Cite as: McCoy, Ava; and Ciolfi, Luigina (2024). 'You were going online for that person': How digital tools shaped Irish mourning experiences amidst COVID-19. *Computer Supported Cooperative Work*. DOI: http://dx.doi.org/10.1007/s10606-024-09505-x

'You were going online for that person': How Digital Tools Shaped Irish Mourning Experiences Amidst COVID-19.

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Accepted Version, October 2024 – The Version of Record is available online at:
http://dx.doi.org/10.1007/s10606-024-09505-x

Abstract. Physical restrictions in many countries during the COVID-19 pandemic affected almost all aspects of social life, including end-of-life rituals such as funerals. In Ireland, public health restrictions required mourners to adapt to alternative rituals to customary Irish mourning practices, which are traditionally community-focused and highly social. This period brought significant changes and challenges in the way Irish people and communities mourn, and in how events such as funerals were experienced through digital and online technologies. This paper reports on a qualitative study that contributes a better understanding of the experiences of mourners in Ireland during the COVID-19 pandemic, particularly regarding the use and role of digital tools during this period, and their continued use following the lifting of pandemic restrictions. Overall, the findings indicate that participants felt a sense of unfulfillment and faced a series of challenges in managing altered support mechanisms, while acknowledging the importance and utility of digitally-mediated experiences, such as participation in live-streamed funerals and in online books of condolences. The paper sheds further light in the experiences of use of technology during the pandemic and provides insights to inform the future design and use of end-of-life digital tools and services, as they remain widely used also after the end of the pandemic.

Keywords: COVID-19; digital mourning; end-of-life; online funerals

1 Introduction

Public health measures imposed by the governments of many countries during the COVID-19 pandemic significantly affected almost all realms of life, from work and education to family life and informal social interactions. Restrictions on events and gatherings, as well as the risk of infection, made it impossible for many people to physically take part in end-of-life commemorations such as funeral services. Live broadcast of these events via social media and the use of other digital technologies such as *in-memoriam* donation and remembrance online platforms became more widespread, and significantly shaped how people experienced loss, grieving and mourning (O'Mahony, 2020; Torrens-Burton et al, 2022) This paper reports on a qualitative study based on semi-structured interviews exploring the Irish experience of mourning during the period of COVID-19 pandemic restrictions (2020-2022). The study involved people who, during this period, partook in alternative mourning rituals that relied heavily on the use of digital tools and services. Based on our review of the literature at the

time of writing, the study is one of the first in the broad human-centred computing landscape to explore this experience through the accounts of mourners actively involved in rituals during the pandemic period. The goal was to document people's experiences of online commemorations, funeral livestreams, and other transformed traditions, particularly in Irish society, where there is a rich culture of in-person and social and communal facets of mourning (Ryan, 2016; Hourihane, 2021) that had to adapt to physical restrictions and to the vastly increased use of digital tools. The study also touches on the current status of mourning rituals in Ireland in the aftermath of the pandemic: public health restrictions are no longer in place, but digital tools and systems are still used and are expected to remain part of mourning practices in the foreseeable future.

In the Irish experience of mourning, there is a rich history of 'a good send-off', with rituals dating back centuries still remaining today, including the traditional Irish wake where an entire local community comes together to shake hands with the bereaved family, very frequently in the family's private home (Craig, 2021). Removals are also important social moments in dealing with a death: when the deceased person's body is brought from the place of death (often a private residence or a hospital) to a funeral home or a church, where the wake and funeral services will take place, this 'removal' typically involves a gathering of family, friends, and community members who come to pay their respects to the deceased and offer condolences to the grieving family. Traditional Irish Mass cards are also still widespread: a religious token or printed card commonly used to memorialise and honour deceased loved ones, a Mass card is typically distributed at funerals or sent to grieving families. These cards feature a sacred image and a request for prayers for the soul of the departed, encouraging recipients to attend a Mass held in their memory and arranged by whoever presents the card. Mass cards serve both to console grieving families and as an invitation to the wider community to join in the remembrance and prayers for the deceased. They reflect the spiritual and communal aspects of Irish Catholic tradition, emphasising the importance of collective support and religious rituals during times of loss and mourning (Taylor, 1989).

Other rituals have abated, such as the smoking of clay pipes and the employment of professional mourners, which were commonplace customs until the 20th century (Kuijt et al., 2021), when they were outlawed as paganistic practices by the Catholic church in Ireland. And yet, in a country of continued Catholic decline (Central Statistics Office, 2016), certain mourning rituals have endured centuries of an evolving Irish society, with these intergenerational practices persistently transcending political, religious, and social reform (Hourihane, 2021). Death notices are still publicly broadcasted daily on local radio and news media. Removals, funerals and commemorations are almost always open and attended by

large circles of family, friends, neighbours and acquaintances. The obituary website RIP.ie, which began operating in 2005, is now used by all funeral directors in the country to post death notices and to host online books of condolences that are then archived, printed, and given to the bereaved families upon request.

These rituals have a central purpose in that they are a provision of social and communal support, through their emphasis on coming together in the immediate days following loss. Ronan (2021) notes that, while the current status of the Irish funeral is that of a social obligation, it continues to provide invaluable community support to the bereft throughout a period of grief, uncertainty and confusion. These social facets of Irish mourning aid the alleviation of the intense emotions experienced during a bereavement (Howard Sharp et al., 2018; Kaunonen et al., 1999; Çakar, 2020; Skalski et al., 2022).

The COVID-19 pandemic restrictions in Ireland (as well as many other countries) brought forth an entirely unforeseen set of challenges for those experiencing a bereavement and for those supporting the bereaved, when families and communities no longer had full access to familiar mourning rituals. These changes, along with the integration of alternative digital mourning practices, became widespread for communities in Ireland when restrictions came into force in March 2020, before their complete removal in April 2022. Digital funerals, livestreams of events, and the sharing of photos and videos online were some of the mourning practices that had widespread adoption when physical restrictions were introduced (Enari and Rangiwai, 2021). While these have existed well before the COVID-19 pandemic in certain countries, for example the USA (see for example Moncur et al, 2012), they had been much less common in Ireland. Therefore, Irish mourners had to quickly adapt through the translation of familiar rituals into a digital space in order to honour the dead and support the bereaved at a time of crisis (O'Mahony, 2020).

The qualitative study documented in this paper contributes to the understanding of the evolution of mourning practices, at an individual, community, and societal level, in Ireland and in other social and cultural contexts that have traditions of community mourning, in light of the still recent pandemic. Through developing a better understanding of how the rapid introduction of digital tools into Irish mourning rituals was experienced, a clearer perspective on our current and future interactions with these resources and future design directions can also be articulated.

In the following section, we discuss relevant literature on the experience of mourning and end-of-life rituals, and on the role of digital technologies in end-of-life and mourning practices, particularly in the context of the COVID-19 pandemic.

2 Literature Review

Human experiences of loss, grief and mourning have been studied from many different perspectives, from psychological (i.e. cognitive, behavioural, and developmental) (Murray Parkes and Prigerson, 2010) and even medical (Granek, 2016), to social and cultural (Neimeyer at al., 2022; Stephenson, 2007). There have also been studies examining whether and how such experiences were affected by the exceptional situation during COVID-19. For example, understandings of grief at a neurological and physical level have been expanded by considering its prolonged symptoms in response to traumatic experiences such as the pandemic (Eisma and Tamminga, 2020; Pop-Jordanova, 2021).

While we acknowledge the vastness of the topic and of its scholarship, in this paper we focus our review on work that specifically underpins our study and its goals: literature on mourning as a social and cultural experience, on the role of digital technologies in mourning and end-of-life practices, and on digital mourning in the wake of COVID-19.

2.1 Mourning as a Social and Cultural Experience

The experience of grief elicits responses that can be tracked back to our biological and social needs for attachment, and the sudden collapse of such bonds requires a response to mitigate this attack on our personal and collective identities (Neimeyer et al., 2002). It is through an attempt at making sense of this experience that communal and cultural practices assist emotional regulation and become integral to this adaptation (Neimeyer et al., 2002). The complex nature of mourning, as a subjective process, is broadly characterised by the need to protect the individuals' emotions, and it is said to transcend cultural or historical influences (Hagman, 1995). Despite the universal human developmental and biological explanations for grief and mourning, it is within the social context, and through examining (cross)cultural differences that we can gain a comprehensive understanding of bereavement and of the cultural practices around it. Mourning processes interact with individuals to discern the loss, the effects and events surrounding the loss, and in creating a new construction of those lost (Wilson et al., 2021). Community is an integral component to the processes involved in positive grieving, and essential to this reconstruction, and hence memorialization, of the deceased, through numerous mourning rituals and practices (Wagoner and Brescó, 2022). There are numerous sides to grief, one of which is defined as collective, in which the experience of a bereavement becomes one that is embedded as a shared experience (Kumar, 2023). Collective grief helps to unite community members through shared experiences of honouring the dead through established traditions (Wagoner and Brescó de Luna, 2021). The practical responses and coping techniques employed by mourners vary greatly across

different cultures. These include the formulation of what is lost when someone dies, the rituals following death, and the future of living loved ones (Rosenblatt, 2001).

A considerate cross-cultural lens is essential for understanding grieving and mourning in contemporary societies (Ward et al., 2018), and surrounding practices (Glazier, 1993; Hegland, 1998; Aborampah, 1999; Loeffel-Atkins, 2012; Viper et al., 2022). Many mourning rituals have remained unchanged for centuries across numerous cultures and communities. For example, in Western cultures, the practice of wearing dark clothes after a death has occurred dates back to the Roman Empire, or conversely in Eastern Asia, presenting in white or bright colours is expected when the person has lived a long life (Braun and Nichols, 1997). Social dimensions of mourning include aesthetic and performative practices, some inscribed in rituals and social conventions, others improvisational and mundane (Higgins, 2024), and they are highly contextualised (Stephenson, 2007; Klass and Chow, 2021).

The traditions and rituals, including changes to these practices, as a result of cultural influences, as well as the impacts of these changes, have also been widely explored, spanning across countries, continents and religions. For example, the cultural practices for Muslims mourning the dead in Kashmir, such as visiting the bereaved in their home and discussing routine affairs, are regarded as more important than the direct religious post-death rituals (Jahangir and Hamid, 2022). This demonstrates that the rituals of mourning go beyond a boundary of culture or religious intention, and at their core are social processes that are upheld by communities.

As we have described in the introduction section, traditional Irish mourning rituals remain strongly established in their social and community aspect, despite a general decline in Catholic and religious sentiment (Central Statistics Office, 2016; McAndrew, 2023). However, the integration of digital media into everyday living has affected also 21st century mourning in Ireland. For example, the online obituary platform RIP.ie is now fully integrated with livestreaming functionalities, as well as online books of condolences, links to digital *in-memoriams* such as donations and cards, which have become commonplace beside traditional Mass cards. In 2021, with the population of Ireland at just over 5 million (Central Statistics Office, 2021b), RIP.ie reached 250,000 unique visits per day and more than 50 million pages viewed per month, with these unprecedented levels of usage due to both the increase in deaths during the pandemic and in the reliance on digital means of expressing mourning (Deegan, 2022). At the time of its acquisition in 2024 by the Irish Times Group, RIP.ie reportedly receives 60 million page views a month (Hancock, 2024).

As forms of social support to grief and bereavement can include the involvement of large social circles, and indeed of wider communities in certain cultural contexts such as the Irish one, there is an evolution in *how* such social ties surrounding the end of life are and will be maintained in contemporary society, including technological ones.

2.2 Digital Technologies in Mourning and End-of-Life Practices

As we mentioned, while this is relatively recent in Ireland, there is an established body of research internationally that examines the role of digital and interactive technologies around the end of life. A wide range of digitally-mediated practices around death and mourning have been examined in-depth: from the personal process of grieving through rituals and objects (Sas and Coman, 2016) and the expression of grief and emotion through digital tools and platforms (Massimi et al., 2012; Moore et al., 2017), to the digital legacies in the aftermath of a person's death (Brubaker et al., 2014; Gulotta et al., 2014), including related implications in terms of stewardship and privacy of digital legacies (Holt et al, 2021). Research on techno-spirituality (Bell, 2006; Wyche et al., 2006; Buie, 2018), i.e. the role of technology in spiritual experiences and practices, has also focused on the digital mediation of religious mourning and, more broadly, on spiritual experiences of grieving.

A person's death also entails social and collaborative practices beyond the expression of grief and memorialization of the deceased. Moncur et al (2012) offer an in-depth characterisation of the ways in which digital tools and technologies are used in the immediate post-death by the bereaved but also by 'death workers' (Walter, 2005 cited in Moncur et al., 2012: 531): those professionals who support various practical and legal aspects of end-of-life, from celebrants to funeral directors. Technology is used pervasively as part of practices to do with information sharing and seeking, communication, coordination and facilitating remote participation (Moncur et al., 2012).

Social media play a particularly important role, with online communities reacting to deaths and sharing experiences of loss (Brubaker and Hayes, 2011; Refslund et al., 2015; Moore et al., 2017), and individuals seeking support in the online space in the wake of a bereavement (Massimi, 2013).

The practices of sharing and expressing grief through technology are more and more consolidated in socially accepted practices and vocabulary (Moore et al., 2017; Wagner, 2018), including a vernacular of expressing mourning on social media and other online platforms (Moore et al., 2017), such as RIP.ie in the Irish context (Gaspari, 2015). Literature on the shift of commemorating death in an online public space, through online images, events and narration, suggests a

divide between online constructions of death and real-world experiences (Gibson, 2007). Online mourning usually entails the bereaved publishing and/or receiving commemorations to lost loved ones, which can result in either increased personal freedom or an increased pressure to conform to digital methods of mourning (Walter, 2015).

Widespread online participation in end-of-life events such as funerals and memorial services also brings concerns in terms of safety, privacy, and the management of emotional distress (Uriu et al., 2021). Similarly, as human existence (and therefore death) increasingly both occurs online and is (relationally) defined through digital infrastructure (Floridi, 2015) underpinning even a 'digital afterlife' (Öhman and Floridi, 2018), questions arise on the related rights and responsibilities around data legacies and digital legacies (Gulotta et al., 2013; Doyle and Brubaker, 2023) and the inheritance or passing on of digital materials (Odom et al., 2012; Thomas and Briggs, 2012).

Finally, a body of research has focused on the design of digital end-of-life technologies and interactions (Sas et al., 2019), proposing both frameworks and approaches and design concepts and prototypes exploring various facets of mourning: from memorialisation rituals (Uriu et al., 2018), to physical-digital heirlooms (Odom et al., 2012), to mementoes (Wallace et al., 2020) and tributes/memorials (Uriu et al., 2019) also in the long term, such as through the digital augmentation of gravestones (Häkkilä et al., 2019), although there are ongoing debates on the social acceptability of such technologies (Allison et al., 2023).

Beyond these many specific facets of the role of technology around end of life, Massimi and Baecker (2011) argue for a *thanatosensitive* approach to design, advocating for careful design of future technology, chiefly through participatory and value-sensitive approaches (Massimi, 2014), Massimi and Baecker (2011) articulate three dimensions of end-of-life experiences to be addressed through thanatosensitive design: interpersonal communication, new ways of being in the world, and materiality (Massimi and Baecker, 2011). Through further understanding and adoption of appropriate design approaches, thoughtful digital supports can be provided to those experiencing a bereavement.

There is a need to extend this body of work: extensive research is being conducted to understand the impact of pivoting to digitally-mediated experiences during the pandemic in other realms of life such as work, education, and healthcare, and end-of-life also needs examining, especially considering that these technological developments have remained in some form after the end of the pandemic and have become regular part of mourning rituals and practices, extending the range of socio-technical challenges surrounding end-of-life (Doyle and Brubaker, 2023).

2.3 Digital Mourning in the Wake of COVID-19

To date, limited literature exists on the experience of digital mourning during the COVID-19 pandemic period, and very little research has been done in particular cultural contexts, particularly those where there is strong social and collective dimension to mourning, such as Ireland. Some studies have qualitatively explored this experience elsewhere: one such study was conducted amongst Samoan and Māori mourners, who have a rich history of physical rituals of mourning, such as the *hongi,* a ritual of touching noses, which were forced to find alternatives to these traditional practices during the pandemic (Enari and Rangiwai, 2021). The conclusions of the study indicate a positive outcome for the use of digital alternatives in mourning, suggesting that they allowed these communities to connect and participate via webcam viewings of funerals, and suggests that these practices will be carried through in the future following the removal of physical restrictions (Enari and Rangiwai, 2021). Another study looked to the experiences of Italian clergymen and investigated their experiences of funerary rites during COVID-19, whereby digital tools were noted as salient resources in enhancing the experience of mourning in lockdown (Testoni et al., 2021). Testoni et al. (2021) also explored the experiences of Italian women using the internet in mourning, with findings that there was a risk of extending grief in this manner of mourning, with a lack of in-person practices that may yield 'closure'. Mourners in the Philippines, who extended their sympathies in a virtual space during COVID-19, found the experience to be a positive one, in which they were provided with a space to commemorate, support, and pray (Costa et al., 2022), allowing them to translate traditional practices into the digital sphere.

Through the case study of a contemporary Japanese Buddhist funeral during COVID-19, Uriu et al. (2021) experimented with funeral webcasting, representing digitally the presence of mourners that were remotely participating in the funeral. Their findings show that online/in-person co-presence at funerals may be increasingly embraced going forward, especially due to aging population and the decreasing size of funeral halls in Japan. The use of webcasting technology seems to have been considered an inclusive approach by the participants in the study, as recently funerals in Japan have been limited only to close family (Uriu et al., 2021). The authors also identify a new 'death worker' figure in those people who manage the online funeral attendance, with the subsequent need to focus on privacy, on how to manage online interactions by grieving participants, and on the sensitivity required to coordinate a hybrid event in the unique cultural context and the rituals associated with mourning (Uriu et al., 2021).

Very little literature exists to date addressing digital mourning experiences in Irish society and the effects on the tradition of physical and social mourning rituals, such as communities coming together for the shaking of hands, or storytelling at the wake. Many questions have been raised on the impacts of these

changes in Irish society and its emphasis on community and gathering at times of death (O'Mahony, 2020; Pallaro et al., 2021). Developing an understanding of experiences of how such practices of Irish mourning occurred, and creating an understanding of mourners' interactions with technology, is essential in producing an accurate depiction of current Irish mourning rituals. While our study focuses on Ireland, its findings are relevant in the broader context of how social interactions, and particularly mourning practices, have been affected (possibly in the long term) by the COVID-19 pandemic.
In the following sections, we present the methodology for our interview study, followed by the presentation and discussion of findings.

3 Methodology

In planning our interview study, there was a rigorous process of ethical consideration prior to, during, and following data collection. Particular attention was given to the sensitive nature of discussions of grief and mourning during a period of crisis and emotional difficulties for many people. Furthermore, the University ethics committee required a detailed plan to reduce the chances of psychological distress experienced from participation, either during or after the interviews. Due to the need for safeguarding we set strict inclusion criteria as follows:

1. Participants over 18 years of age;
2. Participants who did not have a close relationship with the deceased person discussed in the interview;
3. Participants provided confirmation, prior to interview, that they were not in an active state of grief.

Exclusion criteria therefore were young age, having had a close relationship with the deceased person discussed in the interview, and being in active state of grief.

Ethical approval was granted on these terms before recruitment began. Participants were recruited both online, i.e. through posts on social media and local WhatsApp groups, and via word of mouth and subsequent referrals.
We recruited 8 participants (7 women and 1 man), ranging in age from 21 to 69 (mean = 50.25). Ten participants were originally recruited. However, the first author, who conducted the interviews, faced some ethical obstacles regarding two potential participants. One interviewee disclosed just prior to the commencement of the interview that they had a close bereavement 5 weeks before the interview. The researcher realised that the participant was in a state of active grief and sensitively ended the call, as, with such a recent loss, discussions of mourning

could possibly result in psychological distress for the participant. The participant was contacted with a sensitive email the decision to exclude them from the study to uphold the ethical procedures and to safeguard them. The second instance of concern was for a participant who had experienced the death of a close family member after volunteering to take part in the study. Prior to the interview, this participant honestly disclosed to the researcher that they could no longer participate. Research on such a sensitive topic always needs to be carefully planned and executed, but in the wake of the pandemic ethical safeguarding is even more paramount. Therefore, we report this as it is important for other researchers to carefully consider similar eventualities.

Indeed, because of the difficulties in recruitment due to the sensitive topic and the strict inclusion criteria, as well as the depth and richness of data that the coding process showed for each interview, a sample size of eight was considered appropriate for such a qualitative study, also considering other qualitative studies we encountered in our review of literature that relied on similar sample size (Wyche et al, 2006; Odom et al, 2012; Gulotta et al., 2013; Sas and Coman, 2016; Häkkilä et al, 2019; Buckley et al, 2023).

In conducting the interviews themselves, a semi-structured interview schedule was used comprising of eight questions to ensure overall structure, with open follow-on questions to probe the experiences of each participant. The interview began by asking participants to briefly recount their experience(s) of taking part in mourning rituals during the pandemic. This was followed by questions about the funeral: how they would describe their participation, how they found the experience, and which aspects they found different compared to traditional funerals. They were then asked about their experience of the digital aspects of the ceremony and of any other digital interactions they partook in (e.g. social media tributes, posting on RIP.ie, etc), how they felt these affected them and their social relationships with the bereaved family and other mourners (in both positive and negative ways). The final part of the interview moved to experiences on mourning rituals after the pandemic, whether participants still used digital tools at all and how, and whether they thought that these had a role to play in the future.

The other materials required for completion by the participants were an informed consent form and a demographic survey to capture age, gender and self-defined religious identity. The study participants' demographic information is summarised in Table 1.

Table 1. Summary of Participants

Participant	Pseudonym	Age	Gender	Religious Identity
Interview 1	Jennifer	69	Woman	Roman Catholic
Interview 2	Justin	23	Man	Non-Religious
Interview 3	Serena	21	Woman	Catholic
Interview 4	Pauline	64	Woman	Catholic
Interview 5	Sarah	60	Woman	Catholic
Interview 6	Maureen	46	Woman	Roman Catholic
Interview 7	Harriet	60	Woman	Roman Catholic/ Open to All Faiths
Interview 8	Molly	59	Woman	Catholic

Three participants described their religious identity as Catholic, three described themselves as Roman Catholic, one participant described themselves as Roman Catholic but open to all religions, and one participant described themselves as non-religious.

Participants were provided with an information sheet and consent form. They were reminded that they should not take part in the study if they were actively grieving a loved one at that time and should not discuss the loss of any close friend or family member. A continuous consent procedure (Klykken, 2022) was maintained throughout the interviews to safeguard both the participant and the researcher. Participants received a debriefing sheet at the end of the interviews.

Data protection, anonymity and privacy were also carefully considered and planned for prior to the collection of data. Participants were fully informed that all data (both participant data and interview data) would be anonymised and/or pseudonymised. Following the transcription of the interviews, any identifying data such as names, locations etc. were removed or encoded so that no identifiable information remained in the data transcripts. All audio recordings were stored in a safe cloud storage platform that was only accessible to the researchers.

The interviews were transcribed and then analysed using inductive thematic analysis (Braun and Clarke, 2006), through a process of familiarisation and multiple readings of the transcripts, followed by the generation of codes and themes via an inductive approach. This is a widely accepted analytical approach for qualitative data in CSCW and related disciplines (Wulf et al., 2015; McDonald et al, 2019).

A comprehensive initial coding was conducted by the first author, and following this each transcript was checked to ensure all salient codes had been noted. Following the coding stage, patterns identified through the collected codes in each interview were described and discussed on the basis of a compilation of phrases,

words and quotes from each of the interviews that were salient to the emerging themes. Three main themes with various subthemes were identified: unfulfilled mourning rituals; dealing with altered support mechanisms; and making sense of digital enabling. They are presented and discussed in detail in the sections to follow. Participants are referred to via their pseudonym (see Table 1).

4 Unfulfilled Mourning Rituals

The first theme we identified in the data was the participants' perception of mourning rituals during restrictions as functionally sufficient (i.e. providing a useful functional alternative when traditional practices could not take place), but generating a sense of unfulfillment, particularly regarding physical and social rituals assisting bereavement, and which digital alternatives could not satisfy.

The loss of gestures of support such as handshaking, hugging, house visits and physical gift giving were mentioned as being particularly missed:

> 'I suppose to get that sense of (…) closure I suppose to…meet people and to uh, whatever hug people or shake people's hands can be very healing. And so I would imagine that- that it would have had an effect on [the bereaved] that they weren't able to do those things' (Justin).

There was an expression of a sense of unfulfillment for the bereaved and for the participants who felt they were able to only partly satisfy familiar customs. Justin added that live streamed funerals did not provide the same emotional release without physical closeness and the sharing of the same space: 'I'd love to meet them and shake their hand or whatever and the fact you're kind of stuck at home, watching it on the laptop, at the kitchen table, it doesn't give that same sense of catharsis' (Justin).

In Justin's account, the functional ability to remotely attend did not provide fulfillment in the sense of 'closure', 'healing', and 'catharsis'.

The healing and comforting nature of in-person mourning rituals, and lack thereof during the restrictions, were noted by several participants as particularly significant in times of grief: 'there is a huge physicality in loss' (Sarah), and the loss of such physical expressions of condolences was keenly felt as a limitation of the ability to share grief and communicate empathy, and a loss of meaning to participating in the ritual: 'just the hug or the gesture... It was meaningful, so I think the meaning was gone as well' (Harriet). Physical closeness was described as integral to the social aspect of mourning: a primary provision of comfort to the bereft, and a direct expression from mourners that aided the process of grieving and coming to terms with the loss of a loved one. Loss of physical closeness was

another facet of the sense of unfulfillment: '(…) just to kind of comfort them in some way, a pat on the back or a hand on the shoulder…would have been a massive thing that I'd say would have been missing from the COVID funerals' (Justin).

The physical and social dimensions of mourning were also described in terms of sharing spaces and places where people gather, such as the funeral home or private home for the removal, the church for the funeral Mass, and locations such as hotel function rooms or pubs for refreshments. Seeing the mostly empty space of the church through funerals' live stream was also noted as part of a general sense of unfulfillment: '(…) small groups of people in the big, vast church (…) where it's very sad and sparse and open and empty' (Pauline). Several respondents found that being in their home, rather than in one of these places, felt inadequate. Participants spoke about the importance of creating a space as an alternative to the traditional ones, such as the church or funeral home, within their own home. For example, Sarah felt that the arrangement of a dedicated space at home was important as an attempt to fulfill this aspect and to re-create a respectful or prayerful environment to mourn:

> 'I would create a space for myself, which was usually about a quieter space. I would attempt to do nothing. And… I'm not gonna lie by the end of Covid that had changed somewhat - that I would kind of move about my business and… have the prayerfulness ongoing. But for funerals in general I would sit down and create a quieter space for myself' (Sarah).

Some participants addressed this by creating a unique space for mourning through a blending of in- person and virtual attendance. One participant, Justin, noted that 'there were some people watching [the live stream] in their cars' and described how mourners stood outside the church whilst simultaneously streaming the service online:

> 'For the full service, I think everyone just kind of (…) had something like in front of them… I'd say hundreds of people were like outside the church standing there throughout the service with the with the ceremony on like phones or iPads' (Justin).

The accounts conveying this multi-faceted sense of unfulfillment confirmed the perception of the Irish funeral as an emplaced social gathering, a meeting point for communities, and often an occasion for celebration of a person's life as well as for expressing grief.

Physical gatherings such as removals and funerals were also recognised as an opportunity to reconnect socially as a community, and that sense of broader reconnecting was also unsatisfied:

> 'You don't get…the same sense of community as well, because, and funerals traditionally in Ireland are, in fairness, a way that people often see each other and meet…people do like to kind of see who's at the funeral or whatever, you know' (Justin).

This perception of the funeral as an opportunity to come together and socialise was particularly important to Jennifer, the older adult interviewed, and a particular loss to people of that generation: 'people my age, they go to funerals and they go to weddings to meet people that they haven't seen in a while' (Jennifer).

Conversely, this made one participant reflect on how the community gathering aspect can in some cases feel as an opportunity for 'people watching', despite the solemnity of the occasion: '(…) you kind of notice who's- who's there and who you know? Who are those relatives, etcetera?' (Sarah). Sarah calls this 'nosiness', i.e. the interest in seeing who are the people attending. This is also not fulfilled as it is very difficult to observe others when remotely participating in a livestreamed funeral. Nonetheless, Sarah mentions that later in the pandemic period, she would somehow manage to do this even online: '[I'd] be attentive and be present…and be nosey as well so you know who actually did go and you know, could I recognise people' (Sarah).

As well as the spatial structure, the temporal structure of mourning rituals was also experienced as unfulfilled. The well-established and familiar sequence of participation in in-person rituals (i.e. removal, funeral service, funeral cortege, burial, refreshments, sharing of gifts such as Mass cards) was disrupted: certain important practices could not take place, and it was not possible to take part in others. This did not just feel as the unfulfillment of a social obligation, but of mourning and of a sense of closure in death: 'You don't get to see the actual burial (…) the coffin coming down and that's it. That's the end then' (Jennifer).

People widely attended live streamed funerals, but felt the loss of being able to observe aspects of the ritual: one example is the presentation of 'gifts' in the church, i.e. where objects that represent the deceased's life, interests and personality are brought to the altar during the offertory part of the Mass, could not take place due to the risk of COVID-19 contagion (and therefore was not captured by the livestream): 'those little pieces that sort of capture the essence of the person who has passed, and those - those kind of rituals were gone' (Sarah).

Participants felt that not only was there a lost sense of collective identity as a mourner within the community but a lost sense of the identity of the deceased through the removal of these social rituals in mourning when 'you didn't get the same sense of the person' (Justin).

In describing their experience of watching live-streamed funerals, several participants remarked on how the camera framed their experience as viewers and made miss some important aspects of attending a funeral:

> 'They'd just have a camera and- you know, it didn't move around. The camera (…) just seemed to be focused on the altar… the only time you get to see people, if you want to see people would be communion time when you see them walking around' (Maureen).

Participants communicated their difficulty participating through a limited virtual viewing experience, but also acknowledged that it could be a positive way of avoiding distraction:

> 'It was different in the sense that obviously the way the camera falls and what it takes in is very particular. It's in one place and that's largely on the celebrant, etcetera. So I suppose your attention is honed in some way by the virtue of the of the camera angle' (Sarah).

The social experiences of communities gathering, conversing, sharing the same spaces in the days following a loss were regarded not only as ways to express empathy in mourning but as key rituals aiding the grieving process, i.e. assimilation in bereavement. These familiar social interactions around mourning rituals were regarded as uplifting and comforting: 'the kind of chatting really emphasised things and you forget about the grief' (Maureen). The loss of these social facets involved in mourning was suggested to extend the grief of those bereft individuals and intensify sorrow: 'because there was no chatting it seemed to kind of compound the sadness more' (Maureen).

Participants highlighted the importance of the traditional practices of conversation, story-telling and reminiscing as significant ways of coming to terms with loss, and memorialising the identity of the deceased when in a shared space: 'you might tell one story in one corner and then repeat it in another corner' (Sarah). Sarah highlighted the absence of the wake during COVID as a significant aspect of unfulfillment, which was felt even more keenly when they returned to the ritual once again: 'I was really really struck by wow this is what a wake is…and we have just been through two and a half years where people couldn't experience that' (Sarah).

The unfulfilling experience of COVID-19 funeral rituals resulted in feelings of disconnection that made a bereavement harder for all involved. A dominant concern that emerged in the interview accounts was mourners' perceptions of being helpless in their personal bereavement and in bereavement support.

Feeling alone as a mourner online was a common experience for participants, with a harsh contrast between the digital connectivity and a sense of isolation

(Pallaro et al., 2021). The livestreamed funeral was described by one participant as an experience where 'there was this sense of being utterly alone in grief' (Sarah). The experience felt disconnected from reality and one that was embedded with sorrow as a result of this isolation.

One participant recounted the experience of watching a live streamed funeral outside of the church:

> 'It was just so sad having to watch it on a screen as well. Rather than having to like, be able to hear what they say like in front of them…and having to watch it on a screen or just like, wait for them to come out to see' (Serena).

Participants felt that the experience was 'surreal' and there was a feeling of disbelief in the lack of ability to fulfil the rituals that were so familiar and comforting. Interviewee 4 noted that 'It just looks so lonely' while describing the funeral service viewed through live stream.

Participants keenly felt that the families of people who died during the pandemic could not benefit from the tradition of an entire community coming together to mourn:

> 'For people who died during covid, it was lonely for the family, you know, because meeting people and people saying, well (…) there was such a lovely person or the whatever. All that's part of the grieving process. All that was missing. All that was missing because you barely have the family there and you know everybody's masked and everything' (Jennifer).

Helplessness was mentioned by several participants when describing the lack of agency and ability to fulfil familiar grief rituals. As well as an individual sense of helplessness there was a community one. Participants noted that their distanced attendance felt inadequate, and support from the community mourners and the bereaved family could not be fulfilled:

> 'There was a sense of… always coming together and hospitality, or helping out or doing something and to think that was all gone- so there was this sense of helplessness. Or this sense…you always felt before COVID that you felt, well, I'll do this, or hand in a plate of sandwiches, or I'll do something' (Harriet).

Even participants who participated through distanced in-person attendance, such as standing outside the church during the service, expressed a feeling of helplessness when there were barriers to accessing rituals*:* 'You were so helpless when…you were outside of, like, that the kind of just even outside the building' (Serena).

These feelings were predominantly a result of participants feeling that they could not sufficiently empathise with and provide support to with the bereaved. Pauline describes: 'As a mourner or as a person who wanted to express condolences I found it very different[1]. Yeah I felt very sort…as I wasn't helping at all' (Pauline). This connects to the second theme we identified, which refers to the way in which participants accounted for the difficulties they experienced in giving and receiving support.

5 Dealing with Altered Support Mechanisms

This second theme pertains to the challenges of dealing with altered support mechanisms. It is closely linked to the sense of 'helplessness' which we highlighted in our illustration of the previous theme of unfulfillment.

Participants reported that expressing and giving support, at an individual and community level, is an integral facet of mourning in Irish society, and that the pandemic restrictions and use of technology fundamentally altered how this occurs and, subsequently, raised new challenges for them in the way they took part in mourning. Participating in digitally-mediated rituals (i.e. online books of condolences, livestreamed funerals, etc.) was viewed as meaningful in the personal navigation of grief (albeit in an inadequate, unfulfilling way), but the aspects that were lost were noted as a particular problem for communities and the way they had to adapt their forms of collective support.

Participants expressed the importance of the tradition of not only expressing but also giving support as a fundamental element in facilitating a more positive grieving experience for the bereaved: 'There's a whole tradition of rallying round' (Sarah), noted one participant. This provides emotional and material comfort when there is full access to gathering and unity in times of grief. Pauline described this 'rallying round' as a way of helping the bereaved cope, with social support to somehow dull the grief: 'You can disguise [grief] for that few days by having this blanket of support from your community and the people you know' (Pauline).

All participants reiterated the importance of providing both individual and community support for the bereaved, with one participant expressing how that collective support provides an uplifting and stable foundation in the immediate stages of loss: 'Those days are scaffolded and supported by so many others, from your immediate family, your community' (Sarah).

[1] In Hiberno-English, the variety of English spoken in Ireland, the adjective 'different' is often used to mean that something is unusual and surprising in an unsettling or disconcerting way.

Harriet noted the importance of even small rituals, such as handshaking, as a signal of support: 'That was something that we always did, and people did to us, when we grieved- and it was a real symbol of "I'm with you"' (Harriet).

Another important tradition of support, still widespread despite the decline in religious identification and participation, is the traditional Mass card, which we described in Section 1 and which represents emotional support in the form of prayer for the deceased. Participants expressed that the introduction of digital alternatives to funeral rituals during COVID-19, such as livestreaming and online commemorations, resulted in the decline of this tradition: 'RIP.ie has replaced people going out, buying the Mass cards. And again, you know, I'd like to think if I'd die that people would get a few Masses said for me' (Jennifer). Furthermore, Sarah noted that physically writing something for those grieving was something important for a mourner to do. Digital alternatives to Mass cards and condolences cards were not seen by some participants as equally effective ways to offer support[2].

Generally, participants felt that, broadly speaking, they and the bereaved families had to grieve without support. Almost all participants recalled personal positive experiences of providing and receiving support during times of mourning prior to COVID-19 restrictions. However, recollections of these experiences were counteracted by the expressions of an enormous sense of loss during the pandemic. Molly noted: 'It was very much just [them]…the family on their own and their support networks sort of gone away now' (Molly). Molly went to on to express how the loss of support mechanisms was 'the main negative' during the restrictions.

Participants discussed their experience of support in mourning during the pandemic as altered: they were more dependent on individual support, i.e. the livestreamed religious rituals for spiritual support, when informal gatherings were not possible. Sarah described that grieving alone in a virtual space 'just renders everything somewhat lacking in emotion' (Sarah), and hence lacking the sharing of empathic support as the funeral may feel more formal and detached: 'you're brought right into the religious purpose…of the funeral, as opposed to the more community one which is celebrating the passing' (Sarah).

Furthermore, when participants experienced that sense of being more alone and unsupported in bereavement, the mourning process felt as it had not reached a final destination. Justin explained how the lack of support brings obstacles in the grieving process for 'when they're grieving they kind of do rely on others I suppose to get that sense of- even for closure' (Justin).

[2] It should be noted that in the latter period of the pandemic, RIP.ie introduced a new functionality enabling digital Mass cards.

Multiple participants also noted that they felt lucky to not have experienced a close bereavement during the COVID-19 restrictions, as they felt it would have been an incredibly difficult thing to go through without full access to their networks of support:

> 'Everybody was saying thank God [family member] didn't die during COVID because, you know, we wouldn't have been able...to survive, you know that that loss…because the community is here, it's supporting us and we would not have been able to endure' (Sarah).

Despite these challenges, the participants explained how they adapted, both in-person and online, in their attempted efforts to provide support for the bereaved. The interviews revealed that mourners found ways to interact with their communities in creative and interesting ways in an attempt to provide support by new means. Participants described physical adaptations such as offering a guard of honour for the deceased as the funeral cortege passed through a village or neighbourhood. Other examples were gathering outside their workplace, or outside the church and watching the funeral livestream on their phones from there:

> 'There was a massive congregation assembled outside the church, on the roads, in the carpark, all around basically and there were some people watching it in their cars and there were others… just gathered around listening to the broadcast' (Justin).

There was a sense that there had to be new physical arrangements that communities could use together with digital ones as a way to honour the deceased and support the family, however helpful the digital tools were in aiding connection. Molly recalled her experience of a guard of honour for the death of a colleague and how her community of co-workers chose to express support:

> 'So what we did was we lined. It was all the nurses and anyone that's ever worked there before. Literally lined the route. And for about a mile… to be there with her, when her coffin came past' (Molly).

Several participants expressed an appreciation in their ability to navigate the challenge of establishing altered practices of support within and with their communities, and that these adaptations were somewhat meaningful alternatives to the traditional rituals: '…then afterwards they kind of came around like to everyone that was outside. There was kind of a nice like- there was nice community…in a way because everyone was (…) outside together' (Serena).

6 Making Sense of Digital Enabling

The final theme illustrates how participants felt that digital tools enabled their mourning process and their efforts to make sense of these technologies and the practices they became part of.

Despite the significant difficulties that we described in the two previous thematic sections, overall the introduction of online tools for mourning, such as virtual funerals and online condolence books, was seen as positive (unexpectedly so in some cases) as that these tools gave mourners the ability to interact in some way with their communities; in other words, it made them realise 'that there was that option there' (Justin), at a time of significant and unexpected transformation resulting from the restrictions. Justin stated:

> 'If it had happened ten years previous, it would be totally different because the technology wouldn't have been there and there wouldn't have been that same ability to keep in touch. So it's great that (…) things were able to be live streamed' (Justin).

There was a sense that participants felt fortunate and somehow relieved about having these digital tools that enabled them to a certain extent at least: 'Without live streaming, it would have just been a case of, oh I can't make that… so people from all over the country, all over the world could watch that funeral and pay their respects digitally' (Justin). While paying respects in this manner was seen as not completely fulfilling (as we detailed in Section 5), it was at least possible and accessible to a wide network of relatives and friends.

Some participants reported feeling more present and personally involved with livestreamed funerals, and found that attending a funeral alone at home resulted in increased attention and memory of those services they viewed online. Molly spoke about virtual funerals being more memorable than in-person services, due to the fact that there are 'no distractions and you're able to really link in' (Molly). Molly emphasised how this increased attention, as an observer, resulted in a more memorable event: 'I probably actually remember more about that than I do about manys of funerals [sic] that I went to, you know, I remember, you know, everything that was said' (Molly).

Participants also reported feeling more emotionally involved in funeral services online, and the use of livestreams has continued following the lifting of restrictions. Molly, discussing a recent funeral she watched online, narrated this experience:

> 'I went online and listened to the funeral and I was bawling crying just sitting here on my own because I just- I think it's because you're listening to

> everything… I thought…I find it really emotional, I don't know whether it was just because you're listening to every word the priest says' (Molly).

This further illustrates the tension between the sense of unfulfilled rituals, particularly in their social and community aspects, and the realisation that the individual experience can be more spiritual and reflexive, which we mentioned in an earlier section discussing Sarah's account. The online mourning experience was often described as a more intimate one, with increased personal reflection also on one's own interaction with the rituals, and a more intentional experience where participants were required to create a space that was respectful and sometimes prayerful. In a previous section we described how Sarah created a quiet space for themselves at home in order to 'be attentive and be present' (Sarah). She felt that this focused her on the ritual of the funeral and on mourning the person who died rather than paying too much attention to the congregation:

> 'So whereas I suppose ordinarily (…) you kind of notice who's there (…) you know? Who are those relatives, etcetera? And I suppose that kind of thing is not available to you. You're absolutely (…) You're brought right into the religious purpose… of the funeral… the whole experience of the funeral is paired back to the religious rites' (Sarah).

In Sarah's account there is a clear effort to resolve the tension between missing the sense of a communal experience, as mentioned earlier, and the realisation that the virtual attendance experience can be more attentive and spiritual, which is an interesting aspect of how people dealt with the experience of what was enabled through digital technologies, often unexpectedly, and of how this continues after the pandemic restrictions ended.

Similarly, Molly noted that virtual attendance was more effortful, where one was more engaged with the personal experience as a mourner and less so with the social aspects of shared rituals:

> 'You would make that extra effort to sit down and actually watch it and it could have been a little bit more intimate because you're literally sitting there and you're watching and you're listening to it because sometimes funerals there's just so many people there, you're gonna get lost in the whole thing of it… whereas… when we did go online, you were going online for that person… listening to everything and you're hearing everything and you can hear so much more…because you were focused in' (Molly).

Many participants remarked on how commonplace the practice of online condolences through RIP.ie became during the pandemic period. While the platform existed long before the pandemic, its use would have been less widespread and some people would have not contemplated using it at all: 'On

RIP[.ie]… like normally you wouldn't dream of writing a condolence on that whereas now it's become, you know… a huge thing… other than Mass cards or anything' (Molly).

RIP.ie indeed greatly expanded its user base and made record profits in the 2020-2022 period (Deegan, 2022). As we mentioned earlier in the paper, it expanded the range of services it offers to include digital Mass cards, memorial gifts, and a directory of professionals providing of end-of-life services (e.g. florists, humanist celebrants, musicians, headstone engravers, etc.) and of charities accepting *in-memoriam* donations.

Pauline described the importance of online condolences as a now widely-accepted support tool:

> 'I'd always leave a condolence on RIP because I think it means I've heard it from people that they're very comforted by reading things...I'd always try to include something that I know about the deceased person or something kind they did or complementary thing about the type of person that they were or something they did for me or my family or something because yeah I think it means a lot to people reading them.' (Pauline)

This digital display of sympathy provided mourners with a space to narrate their memorable experiences with the deceased at a time when in-person conversations were severely curtailed. The online book of condolences and other online spaces (such as the Facebook pages that enabled the livestreaming of funerals for funeral directors or for parishes) were used by mourners to communicate their online attendance and enabled them to acknowledge the virtual funeral:

> 'I let them [the bereaved family] know I was going to watch it and then I let them know I watched it and made a comment that the Mass was beautiful or that "you read very well" or "your speech was lovely"' (Pauline).

There was consensus among all participants that these new forms of digital enabling contributed to shaping the ways in which mourning is done in Irish society going forward and beyond the pandemic years. During the period of restrictions, people had to navigate new ways and expectations around the use of technology around mourning and end-of-life, with a set of accepted practices now in place:

> 'I think live streaming definitely has…a place in the future…I think it's really important to keep it… people are now definitely more reluctant to go out or (…) to put themselves at risk of being in a large crowd… it's good that they have that option as well. They can go… wherever is live streaming the funeral' (Justin).

The primary expectation for the continued use of digital alternatives is the support of individuals who are unable to attend physically to take part in the rituals in an

alternative space. These digital alternatives were noted as being particularly useful for those living abroad, older adults, or those who may be too vulnerable to attend large gatherings:

> 'I think they gave huge permission to the elderly- to anyone who's (…) compromised in any way, be it, you know, physically or any other way, just by not being in the country or whatever, to not be physically present in a church' (Sarah).

Sarah hints at the social acceptability of attending remotely that is now in place for those people who are not able to be physically present, which would not have been either possible or adequate before the pandemic. Furthermore, for those unable to take part in person, digital means of mourning can play a role in providing a sense of community and communal support, as it happens, for example, with online books of condolences: 'I think it's nice to leave condolences for somebody you know that passed. And that seems to have really taken off' (Maureen). Maureen made the example of her husband who was grieving for a close family member: 'he did read all the condolences… he did like it… that did help' (Maureen).

Nonetheless, something that could be amply noted in the data was the support and expectation for the continued *integration* of digital tools into Irish mourning rituals, rather than the replacement that unavoidably occurred during the pandemic. Some participants stated very categorically that these forms of participation should never fully replace in-person traditions, and that there should be some care taken when people decide whether to participate virtually or in person. For example, Serena stated that parts of an Irish funeral, such as the removal, must uphold some sense of privacy and intimacy, making them unsuitable for livestreaming or online broadcasting: 'Irish funerals and…removals are so intimate already that…I don't think it's something that you'd probably record and it's kind of nice how it's like there…in person…Removals especially are quite intimate' (Serena).

Participants responses overall indicated that while these changes were seen as poor substitutes for traditional rituals at a time when they had to be almost fully replaced, their integration – both in terms of technology and of considerate use - is continuing and, also, shaping their practices going forward:

> 'I know I would never have done that before COVID either. It was…always the Mass card and it was always going to the funeral, whereas even I've noticed myself now, last week …I went to a wake, but I put the condolences online before I went to the wake' (Harriet).

Many participants felt that there will be a continued intertwining of the new and old and that the required adaptations mourners had to make and make sense of during the restrictions have 'left that legacy' (Harriet).

7 Study Limitations

To fully contextualise our findings, some limitations of the study must also be acknowledged. A first limitation is in the sample from which the data was collected. The sample was relatively small, although in line with other similar studies we reviewed and did yield rich data. However, data was collected from participants who had an experience of mourning during COVID-19 restrictions but did not have a close relationship with the deceased. This criterion for participation safeguarded participants and also permitted the first author, who had limited interviewing experience surrounding such sensitive topics, to ethically and safely collect data from participants: i.e. as the participants did not have a close relationship with the deceased, this significantly reduced the probability of participants experiencing distress during the interview. However, the study did not capture the experiences of those mourning a close friend or family member during the COVID-19 period, and therefore it is likely that intimate facets of the mourning experience and its digital mediation during this time went unexplored. We focused instead on the broader community experience of mourning, which is nonetheless an extremely important dimension of Irish culture that was affected by the pandemic. It is important to note that interviewees regularly disclosed their perceptions of mourning for those closer to the deceased, and the accuracy of these perceptions should be challenged through further research.

The second limitation concerns the variance of the sample in relation to gender and age. The inclusion/exclusion criteria that had to be followed brought forward numerous difficulties in recruitment. Much of the recruitment was carried out via word of mouth, which possibly resulted in the project being circulated amongst more women, as it was originally distributed by women. There was particular interest from women in middle adulthood between the ages of 46-64, which made up five of the eight participants included in the study. There are numerous possible factors contributing to the increased responses from women in middle adulthood than any other group. These may include women being more outwardly involved in mourning rituals (Harris, 2009), or women being more likely to participate in discussions around grief and mourning (Rothaupt and Becker, 2007) as a result of gendered norms or gender-based stigma surrounding bereavement (Creighton et al., 2013; Martin and Doka, 2000). A larger number of participants in middle adulthood participating may have also been a result of factors such as

increased experience with death and mourning, than younger groups. The research was less likely to have reached those in older adulthood as it was distributed online through social media, and it has been shown that social media usage amongst those over 65 in Ireland is at levels of approximately 20% (Eurostat, 2021). There was just one participant from this group, a 69-year-old woman, who was recruited via word of mouth. Conversely, although social network use is highest among young adults (Central Statistics Office, 2021a), participation from younger adults was also low, which may have been a result of reduced life experiences with death and mourning. It is likely that a purposive sampling approach (Palinkas, 2015) would result in a more representative sample of the larger population under study and is recommended for future research. A more varied sample would be useful in uncovering differences across age and gender in the experiences of mourning during the COVID-19 pandemic in Ireland.

8 Discussion and Design Directions

In earlier sections we presented our findings articulating three main themes that illustrate the Irish experience of restricted mourning with the integration of digital tools, characterised by a sense of unfulfillment, by the challenges of managing altered support mechanisms, and by the efforts of making sense of digital enabling. While the digital tools and technologies were seen as somewhat enabling in the exceptional context of a pandemic that dis-abled most social practices, and while the integration of digital tools for mourning has gained a principal role even after the pandemic, there was also the sense of having experienced incomplete fulfillment of the need to mourn and grieve, and of major challenges to manage ways to give and receive support. It was observed that the pandemic restrictions resulted in a heightened sense of grief, through feelings of isolation and disconnection, despite the usefulness of digital connectivity (Pallaro et al., 2021)

The findings highlight the enduring importance of physical and social rituals, as well as the importance of community support in individual and collective grief in Ireland. Accounts documented in our interviews suggest that although the pandemic restrictions on mourning were challenging, following the lifting of restrictions there is consensus in favour of the continued, sensitive, integration of digital mourning tools into established mourning practices, blending recently established practices into long-lived ones. The continued use of live-streamed funerals and online books of condolences in collaboration with traditional practices is seen not only as useful, but also meaningful. All the same, the

importance of communal aspects of mourning and of the shared materialities of traditional practices (through physical presence, supportive gestures, storytelling, food, etc.) remains enduring.

The primary reason of the continued support for the use of digital tools in mourning is that they alleviate a social pressure associated with in-person attendance, and provide the option of alternative spaces for mourning, paying respects to the deceased, and showing support. This is particularly valuable for those who are unable to attend in person, such as for example those living abroad or experiencing health issues. It was also noted how remote attendance can also facilitate individual reflection and an experience more focused on the religious rituals and the spiritual aspect rather than on the social aspect. This is a tension that can be noted in the accounts of several interviewees: while the social and community facets of Irish mourning are of paramount importance and uphold an ancient tradition that people are very proud of, there is recognition that often these events can be seen mainly as social engagements. The addition of newly accepted alternatives to take part in mourning is welcome but needs navigating and further making sense of. Our findings document some challenges in the way remote attendance occurs, with participants mentioning the limitations of fixed camera angles, etc. This resonates with related research conducted during COVID-19 (Uriu et al., 2021), highlighting the need to think of more nuanced yet usable live streaming and broadcasting tools going forward.

Certainly, the changes that took place to Irish mourning during COVID-19 restrictions, and the impact of these changes, seem to be irreversible. Other Irish qualitative studies have explored these impacts, through the lens of mental health professionals supporting the bereft (Buckley et al., 2023) and other bereavement care providers (Pearce et al., 2021; Power et al., 2022). Our study adds the perspectives of mourners in this period, which is important to expand our understanding of the social role and importance of mourning rituals in processes of grieving (i.e. Chen, 2012; Gire, 2014; Norton and Gino, 2014; Rubin, 2014) and of the use of digital tools and technologies (see the useful summary and categorization in (Sas et al., 2019)) that have been documented before the COVID-19 pandemic.

Contextualising the findings of our study in further existing research on mourning yields some interesting discussion points. The cultural context of mourning rituals emerges clearly from our work as an integral component to assimilation in bereavement (Özel and Özkan, 2020), with mourning rituals as a form of emotional protection against the intense feelings experienced in grief (Ahmadi and Ramezani, 2020). Our findings highlight the importance of traditional practices in discerning loss and eliciting a more positive bereavement response. It has been shown that rituals of mourning often aid the grieving process through a

sense of regained control (Norton and Gino, 2014). Participants in our study reported a sense of unfulfillment and loss of support in mourning during the pandemic period. This hints at a sense of loss of agency in mourning during COVID, whereby agency and control over familiar rituals and practices was taken away from mourners. The findings highlight how digitally-mediated mourning rituals can help to foster a sense of agency during bereavement, particularly for those people who are unable to participate in presence.

Furthermore, our findings confirm the importance of social support in the alleviation of feelings of loneliness immediately following a bereavement (Utz et al., 2014; Logan et al., 2018). Conceptualising loss without sufficient social and community support was particularly difficult during the period of pandemic restrictions and brought forth a multitude of challenges. Another aspect which is noted as particularly important in the processes involved in mourning is identity. Identity is targeted following a bereavement when there is a requirement to create a new construction of the deceased (Wilson et al., 2021), whilst simultaneously creating a new sense of identity for oneself, as bereaved. These processes are relational and take place within communities adapting to loss through rituals. Participants in our study expressed how there were issues with self-identity, and how the identity of the deceased was challenged, as mourners moved online. The findings emphasise the importance of mourning rituals in identity formation, and how the loss of these rituals and their digital counterparts may leave ambiguities in making sense of the bereavement.

In terms of implications for digital developments, the existing body of knowledge on the role of technologies around end-of-life has expanded in the wake of the pandemic, with more nuanced understandings of a variety of digitally-mediated practices, from remote participation in rituals to memorialisation, and management of digital legacies. The findings from our study can inform future directions for digital design supporting socially-embedded aspects of mourning. Furthermore, due to the study design and participants, our findings speak particularly to designing in support of mourning rituals as experienced by members of a social circle or community.

In Section 4 of this paper, we illustrated the sense of unfulfillment in mourning rituals experienced by the participants during the COVID-19 period, which indicates clearly that a ‘digitisation’ of mourning rituals, as it was enforced by the pandemic restrictions, would not be a generally effective design approach despite a degree of functional effectiveness and the usefulness it could have for people who face barriers to in-person attendance.

Instead, our findings across the identified themes point towards *integration* of digitally-mediated and in-person experiences, where the opportunities to

sympathise remotely and participate in online activities around mourning rituals could meaningfully add to culturally and socially established in-person practices. We propose that the design process should consider various facets of such integration, namely *physical-digital*, *temporal* and *interactional*.

8.1 Physical-digital integration

Participants expressed a sense of disconnection in describing their experiences of grieving in isolation and being unable to perform physical gestures (such as shaking hands) and to be physically sharing a space and making their presence felt to the bereaved family and the wider community. During the pandemic, people devised workarounds to achieve this integration whenever possible, such as watching a live-streamed funeral while standing outside the church where it was taking place, and performing guards of honour as the cortège passed through a local area. We argue that design should explore sensitive ways to integrate physical and digital, for example by including the potential of tangible technologies and interactions to mediate particular aspects of mourning rituals such as the presentation of 'gifts' - objects meaningful to the deceased person's life - during the funeral service.

8.2 Temporal integration

Another aspect of unfulfillment expressed by participants related to a disruption of the temporal sequence of mourning rituals. In our view, future design should be mindful of the importance of temporal structures of mourning rituals (and their cultural significance) and address this, for example by developing digital means to relate to the detailed timeline of rituals or by considering support in the longer term and not just for the particular event that is the funeral service. For instance, in the Irish context people carefully consider when to participate in the series of rituals surrounding a death, from the wake or the removal held before the funeral, to the funeral itself, and then the 'month's mind' – a requiem Mass held about one month after a person's death. The timeline is invested with cultural and social understandings, and therefore any digital integration would need to consider this in various cultural contexts.

8.3 Interactional integration

During COVID-19 the sudden pivot to online funerals was achieved by relying on established social media platforms such as Facebook. Other existing platforms, such as RIP.ie in Ireland, expanded their user base and range of functionality. However, the social environment for online mourners, and the way in which they

might be able to integrate their interactions within in-person rituals, needs to be carefully considered going forward. Commercial social media platforms might have implications on privacy and accessibility that should be considered, and might not support an appropriate range of interactions, including the possibility of determining their degree of privacy or of visibility. For instance, certain interactions could be visible to the deceased's closest family members, while others to the whole community taking part in mourning, or even to no-one but the person performing them as part of their personal grieving process.

The unfulfillment expressed in the participants' accounts of experiences during the pandemic reported in this paper could also be something still keenly felt by people who are only able to participate remotely even after the end of pandemic restrictions, such as for example friends or relatives living abroad. It might not be possible for design to fully mitigate this; however, we argue that it is possible to explore sensitive and thoughtful ways in which such unfulfillment could be expressed and acknowledged, becoming part – for example in the case of migration and diasporic experiences– of broader social support mechanisms.

8.4 Designing for second-order work around the social context of mourning

Two of the themes we discussed in this paper point to further design implications, which are particularly relevant to CSCW as they stem from the second-order work of managing and making sense of these changes to mourning practices within the social context.

The themes of *dealing with altered support mechanisms* and *making sense of digital enabling* are very much interlinked with each other, and relevant data illustrates the background efforts by participants in making sense of the new reality of digitally-mediated mourning rituals and in figuring out which forms of support can be garnered from them and enacted as part of socially-embedded practices. For instance, participants Molly and Sarah described their process of realising how much bereaved families have come to rely on online messages of condolences as a valuable support mechanism, and they both expressed their appreciation of some of the unexpected positives such as making the experience of the funeral more intimate, reflexive and contemplative.

It is therefore important to consider how design could facilitate this layer of social co-production of new practices, and the work to adopt and adapt new forms of collective support that make sense in the relevant cultural context. An example could be integrating functionalities into systems that enable mourners to adapt

and tweak some of the functionalities to suit their circumstances, both personal and social.

While not addressed directly in our study, there is also a need to design with an understanding of new facets of professional 'death work', as suggested by Uriu et al. (2021), which include the management of online interactions and the monitoring of digital and remote participation in hybrid events, with considerations of safety, privacy, and the management of emotional stress. This also links to socio-technical challenges in managing digital legacies, as this social dimension of mourning generates further digital data and interactions connected to the person who died, and becoming part of a broader lifecycle of digital data legacies. As argued by Doyle and Brubaker (2023), it might be necessary to consider a multi-user and multi-generational approach to systems design for these purposes, also considering the relationship between the professionals and the bereaved in managing such legacies.

The complexity is such that the importance of maintaining a 'thanatosensitive' approach to design through participatory approaches, as argued by Massimi (2014), is more important than ever when contemplating a very near future where digital technologies around mourning practices are not only seen as a poor replacement, but as part of an expanded set of collective participation in mourning. Naturally, these possible directions must be further explored in future work that focuses specifically on design.

9. Conclusions

Our work broadly resonates with the experience of mourning during COVID-19 in communities and cultures beyond Ireland as documented by other researchers. An exploration of the experiences of Portuguese mourners (Aguiar et al., 2022) brought forth similar themes in the experience of funeral rituals as inadequate or unfulfilling, with a related focus on feelings of loneliness surrounding restricted mourning. Loss with limited support, and a lack of death rituals were also noted as particular challenges for Muslims of Kashmir during COVID-19 times (Hamid and Jahangir, 2022), mirroring similar findings to the present study. In Peru, Moya-Salazar et al. (2022) explored the challenges faced by mourners who lost loved ones to COVID-19 infections, with similar themes emerging in the experience of lost rituals.

The use of technology during pandemic restrictions was widely recognised as a useful way of connecting, however in-person rituals were noted as preferable and fulfilling (Testoni et al., 2021), particularly in those cultural contexts, such as Ireland, where participation is very broad and involves entire communities. In our

study, the use of digital tools for mourning during COVID-19 restrictions is best defined as a challenging experience which yielded some positive outcomes. The unavoidable use of digital tools at a time of global crisis, acting as an almost full replacement for in-person mourning practices, is perceived as a generally negative experience. Conversely, the outcomes of these tools and practices becoming integrated into tradition, as complementary means of participation, are perceived as opportunities. These results reinforce the importance of sensitively and carefully approaching the design and use of digital support to mourning going forward. In relation to existing HCI and CSCW literature, our findings particularly expand our understanding of the community and social aspects of in-person mourning. They hint at the importance of sensitively *integrating* physical and digital in any future design of tools or platforms to support this particular aspect of end of life.

This paper makes several contributions: first, it adds to the limited literature surrounding the experience of Irish mourning and digitally mediated mourning during the pandemic. Recent literature has begun documenting the experiences of bereavement during COVID-19 in communities and cultures worldwide (Mortazavi et al., 2021; Jahangir and Hamid, 2022; Hernández-Fernández and Meneses-Falcón, 2022), however, the broader Irish experience of mourning during COVID-19 remains relatively unexplored. The importance of our findings also lies in providing accounts of the experiences of mourners in Ireland during the pandemic, as narrated through the mourners' own voices. A better understanding of these experiences and their implications is essential in developing better supports (including digital supports) for those who experienced a bereavement during the pandemic period. Second, it is the first study to explore issues of digitally-mediated mourning in the Irish context, and adds to the body of knowledge in HCI and CSCW on the role and possible future of digital technologies for end-of-life. Our findings speak to certain aspects of designing digital technologies around end-of-life, namely the collective and social dimension of mourning rituals - from the point of view of participants. We suggest possible design directions exploring various facets of the sensitive integration of digital tools and interactions in the physical/material, temporal and interactional structures of mourning rituals. Furthermore, we argue that the second-order work of manging and making sense of these new practices should be supported, for both people experiencing mourning and mourning rituals and for professionals who now facilitate these digital experiences. Finally, the design of future digital interactions will need to be culturally sensitive, as noted also by other CSCW researchers in this space (Doyle and Brubaker, 2023). For example, existing works such as that of Uriu et al (2021) point out at the diverse ways to

take part in mourning rituals in various cultural contexts, as we have characterised in the Irish context.

These contributions of our work aim to further the understanding of how these practices occur in cultures where the social and community aspects of mourning rituals are particularly important, and to reflect on the current and possible future design of digitals tools and services in support.

Acknowledgements

The authors wish to thank Sarah Foley, Laura Maye and Sarah Robinson for providing helpful feedback on this article, and the anonymous reviewers for their constructive comments.

Declarations

Ethical approval

The research followed University College Cork research ethics guidelines (see: https://www.ucc.ie/en/research/support/ethics/)
Full ethical approval was granted by the UCC School of Applied Psychology Research Ethics Committee on 25 January 2023.

Competing interests

Not applicable

Authors' contributions

A. M. conducted the interviews and the initial phases of data analysis. L.C. led the latter stages of data analysis. A.M. and L.C. equally contributed to the writing of the manuscript text. L.C. led the process of article revisions following review. Both authors reviewed and approved the manuscript before submission.

Funding

Not applicable

Availability of data and materials

Not applicable

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