in artificial realities, leading to maladaptive coping mechanisms. Acceptance involves integrating the reality of the loss into one's life through the process facilitated by both cognitive and emotional regulation (Shallcross et al., 2015). Sid underscores the importance of addressing grief authentically by warning against the prolonged use of simulated continuity without becoming reliant on technological substitutes that distort the experience of loss. His perspective also resonates with existential psychology, which posits facing the reality of mortality is essential for emotional growth and meaning-making (Moraglia, 2004).

3.2.1.5 Strengths and limitations of death technologies from a psychological viewpoint

Death technology offers a paradoxical blend of relief and risk. Their greatest strength lies in providing an immediate sense of continuity and control during a period marked by psychological struggle. The ability to continue interaction with the deceased may offer comfort by sustaining attachment bonds with the dead in a way, that temporarily stabilizes the grieving self. This digital scaffolding can

act as an emotional holding space, allowing mourners to navigate the early stages of loss without overwhelming disintegration. However, this very nature of 'continuity' becomes a liability when it begins to substitute rather than support the natural mourning process. By simulating presence, these technologies would affect the cognitive work required for acceptance and re-integration, fostering dependence on illusion rather than resilience in absence (Fernandez, 2025). Instead of guiding the mourner from denial toward adaptation and reality, they create a loop of suspended closure in grief. Thus, while grief technologies may function as transitional aids, their psychological utility depends on the purpose of its usage and not merely how effectively they replicate the lost relationship.

3.2.2 Neurocognitive perspective

3.2.2.1 The role of memory and neuroplasticity

Dimple Ahuja defends the 'Dadbot' as a coping mechanism, perceiving it as a source of comfort. "This helps? This makes me a little sad. So instead of this lecture, why cannot you just be happy for me?" (Akarsh Khurana, Episode 8, 8:31). Grief triggers many changes in the brain, most prominently in areas associated with memory, emotional regulation, and adaptation (Gündel et al., 2003). The brain's emotional centre, amygdala becomes hyperactive in response to the emotional trauma of losing a loved one, resulting in heightened anxiety and sadness (Cacciaglia et al., 2017). The auditory cue of the Dadbot, such as the simulated voice of her father, activates the hippocampus, which consolidates memories, thus creating a sensation of presence that can temporarily ease emotional pain. However, this reliance disrupts the natural process of memory reconsolidation, where the brain integrates new realities with past experiences. Neuroplasticity, the brain's ability to reorganize and adapt is crucial for overcoming grief (Kong et al., 2016). Overusing death technologies like the 'Dadbot' can inhibit this process by reinforcing neural pathways associated with denial and dependence rather than acceptance and emotional resilience. Prolonged reliance may weaken the prefrontal cortex's capacity to regulate emotions and make adaptive decisions, leaving people trapped in a cycle of unresolved grief (Arizmendi et al., 2016).

3.2.2.2 Disruption of emotional regulation

"Welcome back, I missed you." (Akarsh Khurana, Episode 9). Rishi perceives Dimple Ahuja's return to her project as a sign of recovery, unaware of the emotional dependency she's forming. Emotional regulation is a key function of the prefrontal cortex, it is compromised when grief prolongs the amygdala's dominance (Kim et al., 2011). The 'Dadbot' sustains emotional arousal by simulating interactions that mimic real-life connections, preventing the brain's limbic system from habituating to the reality of loss. The prefrontal cortex, illustrated in Figure 1, plays a regulatory role that is compromised when hyperreality prevents memory reconsolidation. Dimple's inability to disengage from the Dadbot suggests this regulatory inhibition. The interplay between the amygdala and the prefrontal cortex becomes disrupted to an imbalance where emotional responses overpower rational thought. This creates a feedback loop which makes Dimple Ahuja dependent on the 'Dadbot' to regulate her emotional state. The prolonged hyperactivity of the amygdala can result in chronic stress, elevated cortisol levels, and suppressed production of serotonin and dopamine, neurochemicals vital for mood stability and emotional well-being (Zhang et al., 2018) making

the person into someone who is numb to positive feelings and emotions. This neurochemical imbalance can lead to anxiety and depression symptoms in addition to difficulties in intimacy with others over time, which can worsen the grief recovery condition (Boelen, 2013).

3.2.2.3 Impact of video call features

“Is this idea cool? Very. Is it good for you? I do not think so.” (Akarsh Khurana, Episode 10, 10:47) Sid is against the idea of video calls, emphasizing the psychological risks involved. The introduction of video call features intensifies the neurological impact of the ‘Dadbot’ by engaging the mirror neuron system, which is activated during observed and simulated social interactions. This system, responsible for empathy and social cognition, may misinterpret the visual and auditory cues of the video calls as authentic, further blurring the line between reality and simulation. Such immersive features create an illusion of continuity that the brain cannot process in terms of finality when it comes to loss, thereby disrupting the natural trajectory of grief. The concept of episodic memory reconsolidation is an important point made by cognitive neuroscience (Gaesser and Schacter, 2014). Episodic memory reconsolidation refers to the integration of memories about the deceased into a coherent life narrative that is impeded by continued interactions with artificially simulated versions of the deceased (Meitzler et al., 2024). Additionally, the reward system of the brain, stimulated by dopamine release, may facilitate such interactions as a source of comfort, resulting in a kind of dependency akin to addictive behaviours (Amadei et al., 2017). This dependency threatens to have long-term effects, like decreased emotional strength and diminished ability to build deep human relationships.

3.2.2.4 Broader implications of death technology

Death technologies like the ‘Dadbot’ exemplify how technological mediation of grief can exploit the brain’s vulnerability to emotional stimuli (Meitzler et al., 2024). Adaptive coping relies on neuroplasticity’s capacity to desensitize emotional triggers and rewire the brain for new experiences (Cabib et al., 2020). The artificial continuity provided by death technologies prevents this desensitization, reinforcing maladaptive neural circuits that perpetuate grief. The manipulation of dopaminergic pathways by simulated interactions creates a cycle of short-term relief and long-term emotional dependency (Alcaro et al., 2021). From a neuroethical perspective, the potential for such technologies to alter the brain’s natural healing processes raises concerns about their impact on emotional health and societal norms around mourning. The long-term effects may include diminished cognitive flexibility, reduced social integration, and an overreliance on artificial connections that challenge the authenticity of human relationships (Shanmugasundaram and Tamilarasu, 2023).

3.2.2.5 Strengths and limitations of death technologies from a neurocognitive viewpoint

Death technologies like the Dadbot operate as double-edged instruments offering initial relief while causing deeper disruptions in brain function over time. Their strength lies in producing familiarity, stimulating emotional and memory-related pathways that provide temporary neurological cushioning against the negative psychological emotions including the shock of loss. Eventually, their long-term

usage poses risks to the brain’s adaptive mechanisms. By sustaining emotional arousal and delaying memory restructuring, griefbots may prevent the essential rewiring of neuroplasticity towards recovery. They simulate presence which can be helpful but impede transformation. Thus, while they engage the brain’s need for continuity, they risk neurologically encoding grief into permanence.

3.2.3 Humanities perspective

3.2.3.1 Cultural and ethical implications

A scene where Harsh calls Rishi and says “While it seems Dimple is doing better, but between you and me, she really is not, and you should know that.” (Akarsh Khurana, Episode 7, 12:80) Harsh’s concern highlights societal perspectives on mourning and the role of technology in grief. Mourning is deeply embedded in cultural practices that shape collective and individual responses to loss (Rosenblatt, 2017). For the humanities perspective, grief comprises shared rituals, such as funerals, storytelling, and communal remembrance through which people may process loss in a cultural context (Silverman et al., 2020). Traditional practices are thus challenged by death technologies like the ‘Dadbot’, which offer an intensely individualized grieving experience. While the hyperrealism may bring personal consolation, it risks commodifying what is essentially about grief, using it as merely a transaction with the user by the technology: this commodifies the cultural nature of mourning through its communal processes and transformative outcome. Furthermore, the artificial construction of the relationship between the father and the robot raises questions as to authenticity—since it performs parts of what the deceased stands for but misses the human entirety. This partial simulation upsets the integrity of memory, reshaping how people interact with the past and changing the norms of society in terms of death and remembrance.

3.2.3.2 Hyperreality and moral concerns

When Dimple creates ‘Dadbot’ and Sid says, “Your dad is not coming back. You have to accept it and move on.” (Akarsh Khurana, Episode 7, 8:49). This encapsulates the existential dilemma posed by death technologies. Jean Baudrillard’s concept of hyperreality, which he describes in 1981, serves as a critical lens to consider the ethical implications of the Dadbot. Hyperreality describes a state in which the distinction between reality and simulation becomes increasingly blurred, producing a world of simulacra that replaces authentic experiences with artificial constructs (Barroso, 2022). The ‘Dadbot’ works as a simulacrum that provides Dimple Ahuja with a constructed continuity of her father’s presence that distorts the perception of reality. This distortion raises profound moral concerns about reducing the deceased to a collection of data points, programmed to simulate human interactions. Thus, such simulations endanger the sacred status of life and death, translating intimate personal bonds into algorithms (Hutson and Ratican, 2023). Moreover, depending on death technologies undermines the radical nature of the process of bereavement itself (O’Connor et al., 2021). Bereavement, to use the lexicon of those like Sigmund Freud who wrote *Mourning and Melancholia* in 1917, is the breaking of bonds of attachment while ensuring that the relationship is preserved within memory. The ‘Dadbot’ disrupts this process by creating an illusion of presence, making it impossible for the mourner to immerse themselves in the

finality of death. It not only extends the process of grieving but also raises questions regarding autonomy and consent, since the recreated persona of the deceased cannot represent his true self or even give his consent to digital replication.

3.2.3.3 Human connection vs. artificial continuity

Dimple Ahuja uses the 'Dadbot' to simulate her father's interactions with others. "Papa, Sid sir has no complaints at all." (Akarsh Khurana, Episode 10, 10:47). The humanities perspective underscores the irreplaceable value of authentic human connections, which are dynamic, reciprocal, and rooted in shared experiences (Ouellette, 2022). While the 'Dadbot' offers continuity, it lacks the spontaneity and emotional nuance that define genuine relationships. Philosophers like Martin Buber, in his concept of "I-Thou" relationships (Nall, 2004), argue that true human connections require mutual presence and authenticity, which cannot be replicated by artificial constructs. The 'Dadbot', by simulating these interactions, risks reducing human relationships to 'I-It' dynamics, where the other is treated as an object rather than a fully realized individual. The 'Dadbot' also challenges cultural understandings of mortality and memory. In many traditions, the finality of death serves as a catalyst for reflection, growth, and the preservation of the deceased's legacy through collective memory (Corr and Doka, 2019). By offering a perpetual, simulated presence, the 'Dadbot' disrupts this natural process, creating a dependency on artificial interactions that may erode the depth and authenticity of grief. The substitution of real memories with simulated ones also raises concerns about the long-term impact on personal identity and societal norms, as people may prioritize curated digital interactions over genuine emotional engagement with the past.

3.2.3.4 Temporality and the nature of grief

As a reply to everyone insisting to give up on 'Dadbot' she says, "This helps? This makes me a little sad." (Akarsh Khurana, Episode 8, 8:31). Dimple Ahuja reflects on the emotional impact of interacting with the 'Dadbot' and its influence on her grieving process. Temporality is a critical element in the experience of grief (Shardlow, 2022). Human relationships, memories, and mourning unfold over time, allowing for emotional and cognitive processing of loss (Kenny et al., 2019). Death technologies like the 'Dadbot' distort this natural progression by creating a static, artificial temporality. The 'Dadbot' freezes the deceased in a specific moment, offering a timeless simulation that does not evolve alongside the mourner's emotional journey. The 'Dadbot', by offering an illusion of timeless presence, undermines this confrontation, delaying emotional acceptance and disrupting the mourner's ability to move forward. The disruption of temporal flow alters how people construct and preserve memories. In traditional mourning, memories of the deceased are shaped by the passage of time, allowing for reinterpretation and integration into a broader life narrative. The 'Dadbot', however, locks these memories into a repetitive, unchanging cycle of interaction, preventing the mourner from experiencing the natural evolution of memory. This stasis risks diminishing the mourner's capacity for emotional resilience and adaptation, fostering a dependency on artificial interactions rather than encouraging growth and healing.

3.2.4 Strengths and weaknesses of death technology from a humanities perspective

Death technologies like the "Dadbot" oscillate between cultural innovation and ethical degradation. On a positive note, they create

new spaces for grief expression and offer individualised services to reframe mourning beyond traditional ritual boundaries. Yet, these come at the cost of potentially undermining the moral, temporal, and relational authenticity that has historically anchored bereavement. They risk transforming grief from a deeply transformative human process into a scripted interaction within a simulated environment. As society confronts the growing integration of griefbots, the challenge lies not only in how we preserve memory, but in how we preserve dignity, autonomy, and the sanctity of loss itself.

3.3 Thematic mapping of dialogue, interpretation, and cognitive-emotional insight

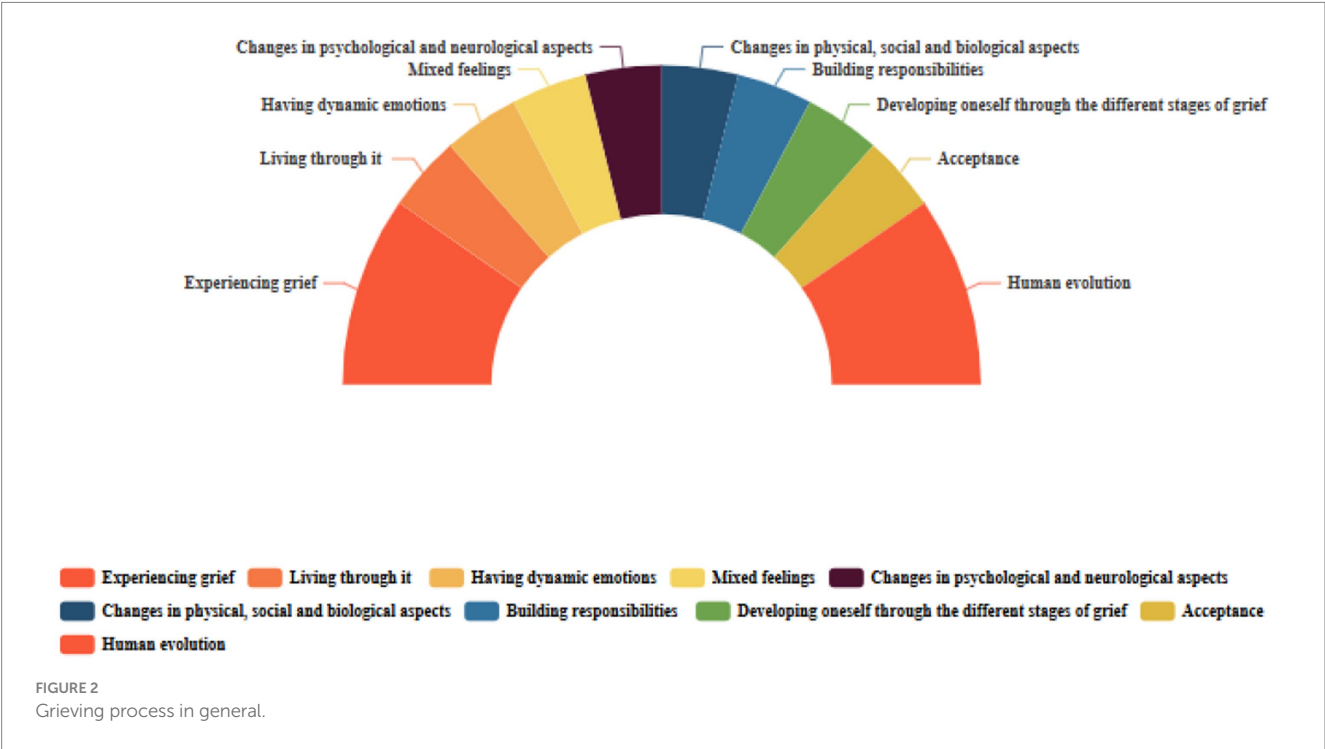
3.3.1 Phenomenological view from a personal dimension

As one of the researchers and a viewer of the series *Mismatched*, my perspective provides significant insight into the phenomenological analysis of grief and death technologies presented in the series. Having lost my father last year, I initially felt a sense of relief and solace upon learning about the concept of death technology (Table 1). The idea of interacting with a virtual representation of my father, through his voice, images, or videos, comforted me by suggesting he could remain 'present' in some capacity. The notion of lessening the permanence of his absence appeared to ease my grief and offered a way to feel connected to him again. However, as Dimple Ahuja expressed in the series, *it made me feel a little sad*. Reflecting on my journey over the past year, I realize that grief, while painful, has shaped me into a stronger individual. This period of profound loss allowed me to grow and gain a better understanding of the world and myself. It was a difficult but transformative experience. I have come to accept that when my father passed away, the reality of his absence was final. While death technology might provide a means to access a version of him during moments of emotional desperation, it cannot recreate the essence of who he was. The photos, voice, and data used to construct my virtual "dad" would inevitably be incomplete and manipulated. Such a creation would lack the ability to grow older, share in my life's journey, or preserve the trust and authenticity that defined our relationship.

The advancement of death technologies, as depicted in *Mismatched*, raises ethical and psychological concerns. The potential for cybercrimes and misuse of sensitive data is alarming, and relying entirely on a virtual version of a loved one could blur the boundaries between reality and illusion. While a primitive version of the 'Dadbot' might offer temporary solace during moments of acute grief, advancements such as video calls or humanoid representations could lead to significant emotional and cognitive repercussions. Over time, these technologies might overshadow the value of the real memories I hold of my father. Instead of treasuring the moments we shared, there is a risk of substituting them with fabricated interactions, ultimately diluting the authenticity of my love and connection with him. Additionally, the presence of a virtual version could make it harder to let go and accept the reality of loss. While the technology might initially provide comfort, it could hinder the natural grieving process,

TABLE 1 Thematic analysis of dimple Ahuja’s interaction with the ‘Dadbot’ across psychological, neurocognitive, and humanities perspectives.

Theme	Dialogue example (episode/time)	Interpretation (perspective)	Cognitive/emotional insight	Implication
Emotional Withdrawal	“It’s great, you will love it. But I will tell you about it when it’s ready.” (S3E6, 27:01)	Denotes isolative grief response; Dimple invests emotionally in the Dadbot to suppress real pain	Reflects prefrontal suppression of affect; emotional dysregulation in early grief	Prevents social–emotional support systems from functioning effectively
Bargaining & Control	“This app helps you talk to them... with papa’s voice.” (S3E6, 13:37)	Bargaining stage of grief; challenges natural boundaries of life/death	Amygdala and hippocampus reinforce attachment-based memory illusion	Raises ethical concerns about artificial prolongation of bonds
Hyperreality & Dependency	“I’m going to put video calls also.” (S3E6, 13:03)	Escalation from voice to visuals intensifies hyperreality (Baudrillard)	Activates mirror neurons and dopamine circuits; potential for compulsive use	Commodifies grief, risks addiction to technological mourning
Real-World Moral Confrontation	“You have brought him back... he is not coming back.” (S3E7, 8:49)	Sid confronts the illusion; urges return to reality and acceptance	Encourages prefrontal integration of emotional truth and loss processing	Highlights the conflict between phenomenological closure and technological denial
Comforting Illusion	“Welcome back. I missed you.” (S3E9)	Comfort through simulation; signifies emotional bypass	Amygdala remains overactive; delays habituation to absence	Sustains emotional dysregulation and prevents recalibration of emotional circuits
Temporal Disruption & Memory Fixation	“This helps? This makes me a little sad.” (S3E8, 8:31)	Challenges the temporal flow of mourning; replaces evolving memory with frozen simulacrum	Episodic memory reconsolidation halted; neuroplastic healing impeded	Suggests grief is frozen in time; may impair identity reconstruction and resilience



complicating the stages of acceptance. For instance, the virtual version might create an illusion of permanence, making it difficult to reconcile with the finality of death. This raises concerns about how people, especially those in vulnerable emotional states, might become dependent on such technologies, affecting their mental well-being (Figure 2).

Another crucial aspect is the authenticity of the recreated relationship. The trust, sensitivity, and emotional nuances that form

the foundation of a parent–child bond or loved ones in some other cases cannot be replicated. The virtual version would be limited by the data it is built upon, lacking spontaneity, growth, and adaptability. For example, I cannot envision the virtual version of my father holding my secrets, guiding me through unforeseen challenges, or evolving alongside me. Such limitations underscore the inherent gap between the real and virtual representations of a loved one. At this stage in my journey, I have embraced acceptance

and found ways to channel my grief constructively. I focus on cherishing the lessons my father taught me, the care he provided, and the memories we created together. These elements form an intrinsic part of my identity and guide my growth. While death technology might offer short-term comfort, it risks hindering personal evolution by creating dependency on an artificial representation. Such reliance can be compared to a drug, providing temporary solace while generating long-term emotional, mental, and cognitive challenges. Moreover, the societal and ethical implications of death technology must be considered. Its misuse could lead to consequences such as the exploitation of sensitive personal data or the commodification of grief. Such developments might undermine the sanctity of human relationships and the natural process of mourning. From a cognitive neuroscience perspective, over-reliance on virtual representations could alter neural pathways associated with memory, emotional regulation, and personal growth, potentially creating a detachment from reality. The love and intimacy shared in a father-child relationship are deeply personal and irreplaceable. No technological advancement can replicate the voluntary presence, emotional nuances, or authenticity of such a bond. While death technology might have its merits in alleviating grief, it cannot and should not replace the cherished reality of a loved one's life and legacy. Embracing the lessons, memories, and growth born from loss is essential to honoring their true value and preserving their place in

our lives. Being against nature, death technologies might hinder human evolution (Figure 3).

3.3.2 Broader implications of death technologies and cultural disruption

Death technologies like the ‘Dadbot’ mark a profound transformation in how society navigates grief, memory, and mortality. These tools, while technologically advanced, challenge long-standing cultural, philosophical, and ethical foundations of mourning. Drawing from the humanities, psychology, and neuroscience, the implications of such technologies are not merely technical but deeply existential. The hyperrealism of simulations disrupts traditional mourning, replacing evolving grief with static, digitally maintained presence. As communal rituals are replaced by individualized, screen-based interactions, the very fabric of cultural grief becomes fragmented (Silverman et al., 2020; Rosenblatt, 2017).

From an ethical standpoint, the simulation of the deceased without consent raises questions about posthumous autonomy, digital dignity, and the commodification of loss (Fernandez, 2025; Hutson and Ratican, 2023). The grief process, meant to transform and integrate loss over time, may instead be suspended in a technologically constructed stasis that delays closure and complicates emotional regulation. The use of griefbots, while emotionally consoling, introduces moral, emotional, and neurocognitive dilemmas that demand careful, interdisciplinary intervention (Table 2).

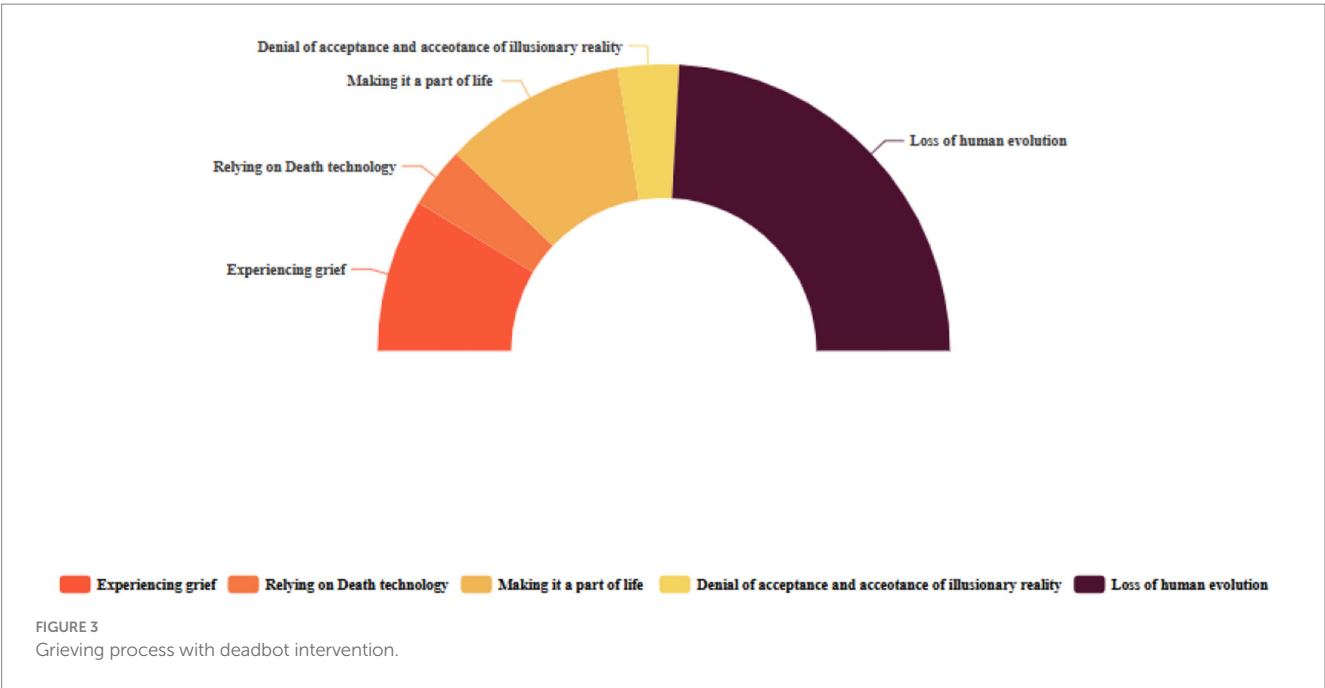


TABLE 2 Interdisciplinary implications of death technologies.

Stakeholder	Key implications
Technology Developers	Ethical design, data protection, and transparency; avoid features that foster dependency or simulate personhood
Policymakers	Regulation on posthumous data usage, consent protocols, public awareness, and anti-commodification laws
Users	Informed use, emotional literacy, digital consent awareness, complementing, not replacing traditional mourning
Mental Health Professionals	Therapeutic integration, long-term impact studies, public education, ethical advocacy in design and application

3.3.2.1 Implications for technology developers

Developers of grief-related AI technologies carry immense responsibility in determining how users emotionally engage with simulated presence. While emotional continuity may ease initial distress, over-immersion risks psychological entrapment. Developers must prioritize ethical design principles, such as embedding usage limitations, reflective prompts, and emotional checkpoints that guide users toward recovery rather than dependency (Meitzler et al., 2024). Collaborative work with psychologists and grief experts should inform interface features to ensure they facilitate, rather than replace, mourning.

Additionally, handling sensitive data—voice, personality, behavioral patterns—requires stringent encryption, privacy standards, and transparency protocols. Misuse of these data not only violates digital dignity but may also contribute to emotional harm for both users and families. Developers must clearly communicate that grief technologies are supportive tools, not replacements for the deceased.

3.3.2.2 Implications for policymakers

Policymakers have a crucial role in defining the ethical contours of posthumous digital life. Regulations should prohibit the unauthorized recreation of deceased individuals' likenesses and voices, emphasizing informed consent and posthumous data dignity. Standardization in digital rights, storage protocols, and data minimization is essential to prevent emotional exploitation in grief-related markets.

Public policy must also engage with the cultural implications of these tools. By promoting public awareness campaigns, governments can educate citizens on both the promises and perils of death technologies, fostering informed decision-making and ethical engagement with griefbots.

3.3.2.3 Implications for users

As the primary recipients of grief technologies, users must approach them with awareness and caution. Death technologies should not be misconstrued as digital afterlives but rather as temporary grief aids. Users must remain informed about data ownership, emotional risks, and the importance of maintaining engagement with communal mourning rituals and human relationships. Overreliance on simulations may interfere with emotional regulation, inhibit neuroplasticity, and delay healthy grief progression (Cacciaglia et al., 2017; Boelen, 2013).

Digital literacy, particularly regarding emotional and privacy concerns must be emphasized in user education. Grief is not a condition to be "solved" by algorithms, and users benefit most when death technologies are integrated into, not substituted for, authentic mourning processes.

3.3.2.4 Implications for psychologists and counsellors

Mental health professionals play a key role in mediating how individuals use death technologies within the therapeutic process. Griefbots can potentially support clients facing traumatic loss, ambiguous grief, or emotional inhibition, but their use must be contextualized and time-bound. Practitioners should monitor for signs of dependency or emotional stagnation and educate clients about the limitations of simulation-based grief tools.

Furthermore, psychologists are in a unique position to contribute to design ethics and clinical evaluation. By conducting longitudinal

studies on the emotional, relational, and neurological impacts of grief technologies, mental health experts can shape how such tools are responsibly integrated into society. Advocacy for ethical standards, culturally sensitive design, and the preservation of human dignity in mourning must remain central to psychological engagement.

The integration of grief technologies into modern mourning practices is not merely a technological milestone—it is a moral, cultural, and psychological threshold. Stakeholders across disciplines must engage collaboratively to ensure that the development and use of griefbots uphold the complexity of human emotion, the sanctity of memory, and the integrity of death itself.

3.4 Limitations

- The analysis is based on a fictional narrative (*Mismatched*), limiting its applicability to real-world grieving experiences.
- No empirical data (e.g., interviews, user studies, surveys, neuroimaging) were used to support the theoretical claims.
- The focus on a single grief technology, the 'Dadbot' excludes other emerging tools such as holographic avatars, chatbot memorials, or AI video composites.
- Cultural representation is limited to the Indian urban, English-speaking, middle-class context of the protagonist, without exploring diverse cultural, spiritual, or communal mourning practices.

3.5 Scope for further research

- Exploration of the real-world psychological and cultural impacts of death technologies across diverse communities can be done.
- The other perspectives that impact people in terms of thanatology can be analysed.
- Empirical research on long-term emotional and ethical implications can provide a more comprehensive understanding.

4 Conclusion

Death technologies, as portrayed in *Mismatched*, represent an intriguing yet deeply complex approach to grief. At their primitive stages, such technologies hold undeniable promise. Tools like the 'Dadbot' provide a meaningful outlet for those in mourning, offering a way to engage with loss by revisiting memories, hearing familiar voices, and finding temporary solace during moments of vulnerability. When viewed as companions to the grieving process much like grief counsellors they can help people process overwhelming emotions, lending support as they navigate their journey toward acceptance. However, these technologies should never aspire to replace the irreplaceable. As they advance to include immersive features like video calls or humanoid simulations, the ethical and psychological challenges become apparent. Overreliance on such simulations risk transforming grief from a natural process into a prolonged illusion of continuity. This blurring of reality and hyperreality, as philosopher Jean Baudrillard argued in his concept of simulacra, can render the artificial indistinguishable from the real, leading to emotional entrapment.

By clinging to these technological echoes of the deceased, people may delay the critical process of acceptance, an essential step in healing and moving forward. Death technologies, when used as substitutes rather than aids, can obstruct this detachment, fostering dependency on a simulation that can neither grow, adapt, nor reciprocate in the way a human relationship does. It challenges the authenticity of love and memory. The relationships we cherish are defined by their spontaneity, imperfections, and the reciprocal connection shared with a living, breathing individual. Technologies like the 'Dadbot', no matter how advanced, lack the essence of these traits. They risk commodifying grief, turning personal loss into a transaction mediated by algorithms and artificial interactions. It is crucial to recognize the limitations of death technologies. While they can provide temporary relief and act as a supportive bridge during moments of intense grief, they cannot and should not attempt to replace the deceased. The love, intimacy, and trust shared with a loved one cannot be replicated by any technological construct. Instead, these tools should be designed to guide mourners toward acceptance, enabling them to honour the memories of those they have lost without compromising the authenticity of their connection. Grief, though painful, has a transformative power. It allows people to grow, find strength, and preserve the legacy of their loved ones in deeply meaningful ways. Death technologies, if advanced without ethical and psychological caution, risk undermining this growth by anchoring people in a perpetual simulation of the past. To ensure these innovations remain compassionate aids rather than replacements, society must prioritize the sanctity of human relationships and the authenticity of memory. As C.S. Lewis wrote in *A Grief Observed* (Lewis, 1961): "The pain now is part of the happiness then. That's the deal." This profound reminder underscores that mourning is not a process to bypass or suppress but one to embrace. It is through the pain of loss that we cherish the joy of love shared, and it is this duality that makes human relationships truly irreplaceable. Death technologies must remain tools of support, not substitutes for the deceased. The journey of grief, though arduous, ultimately teaches us the value of presence, the permanence of love, and the beauty of letting go. Only by respecting these truths can we ensure that technological innovation serves to aid, rather than distort, the deeply human experience of loss.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

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Ethics statement

Written informed consent was not obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article because the phenomenological study section is a self-reflection based on the personal lived experience of one of the researchers. The researcher independently authored this section to authentically express their emotions and insights. As this reflection does not involve human participants, data collection, or interventions, written consent is not required.

Author contributions

KS: Writing – original draft, Writing – review & editing, Conceptualization, Formal analysis, Methodology, Resources. GB: Supervision, Writing – review & editing.

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Generative AI statement

The author(s) declare that no Gen AI was used in the creation of this manuscript.

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