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OPEN ACCESS

'He's my mate you see': a critical discourse analysis of the therapeutic role of companion animals in the social networks of people with a diagnosis of severe mental illness

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ABSTRACT

There is increasing recognition of the role pets play in the management of mental health conditions. Evidence suggests that pets promote social interaction and provide secure and intimate relationships which support the management of symptoms. This paper aimed to extend this evidence by exploring the phenomenological understanding of relationships and relationality with companion animals as therapeutic agents in the context of people's wider social networks.

A qualitative study was undertaken incorporating 35 interviews with 12 participants with a diagnosis of severe mental illness who identified a pet as being important in the management of mental health. Participants took part in three in-depth interviews centred on ego network mapping over a 12-month period (baseline, 6 and 12 months). A critical discourse analysis examined therapeutic relationships with pets in relation to mental health and compared these to other types of support over time. Summative discourse analyses were combined with a cross-case thematic analysis to look for commonalities and differences across individuals. Compared with interactions with other therapeutic agents, relationships with pets were free from the obligations and complexities associated with other types of network members and provided an extension and reinforcement to an individual's sense of self which militated against the negative experiences associated with mental illness. Relationships with human network members were more variable in terms of consistency and capacity to manage demands (eg, network members requiring support themselves) and the emotions of others associated with fluctuations in mental health. This study adds weight to research supporting the inclusion of companion animals in the lexicon of mental health self-management through the therapeutic value attributed to them by participants within a wide personal network of support. The findings point to how consideration might usefully be given to how relationships with companion animals can be incorporated into healthcare planning and delivery.

INTRODUCTION

Recent evidence from the medical humanities field and beyond demonstrates a failure of modern health services to provide user-centred mental healthcare which adequately meets individual needs.¹⁻³ There are numerous accounts of the reasons for this failure which include a lack of adequate

consideration by health professionals and services of the wider therapeutic networks associated with self-management.³ This is compounded by a lack of personalised resources to support service users in everyday life, which collectively results in a lack of alignment between service users' expectations of, and the actual support they receive.^{3,4} Previous research has focused on dyadic relating and relationships between health professionals and service users to the detriment of people's wider networks of support and relevance of a wider range of therapeutic agents. This has biased current understanding of self-care as an activity that is dominated by health professionals where interactional styles in controlled situations veer towards determining patients' goals based on biomedical reference points while presenting these goals as something patients are compelled to do.⁵ This has resulted in less consideration being attributed to the part played by significant others in broader personal communities including friends and family, weak ties, companion animals and the therapeutic input of self-management efforts by people themselves.⁶

The shortcomings of traditional mental health management have given rise to an increase in calls for and development of alternative forms of acceptable therapeutic support by and for people with mental health problems. For example, peer-led services such as the hearing voices movement are becoming increasingly common.⁷ Such approaches represent a paradigm shift which places the requisite knowledge for condition management in the hands of service users rather than mental health professionals. Other, alternative forms of therapeutic support are becoming more prominent at the margins of health policy and practice (eg, social prescribing⁸).

The emergent visibility of pets as part of alternative treatment options is aligned with a shift in focus on human-animal relationships more generally in society. In the past, sociologists tended to minimise relationships between people and their pets by portraying human-animal interactions as inferior to human interactions. This world-view was attributed to animals being seen as lacking the fundamental communicative, social and cognitive requirements (eg, language) to participate in complex social interactions considered necessary for humans to derive benefit.⁹ However, more recently this has been partly replaced with a model of human-animal



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interaction within which both humans and other animals are attributed with elements of agency. Research has demonstrated the benefits of animal companionship for human well-being generally in terms of improved quality of life,¹⁰ enhanced social connections¹¹ and reduced loneliness.¹² Recent research further demonstrates the unique benefits that animals have for people with mental health conditions.

There is a burgeoning evidence base for animal-assisted therapy, the formalised use of animals (trained and untrained) as a therapeutic intervention, to support healing and recovery for people with mental health conditions.^{13–15} There is evidence too implicating the role of companion animals (family pets) within the social networks of people living with severe mental health problems in everyday settings.^{16, 17} Such evidence has contributed along with demographic changes such as reduced family size and increased life expectancy to a wider paradigm shift in the understanding of therapeutic relationships including the increased reliance on companion animals as a potential resource for social support and management of health conditions and provision of social support.¹⁸

Pets seemingly make a distinctive contribution to providing emotional support given their proximate and constant presence in an individual's everyday life. They have been shown to contribute to mental health¹⁹ through encouragement of routine and exercise and through distracting their owners from suicidal ideation, upsetting thoughts and a sense of feeling alone^{16, 17}. Pets also provide a form of ontological security—'a sense of order and continuity derived from a person's capacity to give meaning to their lives and to maintain a positive view of the self, world and future' which does not appear to be available from elsewhere within social networks.^{16, 20} Finally, pets have been shown to act as conduits to social interaction for their owners through increasing the quality of existing and supporting the development of new, social connections.^{16, 17} However, what is currently lacking from this understanding of these functional roles is an exploration of the subjective meaning of therapeutic relationships with pets, how this changes over time relative to other therapeutic agents within wider personal networks of support, and what the impacts of losing such relationships are.

The study set out to provide a phenomenological understanding of the therapeutic relationships with companion animals from the perspective of service users with a diagnosis of severe mental illnesses such as schizophrenia and bipolar disorder. Perceptions were explored longitudinally over a 12-month period to develop our understanding of the role of pets within therapeutic networks and the impact of losing a pet.

METHODOLOGY

Critical discourse analysis (CDA)

CDA examines how discourse is related to social practices (including health-related practices) and is considered a useful methodological approach for understanding how identities are formed and change over time in response to changing circumstances.²¹ In the mental health field, it has been deployed in furthering our understanding of the complex process of recovery from mental illness.²² CDA considers the self as comprised of a set of discursive practices which vary in terms of stability and homogeneity within and between people²³.

Choullaraki and Fairclough (1999) contend that discourses contain three components: genre, discourse and style which form the basis of the current analysis:²³

- Genres—the types of discourses that people can use (political speech, everyday conversation, etc).

- Discourse—the varied ways people represent their social worlds from their unique position.
- Style—the ways in which discourse is used to contribute to a sense of personal identity and how identity is grounded in the way we apply and use discourses.

Here we are concerned with the therapeutic role of personal communities—the set of active and significant ties which are important to an individual—in the management of mental health conditions in domestic setting²⁴. By drawing on principles of phenomenology and critical discourse analysis, it is possible to develop an understanding of such relationships as a combination of lived experience and discursive practice which recognises the complex interplay between an individual and the social worlds they inhabit.^{25, 26}

Self-management can be seen as a set of processes that are represented through individual discourses developed and presented in the context of social networks.^{19, 27} Examining the manner in which people talk about therapeutic relationships with companion animals enables a more nuanced understanding of human–animal interactions in relation to mental health to be developed.

Data collection

Participants were recruited as part of a large qualitative study nested within a randomised controlled trial designed to examine the effectiveness of a training package for professionals to promote user/carer focused care planning.²⁸ The original study incorporated in-depth semistructured interviews with 29 people diagnosed with a severe mental illness such as schizophrenia and bipolar disorder at three time points (0, 6 and 12 months).²⁹ Participants were purposively sampled in terms of gender and geographical area from seven Mental Health Trusts in the UK (36 Community Mental Health Teams). To be eligible to participate, participants had to be under the care of secondary mental healthcare services in England and currently participating in a randomised controlled trial examining the effectiveness of a professional training programme designed to enhance service user involvement in mental healthcare planning.²⁸

Baseline interviews collected brief demographic information before moving to the personal network mapping of people, places and activities that participants considered important in terms of mental health self-management.¹⁹ Participants were asked to place identified network members in one of three concentric circles based on importance. Interviews then comparatively explored the function, role, key attributes and components of relationships with identified network members. Any changes in the structure or quality of personal networks were explored during subsequent interviews.

This manuscript reports on a critical discourse analysis underpinned by a phenomenological approach to the data from 35 interviews with the 12 participants who identified one or more companion animals within their personal support networks. Respondents did not have to cohabit with animals to be included in the study but did need to implicate identified animals in the management of their mental health conditions by placing them in one of the three concentric circles within the network diagram. **Table 1** provides demographic information on these participants.

Participants identified a total of 100 network members with an average network size of eight. The most common types of network members were cats (n=7) and dogs (n=4) but networks also included birds, hamsters and guinea pigs.

Table 1 Participants

ID number	Gender	Pets	Number of interviews	Total network size	Loss of pet?
ID1	Male	One dog	3	8	No
ID2	Female	One dog	3	5	No
ID3	Female	Two cats	3	9	No
ID4	Female	Two cats	3	6	No
ID5	Female	One dog	3	9	No
ID6	Male	One cat	3	16	Yes
ID7	Male	Three birds	3	6	Yes
ID8	Male	One hamster	3	8	Yes
ID9	Female	One dog	3	7	No
ID10	Male	Two cats	3	7	No
ID11	Female	One cat	3	15	Yes
ID12	Female	One guinea pig	2 – did not wish to participate in final interview	4	Yes

Data analysis

Interviews were digitally recorded and transcribed verbatim before being anonymised and allocated to a member of the research team for analysis. Transcripts were first analysed thematically using the six-stage process outlined by Braun and Clarke.³⁰ The transcripts were then examined in relation to principles of critical discourse analysis.²³ Specifically, in line with Chouliaraki and Fairclough's categorisations, consideration was given to the genre of discourse (ways of interacting, structure), the discourse or ways of representing relationships with companion animals and the discursive style (type of voice used, tense, etc) employed by participants.²³ Finally, the discourse analysis was combined with the thematic analysis in order to produce a final set of themes. Coders discussed analysis regularly to ensure consistency of coding and a researcher with lived experience of mental illness was involved in the analysis to ensure emergent themes were grounded in the reality of the experience of mental health problems.

RESULTS

Using a combination of critical discourse and thematic analysis, three themes were interpreted from the data which related to the therapeutic function of companion animals. These were: pet relationships as a source of reliability, positivity and vibrancy in an uncertain world; trust, predictability and acceptance: human-animal interactions in the creation and sustainability of personal identity and the devastation of losing a companion animal. Themes are presented using detailed accounts of interpretations and the social context in which participants described them and are supported using quotations from the data.

Pet relationships: a source of reliability, positivity and vibrancy in an uncertain world

Relationships with pets were talked about as providing a reliable source of positivity and vibrancy often not available from other personal support network members. Discourses of living life with a severe mental illness represented people's everyday experiences. Narratives were often centred on despair and hopelessness across multiple genres of discourse including recounting current, or recollecting previous, periods of acute illness. This negative affect extended at times to hopes for the future.

You're so low, you...you've hit rock bottom, you're a terrible mum, you're a terrible wife. You know, you've failed, you're a failure, and that's how you class...how you perceive yourself...

...I was very low in my mood and I felt like am I ever going to have a life again? (ID9, female, one dog).

Accounts did not focus solely on people's individual experience of illness but included reference to the wider political context related to health service provision. ID1's account of his experience of health services is marked with a sense of powerlessness as he describes his fears for the future demise of the health service. The repetition of the word 'talk' reflects his general sense of disillusionment with the political rhetoric associated with mental health services

I watch a lot of news and parliament and all these, err, cut backs, and things like that, you just think, oh my God, it's just going to be terrible, you know.... it's all talk, talk, talk, talk and, in the end, all it's about is cutting money and, I mean, I don't know why I think this, but I just think that within a few...a few more years' time, the National Health Service will be finished. (ID1, male, one dog)

The value of support provided by companion animals was one of backgrounded taken-for-grantedness and seemingly not immediately easy for participants to articulate. It appeared there was something unique about relationships with animals which evaded the constraints of objectifying language.

That dog, oh, you know, it's sad to say but he was more...more helpful than other people. You know what I mean? Er... I: And do you have a sense of why that was? What it was? R: I don't know, I don't know what it was. Um, I mean, yeah, he was...oh God, he was a fantastic dog, um, and he was always there for me. (ID7, male, three birds)

Narrative expressions related to pet ownership were characterised by a sense of warmth and peace and were compared with relationships with human network members.

Sometimes my husband can get on my nerves when he's constantly saying, oh, you're breathing heavily, are you okay? Because last time you had a breakdown, you was breathing heavily, I'm breathing heavily because I'm tired or something, not because of my mental breakdown. So that gets on my nerves sometimes and, you know, then he's constantly coming in the lounge and checking me when I've finished work, so I think to myself, do you know what, I'm going to take the dog for a walk, get a bit of peace. (ID9, female, one dog)
He'd sit on his own, in the room, and then he'd come up and...either sit by my side, on the armchair, and he'd just...he'd just sit there, exuding peace. (ID6, male, one cat)

Distinctions made within narratives about having a pet or not indicated the categorical centrality attributed to companion animals as members of personal communities of support.

...I was living...well I've lived in various hostels, I've lived on my own in bed sits, and I didn't have a pet then. (ID6, male, one cat)

Participants talked about how their pets provided them with important physical contact while providing a source of vibrancy and connection to life unavailable from elsewhere. For example, participants used dull metaphors to describe their illness experience, for example, 'feeling grey' (ID3, female, 2 cats) and reported a lack of connection to the world around them. Pets injected a sense of humour and life into everyday situations and provided access to another way of being for participants which countered feelings of dullness and isolation.

Um, it's just kind of like...I guess it's just kind of a friend... ..in a way, kind of like so if you're having a bad day you can just sit and chat to her and just sort of like stroke her and stuff and watch her

being silly in her cage, because she was a doughnut [laughs]. Would fall off everything, instead of running in her wheel she was on top of her wheel. I: [Laughs] R: She was really stupid [laughs]. And it's just kind of like just little things like that, just like...all the silly little things that pets do and the stupid stuff that they do and... ..and just, and just making you laugh and stuff when you feel really rubbish, and just kind of giving you that little sense of... kind of life. (ID8, male, one hamster)

Trust, predictability and acceptance: human–animal interactions in the creation and sustainability of personal identity

Pets were frequently implicated within interviews as having salience in the development or maintenance of personal identity through references to the depth and consistency of relationality, provision of self-esteem and mediating how others viewed them. Ontological security refers to a sense of stability and order in relation to individual experiences and relationships.²⁰ Ontologically secure people possess a sense of continuity and stability in terms of who they consider themselves to be and feel confident to live life in the presence of risk.

Descriptions of living life with a severe mental illness within the current study often centred on the experience of felt (self-stigma) and enacted (discrimination) stigma.³¹ The stigmatising language used in the quote below (freak, retarded, psychopath) highlights the often isolating experience of social interaction for people in this study.

I think it [not talking to people about mental illness] stops me feeling so alone and a bit of a freak because a lot of people just don't understand and they tend to sort of be wary as though you're going to turn into some sort of psychopath. I think mental illness frightens a lot of people or they think that you're somehow retarded. (ID3, female, two cats)

This was in part attributed to a lack of understanding of mental illness among friends and family but also among mental health professionals. This was viewed as being perpetuated by media coverage of mental health. Negative stigmatising experiences with others reduced the trust people had in those around them and contributed to a sense of vulnerability in the relationships that respondents had with other humans. Even at points over the 12-month period where relationships with humans were discussed positively, perceived or anticipated moral judgement led to a sense of superficiality within relationships which often led to frustration for participants.

I do talk to her a bit about things, but of course I can't talk much about my mental illness because she doesn't understand it. And my other brother tries to understand, but he doesn't really, so...he tries to be sympathetic, which I appreciate, but it's not really helping me. You need that, that understanding seems quite important. I need that from mental health services, but there again mental health services don't understand everything about me because they see matters in a psychiatric way, and I don't feel it's helpful to me sometimes. I feel almost as if I'm being put down. (ID6, male, one cat)

This was compounded by a lack of trust in themselves articulated in narratives about past behaviour during periods of crisis which further detracting from maintaining a sense of ontological security.

I don't trust myself, let alone anybody else. I mean, how can you trust yourself if you try and kill yourself? You know, at the end of the day, I've took tablets, overdoses, set fires... got knives, stabbed myself, slashed my wrists, everything. (ID9, female, one dog)

Unpredictability referring to the course of an individual's condition but also to unreliability with regard to relationships with others featured in discourse about the experience of severe mental illness over the 12-month follow-up period. Respondents reported that people often left their network or became more peripheral in terms of the support they provided. Reasons for these difficulties in maintaining relationships over time included the external rationing of formal health services, a deterioration in relationships or a self-rationing of contact with other network members because participants felt unable to continue contact in the same way because of feelings of guilt or interference related to acute mental health symptoms. The passive voices used in the quote below highlight the lack of control participants felt over this unpredictability.

You feel safe and you've built up a relationship and then all of a sudden they're coming along and telling you they're getting you ready for discharge and you feel a bit nervy about it, you think, oh God, I've not got this person who is coming to motivate me now, because everybody is out of the house, the children are at school, your husband is at work and there's just you on your own. (ID9, female, one dog)

Yeah, I mean one of the things, in terms of my immediate circle and my second circle is, it's, there's a massive guilt that you feel when you've been unwell, erm, because what happens to me is obviously I behave, they say that I'm a bit of a Jekyll and, and Mr Hyde, and the Jekyll side of me comes out when I'm having a, an episode because I've got bipolar. And, er, I say really unpleasant, er, nasty things to people and then when I, my, my mood starts to level out I sometimes start to remember how I've treated people, and so that, erm, impacts on my wellness where I start to feel incredibly guilty. (ID11, female, one cat)

Consistency, unconditional support and acceptance were central features of narratives about relationships with pets over the 12-month follow-up period. Comments made about pet ownership revealed that concerns about moral judgements, stigma, superficiality and unpredictability were lifted as part of the relationality participants had with animals which remained stable over the 12-month data collection period.

We come back to unconditional love, support, non-judgementalism. I won't say it's relaxing, it...it's reassuring, it's supportive, and it gives you a boost. (ID3, female, two cats)

She's kind of there throughout the night as well when I was really bad at night, and when other people were asleep, she was there. And even if it was the middle of the day or she was asleep because obviously they're nocturnal, she was kind of there and I could wake her up, she was kind of there and I could just talk to her. And she was always kind of there whatever, and she wouldn't mind me talking to her, she wouldn't get annoyed. (ID8, male, one hamster)

Freedom from concerns about moral judgements and lack of understanding meant that participants felt able to be honest and open when talking to animals which led to depth and security which was not apparent in other types of relationships. This appeared to be because they were free of concerns that pets would act on the things they told them (eg, fear of being detained by the mental health system or people holding past behaviour against them).

I could talk to her as much as I wanted and she would just run around her cage like an idiot. So it was kind of like [laughs] so she wasn't going to get bored of me and run off and kind of like, oh, for God's sake, shut up. (ID8, male, one hamster)

When there's nobody around to listen to me, he'd be there for me. So he was good, just to have him on me, or near to me... total accep-

tance, really, and I mean just...say I didn't want to speak my feelings or my thoughts, he would pick up on my feelings and thoughts. And he'd be there for me, and he wouldn't...he wouldn't judge me at all, or say anything that made me feel he misunderstood me, he'd just... just total acceptance really. (ID11, female, one cat)

Thus, pets provided an outlet for talking about mental health problems but at the same time were able to provide support without the need for articulation or verbalised understanding.

Occasionally I will talk to them and they'll talk back to me, and neither of us understands the other but we're quite comforted by the conversation. (ID3, female, two cats)

Pets also played an important role in terms of mediating how other people viewed them. This was apparent within interviews and the quote below demonstrates how self-esteem was bound up with relationships with animals. As a result, participants' identities blended with those of their companion animals with pets viewed as an extension to their own. The first paragraph of the quote below demonstrates how participants used relationships with companion animals to portray themselves in a positive light as 'responsible' pet owners (eg, dog losing weight through healthy eating and exercise when living with him). The second paragraph within the quote demonstrates through the participant's use of colloquialisms such as 'mate' that companion animals could allow alternative forms of identity to develop and co-exist with the identity of being someone with mental health problems (eg, friend, parent, carer). Such hybrid identities appeared to help people manage the negative experiences of mental illness.

Lara gave him some dried food, he wouldn't eat that, so I says, do you want...I talk to him, like, do you want a burger? So we had a burger and he ate half his burger, so he's happy. He's lost a fair amount of weight since he's been with me, he's, err, he was quite chubby when he came. But, err, because I used to give him two Maltesers before I went to bed every night and he'd lost...he'd lost two and a half kilos when I got him. His tummy was on the floor. And, err, with walking him up and down, he must have lost another half a kilo or something. I: Ah, that's brilliant, he looks...he looks a nice size. R: Well I don't want him to lose too much too quick, but, err, I mean, he is 10 year old, so... He trucks up and down there, he's alright, happy, so long as he gets his sniffing in, yeah, he's good for me...

...Frank on the end boat says to me what's he having for breakfast? I says, well, he's having, erm, scrambled egg and smoked ham this morning for his breakfast and he said, God, even I don't get that. I went, well, he's my mate you see, I'm having it so he has it and he enjoys that. (ID1, male, one dog)

Participants often appeared concerned about how their relationships with animals would be viewed by others and felt the need to justify such relationships or required validation from the interviewer before continuing.

I mean part of my condition was that I would be up, I, I don't sleep, I feel that I don't need to sleep, so I'd be up at in the early hours of the morning journaling or researching things on my laptop and my cat would be there right there with me. Erm, so he, he really supported me if that doesn't sound crazy, really supported me. (ID11, female, one cat)

Being identified as a pet owner, rather than being defined as someone with a mental health problem was also viewed as important in terms of self-identity and reducing felt stigma.

You're just walking a dog and that's kind of all they see about you, and there's no kind of like barrier up because, oh, you've got a men-

tal health problem, and [then] there's always kind of [something to] stigmatise about you. (ID4, female, two cats)

The devastation of losing a companion animal

The strength of relationships can be implied by the grief people experience and express when such relationships are lost. Five participants described the loss of a pet within the 12-month follow-up period. Reasons for losses included death/loss of an animal, giving the pet away because they felt unable to care for them or pets being taken away during a hospital stay. The impact of losing animals could be devastating and exacerbated if participants had limited support from elsewhere or experienced guilt as a result of the loss.

...And it broke my heart when he died, ooh...Jesus! And I thought, I've lost everything now. (ID7, male, three birds)

Given the reliance on relationships with pets, the experience of loss was particularly difficult not only due to a loss of companionship and emotional support but also of routine activities associated with caring for animal which formed a central element of individuals' self-management strategies.

With the hamster dying it was kind of like there's no one to kind of always be there, like... ...[and] just to look after, because she obviously needed me to look after her and stuff because she couldn't do it herself, so I kind of like lost that kind of responsibility [too]. (ID8, male, one hamster)

It appeared that losing an animal reinforced a sense of loss and lack of control experienced in life generally which negatively impacted on self-care.

I've also met people who've had, like, dogs and cats, and they've had to have them removed or taken away. A lot of the people who I come in contact with in my work, they've had a pet, people with mental health issues, they've had pets, but when they've become unwell they'd be taken away from them. So I would imagine that they would suffer another element of loss. (ID11, female, one cat)

It appeared that while it was possible to replace the support provided by a pet by getting another, there was a period of grieving which was required during which it was not considered possible to get another animal. While undoubtedly an experience of pet owners in general, participants in the current study described pressures to replace animals too quickly as further examples of the lack of understanding on the part of others of the meaning and value attributed to pets for an everyday sense of equilibrium. Two participants who described the loss of an animal over the 12-month period said they felt unable to get another pet in the foreseeable future despite the ascribed benefits because the loss had been so difficult to deal with on top of their mental health problems.

The support workers keep asking me, when are you going to get another bird...but I said, I just don't, you know, I can't just pick up a bird and get to know it, and then when that's gone, try and do something, you can't, you know, it takes a while. (ID7, male, three birds)

Two others cited positive aspects that came out of losing a pet despite overwhelming sadness. One described how people in his supported accommodation were unexpectedly sympathetic towards him and in this way the death of his animal mobilised support from other people.

In fact the ones that I thought wouldn't be sympathetic to me losing George, were the most sympathetic. (ID6, male, one cat)

Another described how happy she felt when she saw her pet being cared for in their new home which served to validate her decision. The retelling of this story using repetition of the word 'happy' further highlights the importance of making the right decision with regard to their own well-being and the well-being of companion animals.

Ah, Tubbs, now he was re-homed to a family that was known to my son, and in the six months they went on holiday and my son and I actually went to feed him, and that was really good to see him; but he didn't know me, which really made me upset, and I was like, oh, come on, Tubbs, Tubbs, come on, come to mummy; but he just looked at me a bit sort of bemused. But I was really pleased to see him, that he was doing well, he was just plump and happy, eating his food and, yeah, so it was really, really good to see him, it really made me happy, made me. happy that he was re-housed with people who loved him and were caring for him; so that gave me a massive boost. (ID11, female, one cat)

DISCUSSION

The collection of longitudinal qualitative data combined with a critical discourse analysis allowed for a comparative examination of the respective relationships between human and animal network members operating as therapeutic agents in managing mental health and negotiating everyday life. Following participants over time demonstrated a continuity in narrative accounting about who was involved in managing a person's mental health highlighting the therapeutic value of pets compared with other network members. The sporadic, ad hoc and minimal involvement of some human network members, for example, provided a stark contrast to the consistency of input from pets. The discourse analysis adds to our understanding of network membership properties and human-animal relations within personal communities of support for those with mental health problems.

In order to maximise benefit from social networks, people need to be able to conceptualise their own relationships, identify why relationships might be beneficial in terms of accessing and mobilising support for managing their conditions and be able to understand how to maintain support from network members during the periods of flux and change associated with the trajectory of mental health problems.³² The current study illuminates how pets comprise a central element of the support networks and social worlds of people with serious mental health problems. The analysis of discourses related to interactions with pets point to how a focus on the specific dyadic relation with pets influence the presence and nature of networks relationships overall. The narratives implicating the consequences of the loss of a pet highlights the way a network may shrink through the loss of the mediation of value in the eyes of others, self-efficacy in relating to others in a network and in a sense of self-possession in acting in the social world. Similarly, the counter properties of the existence and existential presence of a pet lays the foundations for network enrichment and extension.

Although the therapeutic value of animals in terms of illness management is increasingly being acknowledged,^{16, 17} they are yet to be recognised or given the value they seem to represent for people when compared with other agents of support such as health professionals. Anthropocentrism has focused previous work in the social sciences on the dyadic relationships between health professionals and service users within

the context of institutionalised care. Often this has involved exploring relationships with antipsychotic medication,³³ coercion³⁴ and whether specific events like compulsory admission impact on these relationships³⁵ centred around acceptance and compliance with the therapeutic regimen. While the notion of compliance features in accounts of relationships with other people including health professionals,³⁶ it does not appear salient in the discourses of relationality with pets. Rather, therapeutic features of support from companion animals are most closely aligned to the valued components of desired therapeutic relationships more generally (eg, warmth, peace and consistency)³⁷ and are able to support aspects of identity and self-efficacy that is in shorter supply or unavailable from human network members. These findings lend support to removing the anthropomorphic blinkers associated with conventional mental health service provision. This would allow consideration to be given to the wider therapeutic networks associated with mental health management and the integration of human-animal relationships for self-care through, for example, the recognition of companion animals in the planning and delivery of mental healthcare. Additionally, the risks associated with over reliance on relationships with animals should be considered by health services as well as planning for a time in the future where they may no longer have their pet.

The reasons for failing to extend the status of therapeutic relationships to companion animals may in part be due to a presumption of a lack of meaningful communication, a view put forward by early sociologists such as Mead.⁹ This study implies that such assumptions are not relevant to the mental health field where identity was not tied exclusively or predominantly to verbal communication with network members. Rather, participants valued support from networks members with whom they were not compelled to articulate their experiences. For example, participants reported that they often felt judged when they spoke to other people in their network which contributed to a sense of superficiality of relationality. Pets, on the other hand, were seen as a non-judgemental recipients of communication and there was no need for this to be verbally acknowledged or reciprocated. This is closely aligned to Cain's notion of authentic conversational exchange whereby people consider that their animals understand what they say and act accordingly without the need for articulation.³⁸

Despite official policy and practice discourse advocating meaningful communication within health services in the form of shared decision-making, this is under-realised.^{1, 2} The current study identified difficulties in how participants related to human members of their social network. Such relationality was considered unpredictable, superficial and contingent on wellness and moral obligation. Sanders presented companion animals as 'unique individuals, who are minded, empathic, reciprocating and well aware of basic rules and roles that govern the relationship' which can be compared directly to relationships with human network members described in the current study who often did not appear to meet such criteria.³⁹ Companion animals provide an important source on ontological security which current mental health provision is failing to address.³ Ontological security occurs through the routinisation of daily life, where risks are compartmentalised and backgrounded as people focus on engaging in the routine aspects of daily living.²⁰ Giddens (1991) refers to this phenomenon as 'practical consciousness' and claims that we need to invest trust in routines so that we may be free from anxiety and able to continue with life.²⁰ In this way, through their contribution to ontological security and provision of security and stability

pets provide the bases for continuing with life after diagnosis in a meaningful way thereby supporting individual recovery. Further research is required to explore how health services can adopt and implement these implications for practice and learn from the key features of human–animal interactions associated with therapeutic benefit in order to promote therapeutic relationships within services.^{16, 17}

Social interaction is concerned with self-identity, a necessary part of relationships and relatedness.⁴⁰ Companion animals act as facilitators of human-to-human interaction⁴¹ and here the significance of the contribution made by companion animals to an individual's sense of self, was evident through discursive references commensurate with 'ontological drift' with an individual's sense of self coalescing and merging with animal identity to form a 'couple identity'.⁴² Previous research has shown that identities of animals can shape the identities of owners and that other people make judgements about them as a dyad.³⁹ For people in the current study this appeared to be of increased salience given the high levels of felt and enacted stigma associated with mental health diagnosis identified in their relationships with other humans. People drew on their relationships with companion animals to portray themselves in a positive light as responsible pet owners. This finding represents an extension to existing literature through demonstrating how people identify with and construct the identity of companion animals to support ontological security and improve relational satisfaction in everyday lives. This critical discourse analysis revealed concerns about the validity of relationships with pets from the perspectives of others. Previous analysis by the authors identified a lack of acknowledgement and appreciation of companion animals within mental health-care planning.¹⁷ Here we have shown how this extends to the loss and death of a companion animal which can be devastating⁴³ but is rarely acknowledged in main stream mental healthcare contact or care. This study demonstrates that such loss could compound existing feelings of guilt, isolation and lack of understanding commonly associated with living life with a long-term mental health problem. This has clear implications for health services, social services and housing providers in terms of acknowledging such relationships and supporting owners and their pets to stay together. Further research is required to elucidate the best ways to do this from the perspectives of service users and professionals.

The study gains its strengths from the combination of longitudinal data collection and critical discourse analysis which allowed an in-depth understanding of the relationships between companion animals and their owners to be developed. However, data was limited to self-reported accounts of pet ownership. Participant observation could enrich our understanding of the human–animal interactions and the contributions of animals to self-management. This study included participants from the UK only and it is likely that there will be additional cultural factors related to the role of companion animals for mental health which require further examination.

The findings from this study support existing evidence demonstrating the benefit that pets can confer to those with mental health conditions. The longitudinal analysis demonstrated continuity in the relational quality of interactions with pets that contrasted directly with other network members such as health professionals and family members.

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NOTES

1. Penny Bee et al. (2015), "Systematic Synthesis of Barriers and Facilitators to Service User-led care Planning," (in English), *British Journal of Psychiatry* 207, no. 2 (August 2015): 104–114.
2. A C Grundy et al. (2016), "Bringing Meaning to User Involvement in Mental Healthcare Planning: A Qualitative Exploration of Service User Perspectives," *Journal of Psychiatric and Mental Health Nursing* 23, no. 1 (February 2016): 12–21.
3. Helen L Brooks et al. (2018a), "Is It Time to Abandon Care Planning in Mental Health Services? A Qualitative Study Exploring the Views of Professionals, Service Users and Carers," *Health Expectations* 21 no. 3 (June 2018): 597–605.
4. Helen Brooks et al. (2015), "Re-inventing Care Planning in Mental Health: Stakeholder Accounts of the Imagined Implementation of a User/Carer Involved Intervention," (in English), *BMC Health Services Research* 15 (October 2015).
5. Marika Franklin et al. (2018), "Controlled, Constrained, or Flexible? How Self-Management Goals Are Shaped by Patient-Provider Interactions," *Qualitative Health Research* (June 2018), p. 1049732318774324.
6. Anne Rogers et al. (2011), "Social Networks, Work and Network-based Resources for the Management of Long-term Conditions: A Framework and Study Protocol for Developing Self-care Support," (in English), *Implementation Science* 6 (May 2011).
7. Jacqui Dillon and Gail A. Hornstein (2013), "Hearing Voices Peer Support Groups: A Powerful Alternative for People in Distress," (in English), *Psychosis-Psychological Social and Integrative Approaches* 5, no. 3 (October 2013): 286–295.
8. Hugh A. J. Alderwick et al. (2018), "Social Prescribing in the US and England: Emerging Interventions to Address Patients' Social Needs," (in English), *American Journal of Preventive Medicine* 54, no. 5 (May 2018): 715–718.
9. George H. Mead (1907), "Concerning Animal Perception," (in English), *Psychological Review* 14, no. 6, (November 1907): 383–390.
10. Debra Bakerjian (2014), "Pets Impact on Quality of Life, A Case Study," *Geriatric Nursing* 35, no. 2, (March–April 2014): 160–163.
11. Lisa Wood et al. (2015), "The Pet Factor – Companion Animals as a Conduit for Getting to Know People, Friendship Formation and Social Support," *PLoS One* 10, no. 4, p. e0122085, 2015.
12. Lynn Rew (2000), "Friends and Pets as Companions: Strategies for Coping with Loneliness Among Homeless Youth," *Journal of Child and Adolescent Psychiatric Nursing* 13, no. 3 July–September 2000): 125–132.
13. S. B. Barker and K. S. Dawson (1998), "The Effects of Animal-assisted Therapy on Anxiety Ratings of Hospitalised Psychiatric Patients," *Psychiatric Services* 49, no. 6 (June 1998): 797–801.
14. Sandra B. Barker et al. (2003), "Effects of Animal-assisted Therapy on Patients' Anxiety, Fear, and Depression before ECT," *Journal of ECT* 19, no. 1 (March 2003): 38–44.
15. Martina Lundqvist et al. (2017), "Patient Benefit of Dog-assisted Interventions in Healthcare: A Systematic Review," *BMC Complementary and Alternative Medicine* 17, no. 1 (July 2017): 358.
16. Helen Brooks et al. (2016), "Ontological Security and Connectivity Provided by Pets: A Study in the Self-management of the Everyday Lives of People Diagnosed with a Long-term Mental Health Condition," (in English), *BMC Psychiatry* 16 (December 2016).
17. Helen Louise Brooks et al. (2018b), "The Power of Support from Companion Animals for People Living with Mental Health Problems: A Systematic Review and Narrative Synthesis of the Evidence," *BMC Psychiatry* 18, no. 1 (February 2018): 31.

18. Elizabeth J. Ormerod (2008), "Bond-centred Veterinary Practice: Lessons for Veterinary Faculty and Students," *Journal of Veterinary Medical Education* 35, no. 4 (Winter 2008): 545–552.
19. Ivalyo Vassilev et al. (2013), "Social Networks, the 'Work' and Work Force of Chronic Illness Self-Management: A Survey Analysis of Personal Communities," (in English), *Plos One*, 8, no. 4 (April 2013).
20. A Giddens (1991), *Modernity and Self-Identity: Self and Society in the Late Modern Age* (Stanford: Stanford University Press, 1991).
21. Nancy Fraser (1992), "The Uses and Abuses of French Discourse Theories for Feminist Politics," (in English), *Theory Culture & Society* 9, no. 1 (February 1992): 51–71, Feb 1992.
22. M A Mancini and R Rogers (2007), "Narratives of Recovery from Serious Psychiatric Disabilities: A Critical Discourse Analysis," *Critical Approaches to Discourse Analysis Across Disciplines* 1, no. 2 (2007): 35–50.
23. L. Chouliarki and N. Fairclough (1999), *Discourse in Late Modernity: Rethinking Critical Discourse Analysis* (Edinburgh: Edinburgh University Press, 1999).
24. Ivalyo Vassilev et al. (2014), "The Influence of Social Networks on Self-management Support: A Metasynthesis," (in English), *BMC Public Health* 14 (July 2014).
25. D. Lupton (1992), "Discourse Analysis – A New Methodology for Understanding the Ideologies of Health and Illness," (in English), *Australian Journal of Public Health* 16, no. 2 (June 1992): 145–150.
26. Rick Hood (2016), "Combining Phenomenological and Critical Methodologies in Qualitative Research," (in English), *Qualitative Social Work* 15, no. 2 (March 2016): 160–174.
27. Rebecca L. Morris et al. (2016), "Evolving 'Self'-management: Exploring the Role of Social Network Typologies on Individual Long-term condition management," (in English), *Health Expectations* 19, no. 5 (October 2016): 1044–1061.
28. Karina Lovell et al. (2018), "Embedding Shared Decision-making in the Care of Patients with Severe and Enduring Mental Health Problems: The EQUIP Pragmatic Cluster Randomised Trial," *Plos One* 13, no. 8 (2018): e0201533.
29. Helen Brooks et al. (2019), "Implementing an Intervention Designed to Enhance Service User Involvement in Mental Healthcare Planning: A Qualitative Process Evaluation," *Social Psychiatry and Psychiatric Epidemiology* (September 2018).
30. Virginia Braun and Victoria Clarke (2006), "Using Thematic Analysis in Psychology," *Qualitative Research in Psychology* 3, no. 2 (2006): 77–101.
31. Graham Scambler (1998), "Stigma and Disease: Changing Paradigms," *Lancet* 352 (1998): 1054–1055.
32. Sandra Walker et al. (2018), "How do People with Long-term Mental Health Problems Negotiate Relationships with Network Members at Times of Crisis?," *Health Expectations* 21, no. 1 (February 2018): 336–346.
33. Clive Seale et al. (2007), "Antipsychotic Medication, Sedation and Mental Clouding: An Observational Study of Psychiatric Consultations," *Social Science and Medicine* 65, no. 4 (August 2007): 698–711.
34. Helen Gilbert et al. (2008), "The Importance of Relationships in Mental Healthcare: A Qualitative Study of Service Users' Experiences of Psychiatric Hospital Admission in the UK," (in English), *BMC Health Services Research* 8 (April 2008).
35. B Olofsson and L Jacobsson (2001), "A Plea for Respect: Involuntarily Hospitalised Psychiatric Patients' Narratives About Being Subjected to Coercion," *Journal of Psychiatric and Mental Health Nursing* 8, no. 4 (August 2001): 357–366.
36. Luigina Mortari and Marco Pino (2014), "Conversational Pursuit of Medication Compliance in a Therapeutic Community for Persons Diagnosed with Mental Disorders," *Disability and Rehabilitation* 36, no. 17 (2014): 1419–1430.
37. Angela Sweeney et al. (2014), in *A Mixed-methods Study Exploring Therapeutic Relationships and Their Association with Service User Satisfaction in Acute Psychiatric Wards and Crisis Residential Alternatives* (Health Services and Delivery Research, Southampton, UK, 2014).
38. A O. Cain (1985), "Pets as Family Members," in *Pets and the Family*, ed. M B Sussman (New York: Hayworth, 1985), 5–10.
39. C R Sanders (1993), "Understanding Dogs – Caretakers Attributions of Mindedness in Canine–Human Relationships," (in English), *Journal of Contemporary Ethnography* 22, no. 2 (July 1993): 205–226.
40. S Stryker (1980), *Symbolic Interactionism: A Social Structural Version* (Menlo Park: Benjamin Cummings, 1980).
41. Lisa Wood et al. (2005), "The Pet Connection: Pets as a Conduit for Social Capital?," *Social Science and Medicine* 61, no. 6 (September 2005): 1159–73.
42. P Blumstien (1997), "The Production of Selves in Personal Relationships," in *The Production of Reality*, eds. J O'Brien and P Kollack (Thousand Oaks, California: Pine Forge, 1997), 209–236.
43. John Archer (1997), "Why Do People Love Their Pets?," (in English), *Evolution and Human Behaviour* 18, no. 4 (July 1997): 237–259.

BIBLIOGRAPHY

- Alderwick, Hugh A J, Laura M Gottlieb, Caroline M Fichtenberg, and Nancy E Adler. "Social Prescribing in the U.S. and England: Emerging Interventions to Address Patients' Social Needs." *American Journal of Preventive Medicine* 54, no. 5 (2018): 715–8.
- Archer, John. "Why Do People Love Their Pets?" *Evolution and Human Behavior* 18, no. 4 (1997): 237–59.
- Bakerjian, Debra. "Pets Impact on Quality of Life, a Case Study." *Geriatric Nursing* 35, no. 2 (2014): 160–3.
- Barker, S B, and K S Dawson. "The Effects of Animal-Assisted Therapy on Anxiety Ratings of Hospitalized Psychiatric Patients." *Psychiatric services* 49, no. 6 (1998): 797–801.
- Barker, Sandra B, Anand K Pandurang, and Al M Best. "Effects of Animal-Assisted Therapy on Patients' Anxiety, Fear, and Depression Before ECT." *The Journal of ECT* 19, no. 1 (2003): 38–44.
- Bee, Penny, Owen Price, John Baker, and Karina Lovell. "Systematic Synthesis of Barriers and Facilitators to Service User-Led Care Planning." *British Journal of Psychiatry* 207, no. 2 (2015): 104–14.
- Blumstien, P. "The Production of Selves in Personal Relationships." In *The Production of Reality*, edited by J, O'Brien, and P, Kollack, 209–36. Thousand Oaks, California: Pine Forge, 1997.
- Braun, Virginia, and Victoria Clarke. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3, no. 2 (2006): 77–101.
- Brooks, Helen, Caroline Sanders, Karina Lovell, Claire Fraser, and Anne Rogers. "Re-Inventing Care Planning in Mental Health: Stakeholder Accounts of the Imagined Implementation of a User/carer Involved Intervention." *BMC Health Services Research* 15, no. 1 (2015): 490.
- Brooks, Helen, Kelly Rushton, Sandra Walker, Karina Lovell, and Anne Rogers. "Ontological Security and Connectivity Provided by Pets: a Study in the Self-Management of the Everyday Lives of People Diagnosed with a Long-Term Mental Health Condition." *BMC Psychiatry* 16, no. 1 (2016): 16.
- Brooks, Helen, Karina Lovell, Penny Bee, Claire Fraser, Christine Molloy, Anne Rogers, and H Brooks. "Implementing an Intervention Designed to Enhance Service User Involvement in Mental Health Care Planning: a Qualitative Process Evaluation." *Social Psychiatry and Psychiatric Epidemiology* 54, no. 2 (2019): 221–33.
- Brooks, Helen L, Karina Lovell, Penny Bee, Caroline Sanders, and Anne Rogers. "Is It Time to Abandon Care Planning in Mental Health Services? a Qualitative Study Exploring the Views of Professionals, Service Users and Carers." *Health Expectations* 21, no. 3 (2018a): 597–605.
- Brooks, Helen Louise, Kelly Rushton, Karina Lovell, Penny Bee, Lauren Walker, Laura Grant, and Anne Rogers. "The Power of Support from Companion Animals for People Living with Mental Health Problems: a Systematic Review and Narrative Synthesis of the Evidence." *BMC Psychiatry* 18, no. 1 (2018b): 31.
- Cain, A. O. "Pets as Family Members." In *Pets and the Family*, edited by M. B. Sussman, 5–10. New York: Hayworth, 1985.
- Chouliarki, L, and N Fairclough. *Discourse in Late Modernity: Rethinking Critical Discourse Analysis*. Edinburgh: Edinburgh University Press, 1999.
- Dillon, Jacqui, and Gail A. Hornstein. "Hearing Voices Peer Support Groups: a Powerful Alternative for People in Distress." *Psychosis* 5, no. 3 (2013): 286–95.
- Franklin, Marika, Sophie Lewis, Karen Willis, Anne Rogers, Annie Venville, Lorraine Smith, M Franklin, and S. Lewis. "Controlled, Constrained, or Flexible? How Self-Management Goals Are Shaped by Patient-Provider Interactions." *Qualitative Health Research* (2018), 1049732318774324.
- Fraser, Nancy. "The Uses and Abuses of French Discourse Theories for Feminist Politics." *Theory, Culture & Society* 9, no. 1 (1992): 51–71.
- Giddens, A. *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Stanford University Press: Stanford, 1991.
- Gilbert, Helen, Diana Rose, Mike Slade, D. Rose, and M. Slade. "The Importance of Relationships in Mental Health Care: a Qualitative Study of Service Users' Experiences of Psychiatric Hospital Admission in the UK." *BMC Health Services Research* 8, no. 1 (2008): 92.
- Grundy, A C, P Bee, O Meade, P Callaghan, S Beatty, N Ollevent, and K Lovell. "Bringing Meaning to User Involvement in Mental Health Care Planning: a Qualitative Exploration of Service User Perspectives." *Journal of Psychiatric and Mental Health Nursing* 23, no. 1 (2016): 12–21.
- Hood, Rick. "Combining Phenomenological and Critical Methodologies in Qualitative Research." *Qualitative Social Work: Research and Practice* 15, no. 2 (2016): 160–74.
- Lovell, Karina, Penny Bee, Helen Brooks, Patrick Cahoon, Patrick Callaghan, Lesley-Anne Carter, and Lindsey Cree, et al. "Embedding Shared Decision-Making in the Care of Patients with Severe and Enduring Mental Health Problems: The EQUIP Pragmatic Cluster Randomised Trial." *Plos One* 13, no. 8 (2018): e0201533.
- Lundqvist, Martina, Per Carlsson, Rune Sjödash, Elvar Theodorsson, Lars-Åke Levin, and M Lundqvist. "Patient Benefit of Dog-Assisted Interventions in Health Care: a Systematic Review." *BMC Complementary and Alternative Medicine* 17, no. 1 (2017): 358.
- Lupton, D. "Discourse Analysis: a New Methodology for Understanding the Ideologies of Health and Illness." *Australian Journal of Public Health* 16, no. 2 (1992): 145–50.
- Mancini, M A, and R Rogers. "Narratives of Recovery from Serious Psychiatric Disabilities: a Critical Discourse Analysis." *Critical Approaches to Discourse Analysis across Disciplines* 1, no. 2 (2007): 35–50.

- Mead, George H. "Concerning Animal Perception." *Psychological Review* 14, no. 6 (1907): 383–90.
- Morris, Rebecca L, Anne Kennedy, and Caroline Sanders. "Evolving 'Self'-Management: Exploring the Role of Social Network Typologies on Individual Long-Term Condition Management." *Health Expectations* 19, no. 5 (2016), no. : 1044–61.
- Mortari, Luigina, and Marco Pino. "Conversational Pursuit of Medication Compliance in a Therapeutic Community for Persons Diagnosed with Mental Disorders." *Disability and Rehabilitation* 36, no. 17 (2014): 1419–30.
- Olofsson, B, and L Jacobsson. "A Plea for Respect: Involuntarily Hospitalized Psychiatric Patients' Narratives About Being Subjected to Coercion." *Journal of Psychiatric and Mental Health Nursing* 8, no. 4 (2001): 357–66.
- Ormerod, Elizabeth J. "Bond-Centered Veterinary Practice: Lessons for Veterinary Faculty and Students." *Journal of Veterinary Medical Education* 35, no. 4 (2008): 545–52.
- Rew, Lynn. "Friends and Pets as Companions: Strategies for Coping with Loneliness Among Homeless Youth." *Journal of Child and Adolescent Psychiatric Nursing* 13, no. 3 (2000): 125–32.
- Rogers, Anne, Ivaylo Vassilev, Caroline Sanders, Susan Kirk, Carolyn Chew-Graham, Anne Kennedy, Joanne Protheroe., et al. "Social Networks, Work and Network-Based Resources for the Management of Long-Term Conditions: A Framework and Study Protocol for Developing Self-Care Support." *Implementation Science* 6, no. 1 (2011): 6.
- Sanders, C R. "Understanding Dogs – Caretakers Attributions of Mindedness in Canine–Human Relationships." *Journal of Contemporary Ethnography* 22, no. 2 (1993): 205–26.
- Scambler, Graham. "Stigma And Disease: Changing Paradigms." *The Lancet* 352, no. 9133 (1998): 1054–5.
- Seale, Clive, Robert Chaplin, Paul Lelliott, and Alan Quirk. "Antipsychotic Medication, Sedation and Mental Clouding: an Observational Study of Psychiatric Consultations." *Social Science & Medicine* 65, no. 4 (2007): 698–711.
- Stryker, S. *Symbolic Interactionism: a Social Structural Version*. Menlo Park: Benjamin Cummings, 1980.
- Sweeney, Angela., Sarah Fahmy., Fiona Nolan., Nicola Morant., Zoe Fox., Brynmor Lloyd-Evans, and David Osborn., et al., and . *A Mixed-Methods Study Exploring Therapeutic Relationships and Their Association with Service User Satisfaction in Acute Psychiatric Wards and Crisis Residential Alternatives*, vol. 2, 1–106. Southampton (UK), 2014.
- Vassilev, Ivaylo, Anne Rogers, Christian Blickem, Helen Brooks, Dharmi Kapadia, Anne Kennedy, Caroline Sanders, Sue Kirk, and David Reeves. "Social Networks, the 'Work' and Work Force of Chronic Illness Self-Management: a Survey Analysis of Personal Communities." *PLoS ONE* 8, no. 4 (2013): e59723.
- Vassilev, Ivaylo, Anne Rogers, Anne Kennedy, and Jan Koetsenruijter. "The Influence of Social Networks on Self-Management Support: A Metasynthesis." *BMC Public Health* 14, no. 1 (2014): 719.
- Walker, Sandra, Anne Kennedy, Ivaylo Vassilev, and Anne Rogers. "How Do People with Long-Term Mental Health Problems Negotiate Relationships with Network Members at Times of Crisis?" *Health Expectations* 21, no. 1 (2018): 336–46.
- Wood, Lisa, Billie Giles-Corti, and Max Bulsara. "The PET Connection: Pets as a Conduit for Social Capital?" *Social Science & Medicine* 61, no. 6 (2005): 1159–73.
- Wood, Lisa, Karen Martin, Hayley Christian, Andrea Nathan, Claire Lauritsen, Steve Houghton, Ichiro Kawachi, Sandra McCune, and L Wood. "The Pet Factor – Companion Animals as a Conduit for Getting to Know People, Friendship Formation and Social Support factor--companion animals as a conduit for getting to know people, friendship formation and social port." *PLoS One* 10, no. 4 (2015): e0122085.