

Pet ownership and grief - Exploring how pet ownership effects owners' mental wellbeing during times of grief, a qualitative pilot study

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Abstract: Animal-assisted interventions (AAIs) have exhibited encouraging outcomes in enhancing human mental health. However, research has investigated the potential benefits of untrained pets for human mental wellbeing, as training animals for AAI can be costly and time-consuming. However, despite times of grief representing a significant risk factor for poor mental wellbeing, to date few studies have explored how pets may protect owner mental wellbeing during this period. This qualitative study explored how pet ownership impacts owner's mental wellbeing during times of grief, and through what mechanisms. This study used semi-structured interviews to interview pet owners who had lost a loved one (human) in the last 2 years. Twelve participants took part in the interviews which were analysed with thematic analysis. The analysis determined three key themes: hedonic wellbeing, feeling connected, and emotion regulation. The mechanisms that lead to owners' mental wellbeing during times of grief were varied, including things like cuddling and walking pets, as well as just being in their presence. The key benefits owners derived from these activities and interactions are discussed. The findings of this study highlights how different owner-pet activities and interactions bring differing benefits. While further studies are necessary, these preliminary findings can help inform current guidelines on pet ownership, and further understanding how these key relationships in times of grief. Future research should explore further the mechanisms related to pet ownership and grief.

Keywords: wellbeing; companion animals; human loss; emotion regulation

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HIGHLIGHTS

- Pets provide support to their owners during times of grief by improving their emotional wellbeing and sense of connection, as well as regulating their emotions.
- High engagement activities, such as cuddling and exercising with the pet, have been found to be particularly beneficial during times of grief.
- Even incidental interactions with pets, such as simply being in their presence, have a positive effect.
- The bond between pet and owner is perceived to be important and offers low-effort, non-judgmental support, which is often preferred over human companionship.

Introduction

Grief is defined as “the normal but bewildering cluster of ordinary human emotions arising in response to significant loss, intensified and complicated by the relationship to the person, and by the way the person dies” (Mitchell, 1983, p.54). Grief is a common experience; complications or elongation of grief can occur for many people, often having a negative impact upon wellbeing. Mental health issues such as depression, anxiety and stress, are well-known implications of grief (Fried et al., 2015; Maccallum et al., 2015), as such identifying how best to access effective sources of support during these times is important

Bereavement is a cause for depression diagnosis within the DSM-5 (APA, 2013). A meta-review found that between 29-58% of those who experience bereavement also go on to experience depressive symptoms one year later (Maj, 2013). Following a bereavement, individuals had higher suicidality (6.6 times greater), compared with controlled group and this increased to 11.3 times greater after 10 months (Latham & Prigerson, 2004). Increased stress and anxiety have also been associated with experience of grief (Gliatto, 2000; O’Connor et al., 2009), reducing quality of life (Boelen & Prigerson, 2007) and increasing feelings of loneliness (Vedder et al., 2022).

Many forms of support have been developed for improving mental wellbeing in times of grief, with common treatments including family therapy, group based therapy, pharmacotherapy and Cognitive Behavioural therapy for instance (Davidow et al., 2022; Maass et al., 2022; Malkinson, 2001). However, low adherence and high dropout rates are common, potentially due to the complex feelings associated with grief (Buchman-Wildbaum et al., 2020). The bereaved can be less willing to discuss feelings with others during a time of increased vulnerability, as they get comfort in isolation and ruminate on grief related emotions and symptoms (Nolen-Hoeksema, 2001). Indeed, many mourners do not seek support at all. Some studies show that only about 43% of those bereaved seek professional help (Lichtenthal et al., 2011).

An alternative form of support may be that offered from companion animals. Companion animals provide non-judgemental, undemanding support (Brooks et al., 2018). Research in this field has traditionally focused on exploring the benefits Animal Assisted Interventions (AAIs), in which a trained animal (typically a dog), is included as part of a structured therapeutic session. These literatures highlight promise for AAI in improving mental wellbeing outcomes, including those commonly associated with grief, such as depression, anxiety and stress (Beetz et al., 2019; Charry-Sánchez et al., 2018; Jones et al., 2019). However, it should be noted that beneficial effects are not always achieved (Herzog, 2011), and this is likely due large heterogeneity in practice and common methodological flaws (Rodriguez et al., 2021).

More recently there has been interest in the value that untrained pets can bring. Not only do pets avoid the time and cost implication associated with training an animal for AAI (Canine Partners, 2021), they enable 24-hour, 7-day a week access to support, without needing to leave the home. Indeed, pet ownership has been associated with increased feelings of autonomy and relatedness



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(Damberg & Frömbling, 2022; Kanat-Maymon et al., 2021), feeling ones social needs are fulfilled and have a sense of being connected (Bao & Schreer, 2016; Kretzler et al., 2022), experiencing lower depression and anxiety (Bolstad et al., 2021; Martin et al., 2021), as well as reduced stress and better functioning (Wright et al., 2015; H. Wright et al., 2015).

Although the benefits that pets can bring to their owners is topic of increasing scientific interest, the mechanisms of these effects are largely unknown and under-researched. This prevents a deeper understanding of the benefits of pets to owner mental health and wellbeing, and therefore impedes the true value of pets to owners and health services from being realised. More recently researchers have focussed on developing and evaluating frameworks to begin to unpick some of the mechanisms and contexts associated with owner wellbeing outcomes (Barcelos et al., 2020; Gee et al., 2021; Ravenscroft et al., 2021). In brief, these literatures indicate the potential utility of the biopsychosocial model, which considers the combination of physiological pathology, emotions and behaviours and social influences (Gee et al., 2021), and popular models of wellbeing, including hedonic (e.g., happiness) and eudemonic (e.g., finding meaning/fulfilment) wellbeing (Barcelos et al., 2020; Ravenscroft et al., 2021), in explaining some of the potential mechanisms associated with outcomes of pet ownership. These frameworks highlight the importance of identifying the specific activities pet owners engage in, since these potentially provide a greater contribution to understanding the benefits of pet ownership, rather than the sheer act of just being a pet owner (Barcelos et al., 2020). For example, walking, playing, or cuddling with a dog may facilitate increased feelings of relaxation, and happiness, whereas having a care routine may increase feelings of a sense of purpose.

Despite growing scientific interest in the benefits of pet ownership, few studies have looked specifically at how pet-ownership can impact owners' mental wellbeing during times of grief. Nonetheless, in time of grief, studies have shown that pets are often selected as a comforting grief companion for people experiencing the loss of a loved one (Murry & Allen, 2012). (Thompson & Kim, (2021) investigated the experiences of elderly bereaved men with pets in relation to their grief experiences. Participants revealed that their bond with their pet grew stronger and pets seemed to help with loneliness, social bonding and provided a fresh purpose and routine. Additionally, the close bond between pet and owner seemed to reduce negative psychological symptoms related to grief, such as depression, anger, and suicidal thoughts. A similar study investigated the effects of pet ownership on owners' going through conjugal grief (Gabel, 2014) and found that pets seemed to feel a void left by their late spouse, helping them get through the day. Similar experiences have been shown across different cultures. For example, orphaned and vulnerable children in Western Kenya have found psychological wellbeing benefits from goat ownership (Winsor & Skovdal, 2011). While these were not kept as pets, the findings from this case study exemplifies how animal ownership and the close contacts with them gave children the opportunity for social participation and engagement within their community, increasing resilience and coping skills following the death of a parent.



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Using semi-structured interviews, we aimed to explore the role of pet ownership on owner mental wellbeing during times of grief. This study answers two key questions:

1. How does pet ownership effect owners' mental wellbeing during times of grief?
2. What are the mechanisms of pet ownership that lead to owners' mental wellbeing during times of grief?

Methods

Participants

Participants were adults who had lost a loved one in the last two years and owned one or more pet(s). If participants had more than one pet, they were asked to answer the questions focusing on the pets they felt the closest to.

Materials

Demographic Questionnaire

The questionnaire consisted of 13 questions, capturing participants' age, gender, and how long they have owned their pet and their closeness to their pets. Closeness was measured using a likert scale and may not be an accurate reflection of the likely complex nature of the owner-pet relationship

Interview Schedule

The semi-structured interview schedule (Appendix I, Supplementary material) explored how pet ownership affected owners' mental wellbeing during times of grief and the factors involved in the process. The questions were constructed with a research team of experts in psychology and human animal interactions and were informed by literature in the field (Thompson et al., 2021; Gabel, 2014; Hall et al., 2017; Barker et al., 2003). Prompts were developed specifically aiming to explore different factors of pet and their impact on owners' mental wellbeing.

Procedure

The host organisation granted ethics approval. Participants were recruited through gatekeepers of mental health and animal charities including Mind and Dogs Trust and through social media posts. Following participants expression of interest, informed consent was given online. A demographic form was sent out and an interview time was arranged at a time to suit the participant. The interviews were carried out on Microsoft Teams and participants had the option to have their camera on or off. Participants were asked to reflect on to



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the time their grief was most severe. On average, the interviews lasted 22 minutes (SD = 5.78) with a range of 15 to 31 minutes. The interviews were recorded using the built-in function on Microsoft Teams. All participants were thanked for their time and a debrief form was sent to them including a list of support contacts as well as a £10 shopping voucher. Interviews were then transcribed.

Data analysis

To become familiar and immersed with the data, the researcher transcribed the first three interviews by hand, using the University of Nottingham approved automated transcription service for the remaining interviews, going over these whilst listening to the audio to eliminate any errors. The qualitative data was explored inductively using guidelines of thematic analysis (Braun & Clarke, 2019) to determine themes and subthemes. This included going through six steps: 1) data familiarisation 2) coding, 3) generating initial themes, 4) reviewing themes, 5) defining and naming themes, and 6) producing the report. To ensure inter-rater reliability, another researcher second coded two of the transcripts. Where disagreements occurred a discussion took place between the researchers until a consensus was reached.

Results

The final sample consisted of 12 participants (2 male, 10 females). Their ages ranged between 19-63 years. Of the sample, 10 were dog owners, one owned a rabbit and one a horse. Almost all the participants relayed having an extremely close relationship with their pet as well as the person they were grieving. Length of pet ownership ranged between 1-8 years. Demographic data is summarised in Appendix II (Supplementary material). Due to the small nature of the sample, it was not possible to extract meaningful differences from this descriptive data.

Three key themes were constructed from the analysis; hedonic wellbeing-how pets help bringing pleasure, feeling connected – the importance of bonds and interactions, and intrapersonal wellbeing – how pets help emotion regulations..

Hedonic wellbeing - how pets help bringing pleasure

The interviews highlighted the concept of hedonic wellbeing. Hedonic wellbeing describes the concept of an individual attaining pleasure and satisfaction (Huta, 2016). From this perspective, many participants commented that their pet had a direct impact on including calmness, reducing loneliness, happiness, and distraction from negative events associated with grief.

During times of grief, many participants commented on how their pet induced a sense of calmness in their everyday life, specifically in terms of reducing feelings of anxiety and stress. One participant relayed how beneficial it was having a calm, quiet environment with their pet, away from other family members who are grieving the same loss.



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“He was just a really calming presence. I think that really helped to sort of have a quiet place where I could go but still be with him and be comforted in a way without all the rest of the noise of everyone else, that was also trying to grieve at the same time.” (P.4)

Participants also felt their pets helped calm them by reducing feelings of anger towards their loss, or by reducing feelings of fear.

“She kind of just sat with me. And then it helped me realise, I can’t be stressed and anxious and angry around my dog. Because if I’m angry, she’s going to think that it’s her. So I had to calm down and she help me in that aspect.” (P.11)

Another aspect of hedonic wellbeing was in the ability pets had in reducing feelings of loneliness. Many mentioned the idea of not wanting to be around people when consumed by grief (perhaps due to the pressure of having to talk to people when still trying to process the loss), and pets brought a unique ability pets have of to give space, without making you feel alone.

“When he’d walk into the room or come into bed with me in a sense it kind of took some pain away knowing I wasn’t all alone in a really dark time.” (P.6)

One participant described a turning point when they recognised they needed their pets presence to “keep them sane”, acting as a stable force that they could rely on in this difficult period.

“I was quite lonely and I still feel quite lonely in the days when I’m doing things like staying at home and I think that was probably the biggest turning point when I felt I needed to be around them in the day to sort of keep me sane.” (P.4)

Pets seemed to act as a constant uplifting presence, bringing much needed feelings of happiness and joy. The pet’s happiness easily transferred over to participants, who struggled to stay unhappy in their company.

“Definitely helped me get through the sadness, lifted my spirits. It’s kind of hard to be depressed 24/7 when there’s (pets name) right there next to me giving me loads of kisses and licking my face.” (P.6)

Some described their pet as a grounding presence, helping them realise there are things to be happy about despite their current struggles of coming to terms with the grief, bringing a sense of hope.

“Time keeps moving forward, but you feel like you’re still trying to digest what’s just happened and it can be nice to have a pet around because they can keep you happy and make you realise that you can keep going and there are still things that you can smile about and things that we can laugh about.” (P.4)

Mechanisms/interactions associated with hedonic wellbeing benefits

When discussing the wellbeing benefits relating to hedonism owners referred to some of the interactions which lead to pleasurable feelings and emotions, highlighting some of the mechanisms. Many of these interactions were incidental to the experience of being a pet owner and did not require active owner input. For example, being in the presence of the pet, cuddling/stroking



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them and watching them play in the garden.

“Just having someone there that you can, you know stroke and look after or even just sat out in the garden and watch. You know, watch the rabbit hop about you, definitely it releases that stress and burden.” (P.12)

“Watching (pets name) have so much enjoyment out of something so small made me feel happy... even if I had a bad day, I would be laughing because I just watched (pets name) running full speed and doing the same thing every single day and still finding some sort of joy out of it.” (P.7)

Other more active interactions were mentioned such as walking the dog or riding the horse. In particular, the companionship that the pet brought during these activities appeared to support the owners confidence to leave the house without the support of their loved one who had died.

“It made quite a big difference for me because it got me out of the house and obviously, even though I can't speak to a person, you still feel like you're with someone.” (P.5)

Pets also acted as a distraction from the grief participants were experiencing. The attention required by the pet acted as a day-to-day distraction away from one's own thoughts, breaking up the cycle of the grieving process to prevent the spiralling of one's thoughts. These activities prevented ruminating in one's thoughts and feeling engulfed by grief.

“It helped massively because it was just getting out of the house. So you know it's tempting just to sit there and think about everything and stuff, so it was sort of like that excuse to keep going outside and just being peaceful.” (P.1)

Feeling connected - the importance of bonds and interactions

The second theme of analysis explored the representation of pets as sources of love and companionship for their owners. This manifested in many different aspects including their bond and non-judgemental support, support with social interactions and preferred choice over human company.

The strong bond between pets and their owners and how this bond helped them through the grieving process were prominent topics. Many owners discussed having a strengthened bond to their pets following their loss, potentially due to the increased time spent together, forming an emotional connection and being able to rely on that bond in times of grief.

“I've grown I say closer because now I have this emotional connection where I feel like, it was just so nice to have (pets name) there when I needed someone.” (P.10)

Owners explained how they believed their bond enabled to process their grief quicker.

“I think that strong bond helped me process the situation quicker than if I didn't have him and helped me accept it and come to terms with it.” (P.3)

The nature of the bond between pets and owners were often described as



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'unconditional' and 'unselfish', with the idea that pets are pure and innocent, something that participants couldn't compare to relationships to other humans.

"It's completely unconditional love. You don't have to give him anything, you can ignore him and he will still turn around and be like, ah hi, you know, you can have a grumpy moment with him and he won't hold it against you, yeah he's just always there for you which people aren't really." (P.9)

The non-judgemental support pets offer seems to be an important facet within the pet-owner relationship in times of grief, building trust within that relationship. This seems to give the owners freedom to grieve in their own unique way and the opportunity to fully be themselves without expectation or worry about what others are thinking. Although some relayed knowing they could turn to family and friends, they felt there was underlying judgement that wasn't there with their pet.

"With the dog you can just sit there and cry and you don't feel like. Yeah, you don't have to explain yourself." (P.7)

In a time of severe grief, many participants described wanting to be alone in bed and refraining from seeing and interacting with people. Owning a pet seemed a way of tying the family together in a time when family members may drift from one another due to differing grieving styles.

"It can be quite difficult not to have any outlet and to just be around each other when you're all struggling. So I think it probably would have been a lot more tense and a lot harder to sort of process." (P.4)

Participants expressed they believe their pets were better at providing support in terms of activities or emotional support than family members or friends. Comments were made how their pets were very efficient at reading their emotions.

"Because he knows how I'm feeling and I'm not someone that can easily express my feelings either so being able to grieve with my dog is a lot better for me." (P.10)

Sometimes participants felt like a burden around other people, presenting the idea that you can have your pets' company at a tailored intensity, unlike humans who may make you feel claustrophobic at times.

"My mum would be like oh you're lonely, let me spend time with you let me do this with you, but then I would feel claustrophobic you know, it was like forced and I didn't really want to talk. I just wanted to have someone's company and I think that's what a dog can really do you know, that's how they impact your life." (P.7)

Reasons for this preferred choice over human company varied with many believing this was dependent on their mood as well as the differing stages of grief. Overall, it seems support through pets was preferred in the initial stages of grief when owners are coming to terms with what has happened on their own accord.

"In the earlier stages of grief where you don't want to talk about your feelings, (pets



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name) was way better, before you're ready to actually feel your feelings. You know (pets name) is better than a human because he won't push you to talk about it." (P.9)

Mechanisms/interactions associated with feeling connected

When talking about feeling connected, similar to the interactions associated with hedonic wellbeing benefits, owners often referred to interactions which involve low owner effort/input that are inherent with pet ownership, such as giving the pet a cuddle. It was evident that some owners also believed their pet could detect when and what type of interaction the owner needed.

"He always gave me the right kind of response, but if I needed cheering up or whatever, he'd sort of come in and be goofy and roll around on the floor whereas if I just needed a cuddle he'd just come in and put his head on my shoulder and we'd just have a cuddle and he still does it now, he's incredibly good at reading me." (P.1)

"When we're cuddling I feel like I can work through my own thoughts without judgement and without having to explain what I'm thinking to someone." (P.3)

Other pet-owner interactions that were associated with increased feelings of connectedness required greater owner input, such as dog walking.

"We started to enjoy like doing walks as a family and taking all the dogs out properly... I feel like those going out as a family, kind of made us a bit more strong as a family." (P.11)

Emotion regulation

The final theme related to how pet ownership affects owners' emotion regulation during times of grief. Indeed, pets allowed owners to have headspace and more time or room for reflection.

"I think just having that space to think about everything when I was with them, I was able to get on a lot quicker by having them around." (P.4)

Participants relayed the idea of how their pet helped them appreciate the other things in their life they could be thankful for, no matter how little.

"You can kind of just take a step back and just realise that you've, regarding hard times, you do have everything you need, then you just appreciate the smaller things in life." (P.12)

Mechanisms/interactions associated with emotion regulation

The pet-owner interactions associated with emotion regulation frequently related to the need to make time to care for the pet. In doing so owners commented that provided time for reflection and emotional processing.

"We've got some great tracks, woodland areas. I guess for me that was nice for a bit of calm and that bit of me time and maybe it gave me some thinking time and allowed me to sort of grieve and reflect." (P.2)



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"You have to look after him as well so you have to look after yourself because he's depending upon you." (P.9)

Although difficult after the initial loss, the daily responsibilities of talking care of their pet (feeding them, taking them to the vets, grooming them, walking them) gave participants a sense of purpose and motivation to get out of bed in the morning.

"We always say the dogs kept us going because you have to walk your dogs every day. You can't just stay in bed all day. You can't not go downstairs and feed them, so we had to go out and do things." (P.11)

However, while positive, it was also acknowledged that this responsibility could be quite overwhelming in such a difficult time when you have lots of other things going on.

"I still had that responsibility that I've got to look after the horse and it kind of became sort of a bit of a noose around your neck. But when I was there every day, I just got a massive sense of relief. You know, I'd sort of sit in the field and just cry with the horse because what we were going through." (P.2)

Discussion

This explorative, qualitative study investigated how pet ownership affected owners' mental wellbeing during the grief of a loved one (human). Thematic analyses revealed three ways in which pets support owner wellbeing during grief: hedonic wellbeing-how pets help bring pleasure, feeling connected – the importance of bonds and interactions, and how pets help emotion regulation. The pet-owner interactions which appeared to act as mechanisms to these benefits could be broadly grouped into two categories, incidental interactions inherent with pet ownership that require little/no effort and more active and engaged interactions. We briefly discuss the three key themes below and the mechanisms associated with the benefits, before considering study limitations and implications.

Wellbeing benefits

Hedonic wellbeing

Pets appeared to support hedonic wellbeing on a number of levels such as inducing a sense of calmness in owners day-to-day life, specifically reducing feelings of anxiety and stress which are two well-known implications of grief (Maccallum et al., 2015; Fried et al., 2015), as well providing moments of happiness (for example when watching their pet play). Indeed, previous research highlights that owners derive meaning and happiness from engaging with their pets (Bao & Schreer, 2016). More specifically there is a growing literature base indicating the beneficial impact on the presence of a pet and low effort pet-owner interactions, such as stroking the pet, on improving an owners negative emotional state, including anxiety and stress (Bolstad et al., 2021; Giansanti et al., 2022; Kalenkoski & Korankye, 2022).



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Feeling connected

It is well established that pets are often viewed as an important source of social support (McConnell et al., 2011; McNicholas, 2014; Nieforth & O’Haire, 2020), and this was evident in participants reflections on the grieving process, revealing that pets helped them to feel connected during the time of loss of an important member of their life. This connection was apparent both in terms of that gained from the pet-owner relationship and that which the pet-owner relationship supported interactions with other people. Pets were viewed by participants as fulfilling the need for company, in a way which demanded nothing back from themselves. The trust within the pet-owner relationship aided the non-judgemental support pets provide, enabling owners to have freedom to be themselves and grieve in their own unique way without expectation. Activities such as cuddling and watching movies with pets, giving owners company but in their own term, seemed to support this wellbeing benefit. This idea of non-judgemental support has been explored in previous research, which highlights the value of pets to provide non-judgemental and unconditional affection and facilitate a safe environment in which owners can confide their emotions (Brooks et al., 2018; Meier & Maurer, 2022; Shoesmith et al., 2021). Indeed, research has shown that the social and emotional support provided by professionals, family members and the community is often deemed as inadequate during times of grief, yet pets are able to offer the most desired form of support following a loss (Cacciatore et al., 2021).

Pets also encouraged owners outside their comfort zone, supporting them with social interactions and which in turn strengthened family bonds. Interactions such as exercising the pet were associated with strengthening connections with other human members of the family and friends, even when at times where they might not feel like socialising. This mirrors previous studies which have highlighted the role of pets as social facilitators (Delgado-Rodríguez et al., 2022; Kirnan et al., 2022).

Emotion Regulation

Pets seemed to facilitate emotion regulation by providing opportunities for reflection and positive distraction. Pets had a significant impact in distracting owners from the negative feeling of grief, preventing the spiralling of one’s thoughts. Pets facilitated headspace and reflection that allowed owners to come terms with what has happened at a faster rate. This could be because pets have been described to provide a supportive environment through this process without needing to communicate, aiding the natural progression of working through one’s thoughts without interruption from others. Similar observations were reported during the COVID-19 health pandemic, whereby pets were reported to intuitively respond to their owners emotional distress in a manner which supported emotional processing (Shoesmith et al., 2021).

In addition, the routine and responsibility of pet ownership appeared to support owner emotion regulation in that this provided a sense of purpose and motivation in everyday life. Although pet care was not always easy, many described not wanting to change it, and in fact the responsibility of pet care



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motivated owners to take care of themselves in order to be best able to take care of their pet. . Indeed, previous studies have indicated that the routine associated with pet ownership can act as a resilience factor for those affected by grief (Winsor & Skovdal, 2011), as well as provide a sense of self-efficacy and empowerment around competing daily tasks (Defelipe et al., 2020; Obradović et al., 2020; Wisdom et al., 2009).

Interactions and associated mechanisms

The interactions associated with wellbeing benefits can be broadly classified into two groups: (1) incidental interactions inherent with pet ownership that require little/no effort, such as being in the presence of the pet, stroking the pet, talking to the pet and (2) more active and engaged interactions, such as pet care and exercise.

With regards to the wellbeing effects associated with low effort interactions, we can postulate that these benefits, at least in part, have a psychobiological mechanistic component. Research has shown that stroking a pet to which one is attached to is associated with oxytocin levels, with stronger bonds being linked with greater release of oxytocin (Handlin et al., 2011). Oxytocin has an important role in stress release (Amico et al., 1994; Matsushita et al., 2019) and recent research has highlighted that neural network connectivity associated with grief may be particularly sensitive to oxytocin (Seeley et al., 2023). Furthermore, research also implicates other 'feel good' hormones associated with stroking a loved pet, including prolactin and serotonin (Pendry & Vandagriff, 2019). This infers that, at least in part, during times of grief the functioning of specific hormones act as mechanistic pathway to pleasurable feelings/emotions associated with pet ownership.

In addition, and as highlighted in the responses received, time spent petting a loved animal may provide important cognitive appraisals (Lobb et al., 2010), indicating a cognitive mechanism associated with the wellbeing benefits of pets during grief. Indeed, the grief literature highlights the importance of making positive cognitive appraisals when dealing with the loss of a loved one (Maccallum & Bryant, 2013), and being in the calming presence of a cherished pet may help facilitate this process.

With regards to pet-owner interactions which require more active owner involvement, such as exercising the pet, previous research has shown that the psychological mechanisms associated with this may be distinct from that associated with lower impact pet-owner interactions. For instance, a study showed that walking a dog does not significantly change owners oxytocin levels, but does alter GABAergic and suppressed noradrenergic nerves in the brain, to result in a stress relieving effect (Akiyama & Ohta, 2021).

In addition, mechanisms which have their route in social psychology may also be important in determining wellbeing outcomes associated with pet ownership during times of grief. For example, many owners linked their pet to a form of direct social support and indirect social support (e.g., through providing the confidence to go out walking with family and friends). Social



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support has been shown to reduce feelings of grief (Kaunonen et al., 1999) and associated psychological distress (Lakey & Cassady, 1990) by providing a safe environment in which to experience panic behaviour. In addition, the care of the pet and walking the pet may increase self-efficacy (an individual's belief about their capacity to achieve a goal/task), with previous, with previous research suggesting that pet owner activities are related to better coping self-efficacy (Grajfoner et al., 2021) and that performing simple activities can improve self-efficacy and wellbeing during grief (Fancourt et al., 2022).

Limitations and future research

A few limitations can be observed in this study. Although no participants mentioned any negatives of pet-ownership, the sample size may act as a limitation as it cannot be said to be representative of a larger whole and we might have missed owners who struggled with pet ownership during grief. As this was a difficult topic to discuss, it is also possible that participants taking part in this study were more likely to have come through the worst of the grieving process, making them more open and have better insight into the process. Therefore, this study might miss the views of the difficulties experienced at the worst of the grieving process and the clearer understanding of how pet ownership helped, if at all. Finally, the mechanisms and interactions between owners and pets in order to support grief are postulated from the participants' testimonies and were not directly assessed.

Given the limited literature in this field, this study provides a valuable contribution by highlighting new insights into the pet owner relationship, offering the first steps towards a deeper understanding of how the interactions and activities owners engage in with their pets affect the key benefits gained from pet ownership in times of grief. Future research would benefit from evaluating further the links and exact mechanisms at play on how pet ownership supports wellbeing in times of grief.

While further studies are needed to investigate this relationship fully, this pilot study highlights important implications on grief support for any individuals. By exploring the importance of pets in the recovery process, a lot can be learned by healthcare professionals in terms of how to support grief and what facilitates this process. Clinicians or healthcare professionals could for example ask grieving patients whether they own a pet to gauge if this support is available to them. Animal therapy is being used for many healthcare conditions and it could be recommended to support grieving and AAI (Brooks et al., 2018) should be considered for those without pets.



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Conclusion

This pilot study provides a valuable contribution to understanding the pet-owner relationship in times of grief. Specifically, the findings highlight how different activities and interactions owners engage in may have differing benefits on diverse aspects of wellbeing. It also highlights how the pet owner-bond is central to the owners' experience of coping with grief. As such, the experienced

benefits may be mediated not only by the interactions and activities owners engage in, but the degree of attachment and bond as well.

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