Professionals' Experience of Working with Compulsive Hoarding: A Q-Sort Study.

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Declaration

This work has not been submitted to any other institution nor submitted for any other

qualification.

Thesis Abstract

Through examining evidence for an extant model of compulsive hoarding and considering the experience of professionals working with hoarders, this thesis improves current understanding of hoarding and the approach professionals take to its treatment.

Section 1. The literature review considers empirical evidence for emotional attachment to objects, proposed as one of four key constructs in determining hoarding (Frost & Hartl's, 1996). Differences in emotional attachment to objects in hoarders compared to control populations, the impact of intervention on emotional attachment and evidence regarding the nature of emotional attachment in hoarding are considered. The paucity of research and methodological limitations inherent in this field are highlighted. Theoretical and clinical implications of the review findings are outlined.

Section 2. The empirical report considers the experience of professionals working with hoarders using a Q-methodological approach. Interviews with professionals (*N*=5) experienced in hoarding were analysed using thematic analysis to develop a 49-item Q-set. Subsequently, professionals with experience of working with hoarders (*N*=36) participated in the Q-sorting task. Q-analysis and factor interpretation evidenced three distinct clusters of professionals: (1) therapeutic and client focused, (2) shocked and frustrated and (3) accepting but task focused. Directions for future research and clinical implications are highlighted.

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Tables and Figures: Research Report

Section One

Emotional Attachment to Objects in Hoarding:

A Critical Review of the Evidence.

Abstract

Objective. The current review critically evaluates the evidence for emotional attachment to objects, hypothesised as a key contributor to hoarding in Frost and Hartl's (1996) cognitive-behavioural model.

Methods. Electronic searches were conducted via Web of Science, PsycInfo, PubMed and PsycArticles databases up to May 2012. Identified studies were screened according to specific inclusion and exclusion criteria. Fifteen studies met review criteria and were quality assessed using a framework designed for the appraisal of both quantitative and qualitative studies. Studies were synthesised using descriptive methods and effect sizes were computed and compared where appropriate.

Results. Moderate quality evidence indicates that hoarders have stronger emotional attachment to objects than both clinical and non-clinical populations. Associated effect sizes were large, suggesting that this is an important construct within hoarding. A key finding in the review is moderate quality evidence demonstrating that emotional attachment is not associated with hoarding severity. The review illustrates that, to date, the characteristics and nature of the emotional attachment to objects in hoarding remains poorly understood. Limited evidence from two studies (one high and one poor quality) suggests that hoarding-specific interventions reduce emotional attachment to objects, although long-term maintenance of gains has not been established.

Conclusions. There is a paucity of research investigating emotional attachment to objects in hoarding despite its centrality in Frost and Hartl's (1996) model of hoarding. Future research should be specifically targeted at this concept within the hoarding model, with an emphasis on refining definition, understanding and measurement. Methodological concerns inherent in research to date also need to be addressed.

Emotional Attachment to Objects in Hoarding: A Critical Review of the Evidence.

Relationships between people and possessions are universal across cultures and over individuals' lives. For instance, early theorists conceptualised acquisitiveness as instinctual and observed saving as commonplace in children (James, 1918). Furthermore, up to one third of British adults engage in collecting (Pearce, 1998). Kellett (2007) hypothesised that such acquisitiveness and associated storage is evident across cultures, due to its previous adaptive advantage. Initial research into reasons for owning objects suggested two motivations: instrumental and sentimental saving (Furby, 1978). In the former, an object is needed to fulfil a purpose, and in the latter, the individual develops an emotional attachment to the object.

The emotional element in the relationship between people and their possessions has been evidenced in developmental research. In young children, possessions function as transitional objects, providing feelings of comfort when caregivers are absent (Winnicott, 1975). A possession (e.g. teddy) symbolises the union with and remembered comfort from caregivers, supporting children in transitional experiences from dependence to independence. In adults, studies exploring involuntary possession loss highlight the emotional connection felt with objects. In burglary victims, Maguire (1980) reported that possession loss felt akin to personal violation. In the aftermath of natural disaster, possession loss was associated with increased stress and also purchasing behaviours, to manage emotions and restore a sense of self (Sneath, Lacey & Kennett-Hensel, 2009).

Further insight into the relationships between people and possessions comes from consumer research, where inspiring an emotional attachment to possessions is key to commerce (Park, MacInnis, Priester, Eisingerich, & Iacobucci, 2010). In this context, individuals demonstrate emotional attachments to brands (Belk, 1988; Fournier, 1998), involving feelings of affection, passion and connection (Thomson, MacInnis & Park,

2005). Thus, in consumer research, possessions have been conceptualised as contributing to and reflecting identity (Belk, 1988).

Relationships with objects are, therefore, commonplace across individuals and an emotional aspect to these relationships is well established. However, in compulsive hoarding strong possession attachment appears ubiquitous across a myriad of apparently useless objects with no central theme. Compulsive hoarding is characterised by the acquisition of and failure to discard a significant volume of possessions. Possessions clutter the living areas of the home, precluding activities for which they were designed, resulting in significant distress and impairment in functioning (Frost & Hartl, 1996). First attempts to define hoarding assumed that items lacked sentimental value and hoarders were considered to save items due to their intrinsic or instrumental value (American Psychological Association, 1994). Frost, Hartl, Christian and Williams (1995) challenged this view and proposed that another key feature of hoarding was enhanced emotional attachment, or hypersentimentality to possessions. This concept was therefore specified in Frost and Hartl's (1996) cognitive-behavioural (CBT) model of hoarding. Within this model, hoarding is depicted as a multifaceted problem, arising through difficulties in: information-processing deficits, behavioural avoidance, erroneous beliefs about the nature of possessions and emotional attachment problems. It is proposed that these four aspects overlap and interact to create hoarding. Regarding the emotional attachment component of their model, Frost and Hartl (1996) outline two types of emotional attachment to possessions: (1) sentimentality, where possessions are considered a part of the self, providing meaningful reminders of past events, and (2) emotional attachment to possessions, due to their value as safety signals. In the latter, possessions become associated with security; therefore discard provokes anxiety about potential risk. Possessions are seen as safety signals in a world perceived as dangerous

(Sartory, Master, & Rachman, 1989). Thus, possessions can become associated with emotional comfort and a safe environment (Kellett, 2007).

In further refining the hoarding CBT model, Steketee and Frost (2007) explicitly outline the emotional reactions that create and maintain hoarding. It is suggested that positive emotions (pride and pleasure) arise from beliefs about the sentimental and instrumental value, and the intrinsic beauty of possessions. Positive reinforcement of hoarding occurs through the immediate experience of pleasure/pride at acquiring items, increasing the likelihood that hoarders will continue to collect and save (Steketee & Frost, 2007). Negative emotions (grief, sadness, anxiety, guilt and shame) are thought to arise through beliefs about vulnerability, responsibility for possessions, inadequate memory and control. Negative reinforcement of hoarding occurs when avoidance behaviours prevent the negative emotions associated with discard (Steketee & Frost, 2007).

Although Frost and Hartl (1996) proposed their model of hoarding as a tentative framework for the development, refinement and testing of hypotheses, the model has become a theoretical cornerstone within the literature. Out of the four constructs proposed to mediate hoarders' relationships to possessions, emotional attachment has received least attention (Cermele, Melendez-Pallitto, & Pandina, 2001). Enhanced understanding of this phenomenon is clinically vital given that treatment resistance and poor outcome appear linked to beliefs around emotional attachment to possessions (Frost & Steketee, 1999). To address this gap, the current review set out to examine the evidence base for emotional attachment to possessions in hoarding. The specific aims were:

1. Identify evidence pertaining to emotional attachment to possessions in hoarders.
2. Consider differences in emotional attachment to possessions in hoarders compared to control populations.

3. Outline evidence regarding the impact of intervention on emotional attachment to possessions in hoarders.

4. Outline evidence regarding the nature of emotional attachment in hoarding.

Method

Search Strategy

A literature search was conducted via Web of Science, PsycInfo, PubMed and PsycArticles databases, up until May, week 4, 2012, to identify articles pertaining to emotional attachment to objects in hoarding. Keywords included *emotional attachment**, *object attachment** and *hoard**. The phrase *saving cognitions inventor*y was also utilised because the scale measures emotional attachment to objects. Reference lists of retrieved articles and relevant review articles were also examined. Two journals with the highest number of relevant articles, *Behaviour Research and Therapy* and *Behavioural and Cognitive Psychotherapy* were hand searched to identify articles that might not have been identified in the databases. Finally, an expert in the field was approached to identify key papers.

Inclusion and Exclusion Criteria

Identified articles were screened for potential inclusion in the review. To be included, articles had to provide empirical evidence on emotional attachment to possessions in hoarding, be published in a peer-reviewed journal and written in English. Dissertation abstracts and book chapters were excluded. Studies reporting hoarding in the context of neurological conditions or psychiatric conditions other than OCD were also excluded, because the CBT model of hoarding was only developed for Hoarding Disorder (Frost & Hartl, 1996).

Effect Sizes

Where studies reported data on measures of emotional attachment, effect sizes were computed to assess: (1) potential differences in emotional attachment to objects between hoarders and control groups, or (2) the size of pre-post intervention change in

emotional attachment. The unbiased effect size estimator d (Hedges & Olkin, 1985) was employed using the following formula:

$$d = \frac{M_1 - M_2}{(sd_1 + sd_2)/2}$$

M_1 = mean of hoarding group or pre-intervention, M_2 = mean of control group or post-intervention, sd_1 = standard deviation of hoarding group or pre-intervention and sd_2 = standard deviation of control group or post-intervention. Therefore, higher emotional attachment to objects in hoarders compared to control participants, or reductions in emotional attachment following psychological intervention would produce a positive effect size (Cohen, 1992).

Study Quality

Study quality was assessed using the Caldwell, Henshaw and Taylor (2005) framework (Appendix A1). Studies were assessed against 18 criteria, with total scores varying from zero (*nil quality*) to 18 (*maximum quality*). Results of this process are available in Appendix A2. Total scores were used to categorise studies as high (16-18), medium (13-15) or low (<12) quality. A sub-sample of four studies, stratified according to study quality and study design, was quality assessed by an independent researcher. Inter-rater reliability, assessed using the Intraclass Correlation Coefficient (ICC) was high (ICC=.94, α=.96). Given the limited literature in the subject area under review, results from the quality appraisal process did not influence inclusion or exclusion, but informed the weight assigned to study findings.

Results

In total, 15 studies met the inclusion criteria for the review (Figure 1). Table 1

and Table 2 present the study characteristics of the quantitative and qualitative studies

respectively. The mean quality rating score was 14.3 (*SD*=2.0) out of a possible total

score of 18. Six studies were appraised as high quality, five as moderate and four as low

quality. In order to make the heterogeneous data more comparable, studies were

organised around the aims of the review.
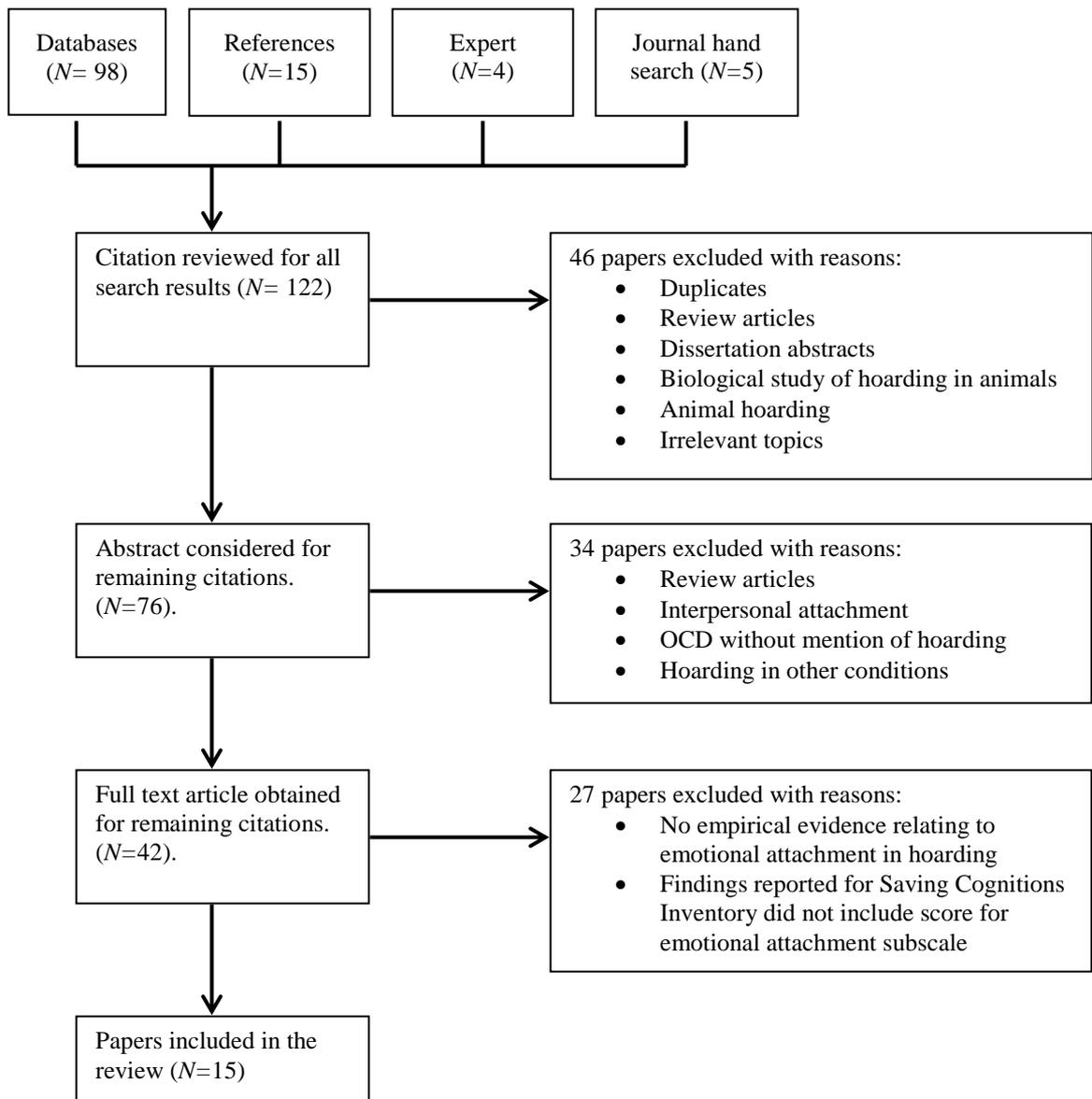
Figure 1. Inclusion process for the review.

Table 1

Quantitative Studies Evidencing Emotional Attachment to Objects in Hoarding

Author, year of publication	Sample	Study Aim	Study Design	Measurement and definition of hoarding	Measure of emotional attachment to objects	Key findings related to emotional attachment to objects	Quality Appraisal Score
Frost and Gross (1993)	Pilot study, *N*=32 self-identified hoarders. Follow-up study, *N*=20 self-identified hoarders, *N*=50 non-hoarding control group. College staff and community recruitment.	Exploration of the nature of hoarding.	Pilot study – structured interview. Follow-up study- cross-sectional questionnaire design.	Hoarding Scale developed for this study. Hoarders were defined as saving a large number of items not as part of collections, with a large percentage of saved items going unused.	Items exploring emotional reactions to discarding objects were included in the Hoarding Scale.	Sentimental saving was a frequent occurrence in hoarders. Hoarders reported higher levels of emotional attachment to their possessions.	12 (Low)
Frost, Hartl, Christian and Williams (1995).	Sample 1, *N*=101 undergraduate students. Sample 2, *N*=52 community participants	Examine hoarding behaviour, emotional attachment and patterns of use of possessions.	Cross-sectional questionnaire design.	Hoarding Scale (Frost & Gross, 1993). Correlational study of hoarding. No cut-off used to define clinical hoarding.	18 item Attachment to Possessions questionnaire generated for this study.	Hoarding was associated with greater emotional attachment and greater reliance on possessions for emotional comfort.	11 (Low)
Frost, Pekareva-Kochergina, and Maxner (2011).	Study 1, *N*=17 Study 2, *N*=11 Community and local agency recruitment.	Investigate the effectiveness of a biblo-based, hoarding support group.	Pre-post single group quasi-experimental design.	SI-R (Frost, Steketee & Grisham, 2004). Hoarding defined as a pre-treatment SI-R score exceeding cut off for clinical significance.	Emotional attachment subscale of the SCI (Steketee, Frost & Kyrios, 2003).	Emotional attachment to objects was significantly lower post-intervention.	16 (High)

Author, year of publication	Sample	Study Aim	Study Design	Measurement and definition of hoarding	Measure of emotional attachment to objects	Key findings related to emotional attachment to objects	Quality Appraisal Score
Grisham, Frost, Steketee, Kim, Tarkoff and Hood (2009).	*N*= 35 OCD with hoarding, *N*=27 OCD without hoarding. Recruited at OCD conference.	Examine attachment formation to newly acquired objects.	Prospective experimental design.	SI-R (Frost et al., 2004). Hoarding reported as one of participants' OCD symptoms.	Emotional attachment subscale of the SCI. Object Attachment Questionnaire specifically developed for this study.	No relationship between severity of hoarding and attachment. Beliefs about the emotional value of possessions significantly predicted the initial attachment to possessions. Initial attachment to an object was the best predictor of later attachment.	15 (Moderate)
Grisham, Norberg, Williams, Certoma and Kadib (2010).	*N*=23 hoarders, *N*=17 participants with mood or anxiety disorder, *N*=20 non-clinical control group. All recruited from the community.	Clarify the nature of categorisation difficulties in hoarding.	Experimental design.	SI-R (Frost et al., 2004). Participants had to meet Frost and Hartl's (1996) hoarding criteria. The Hoarding Rating Scale was also used to diagnose hoarding (Tolin, Frost and Steketee, 2007).	Not directly assessed.	Hoarders had more difficulties sorting personal versus non-personal items.	16 (High)
Grisham, Steketee and Frost (2008)	*N*=30 hoarders, *N*=30 non-hoarding anxious or depressed, *N*=30 nonclinical control participants.	Evaluate whether hoarders differ from clinical and non-clinical participants with respect to interpersonal characteristics.	Cross-sectional questionnaire design.	SI-R (Frost et al., 2004). Diagnosed according to Steketee and Frost's(2003) hoarding criteria.	Emotional attachment subscale of the SCI.	Hoarders reported significantly higher levels of emotional attachment to objects.	16 (High)

Author, year of publication	Sample	Study Aim	Study Design	Measurement and definition of hoarding	Measure of emotional attachment to objects	Key findings related to emotional attachment to objects	Quality Appraisal Score
Hartl, Duffany, Allen, Steketee and Frost (2005)	*N*=26 hoarders, *N*=36 non-clinical control participants. Hoarders recruited through self-help organisations and area agencies. Control participants recruited through the university and community.	Investigate the relationship between hoarding and trauma.	Cross-sectional questionnaire design.	SI-R (Frost et al., 2004). Hoarders met Frost and Hartl's (1996) hoarding criteria.	Possessions Comfort Scale developed for this study.	Hoarders reported significantly greater levels of attachment, security and comfort derived from their possessions. Emotional attachment to possessions was not associated with hoarding severity.	15 (Moderate)
Haws, Naylor, Coulter and Bearden (2012)	*N*=186 undergraduate students Recruited through the university.	Examine the relationship between "product attachment tendency", hoarding and emotional attachment.	Online questionnaire.	SI-R (Frost et al., 2004). Correlational study of hoarding. No cut-off used to define clinical hoarding.	Attachment to Possessions Questionnaire (Frost et al., 1995).	Hoarding was associated with stronger emotional attachment to possessions in comparison to non-pathological forms of keeping behaviour.	14 (Moderate)
Kellett (2006)	*N*=1 hoarding participant. Clinical recruitment.	Assess the effectiveness of object-affect fusion informed CBT.	A/B single-case experimental design.	Not directly assessed. Participant described difficulty with discard and their home was cluttered.	Not directly assessed.	Improvement in hoarding symptoms following intervention targeted at object-affect fusion.	11 (Low)

Author, year of publication	Sample	Study Aim	Study Design	Measurement and definition of hoarding	Measure of emotional attachment to objects	Key findings related to emotional attachment to objects	Quality Appraisal Score
Nedelisky, and Steele (2009)	*N*=14 hoarders, *N*=16 non-hoarding participants with OCD. Recruited through clinics and support groups.	Explore interpersonal and object attachment in hoarders.	Cross-sectional design.	SI-R (Frost et al., 2004). Cut off of 36 on SI-R, used to differentiate hoarders from non-hoarders,.	Reciprocal Attachment Questionnaire (West, Sheldon, & Reiffer, 1987) and Five Minute Speech Sample (Maganam et al., 1986) adapted to assess object attachment.	Hoarders did not report higher levels of secure attachment to objects. Hoarders did demonstrate higher fear of losing objects, greater care seeking from objects and less ability to use objects in times of need.	14 (Moderate)
Pertusa et al. (2008)	*N*=27 hoarders without OCD, *N*=25 hoarders with OCD. Community recruitment.	Compare hoarding in the context of OCD to hoarding without OCD.	Cross-sectional design.	Score of 40 or higher on SI-R (Frost et al., 2004). Participants met Frost and Hartl's (1996) hoarding criteria.	Semi-structured hoarding interview including reasons for hoarding.	Hoarders without OCD reported emotional attachment and intrinsic value as the only reasons for hoarding.	16 (High)
Steketee et al. (2003)	*N*= 95 hoarders, *N*=21 non-hoarders with OCD, *N*=40 community control participants. Clinical participants recruited through clinics, support groups and OCD charity. Controls participants recruited through the community.	Examine the role of hoarding-related beliefs in hoarding.	Cross-sectional questionnaire design.	Saving Inventory, a revised version of the Hoarding Scale (Frost & Gross, 1993) or the SI-R (Frost et al., 2004).	Emotional attachment subscale of the SCI developed for this study.	Factor analysis indicated four categories of hoarding related-beliefs including emotional attachment to objects. Emotional attachment was not a significant predictor of hoarding severity,	16 (High)

Author, year of publication	Sample	Study Aim	Study Design	Measurement and definition of hoarding	Measure of emotional attachment to objects	Key findings related to emotional attachment to objects	Quality Appraisal Score
Wincze, Steketee and Frost (2007).	*N*=21 hoarders, *N*=21 non-hoarding OCD participants, *N*=21 non-clinical control participants. Hoarders and non-clinical participants were recruited from the community. Participants with OCD were recruited from anxiety clinics.	Examine categorisation processes in hoarders.	Experimental design.	Hoarding Scale (Frost & Gross, 1993). The ADIS DSM-IV-Lifetime version was used to diagnose hoarding and OCD. Hoarders had to score 4 (moderate) or more on the ADIS clinical rating severity for their hoarding symptoms.	Not directly assessed.	Hoarders had more difficulties sorting personal versus non-personal items.	15 (Moderate)

Note. ADIS=Anxiety Disorders Interview Schedule for DSM-IV; OCD= Obsessive Compulsive Disorder; SCI=Saving Cognitions Inventory; SI-R=Saving Inventory Revised.

Table 2

Qualitative Studies Evidencing Emotional Attachment to Objects in Hoarding

Author, year of publication	Sample	Study Aim	Study Design	Measurement and definition of hoarding	Measure of emotional attachment to objects	Key findings related to emotional attachment to objects	Quality Appraisal Score
Cherrier and Ponnor (2010).	*N*=8 functional hoarders. Recruited through personal network.	Investigate the motivations to accumulate and reluctance to discard possessions.	Video-ethnography. Unstructured interviews.	Not directly assessed. Participants labelled themselves as hoarders, maintained interpersonal relationships and expressed no purpose for accumulating objects.	Not directly assessed.	Emotional connection to the past emerged as a key motivation to accumulate possessions.	11 (Low)
Kellett, Greenhalgh, Beail and Ridgway (2010).	*N*=11 hoarders. Participants recruited through OCD charity.	Interpretative phenomenological analysis of hoarder's experience.	Qualitative. Semi-structured interviews.	Not directly assessed. Homes were cluttered to a degree that prevented original use of the property.	Not directly assessed.	Emotional attachment to possessions emerged as a key idea.	16 (High)

Definition of Emotional Attachment to Objects in Hoarding

Frost and Hartl's hoarding model (1996) proposed two types of emotional attachment to objects: hypersentimentality and possessions as safety signals. However, in the studies reviewed, additional conceptualisations were evident including comfort from possessions, anthropomorphising objects, inflated responsibility for possessions and identity attachment (Grisham et al., 2009; Kellett, Greenhalgh, Beail, & Ridgeway, 2010). Questions also arose regarding the terminology used to define emotional attachment to objects. Kellett and Knight (2003) argue that emotional attachments to objects can comprise both positive and negative affect, and that the term "sentimental saving" is misleading due to its association with positive affect. In the current review, all studies describing emotional attachment to objects in hoarding were considered. However, this review highlights the need for researchers to define their meaning of emotional attachment to objects, to ensure that the construct under investigation is clear.

Assessment of Attachment to Objects in Hoarding

Closely linked with definitions of object attachment, is the means by which researchers have measured object attachment. Nine studies in the current review included a specific measure of emotional attachment to objects (see Table 1). Four studies utilised the 10-item, self-report, emotional attachment subscale of the Saving Cognitions Inventory (SCI; Steketee, Frost, & Kyrios, 2003) illustrated in Table 3.

Table 3

Items of the Saving Cognitions Inventory Emotional Attachment Subscale

SCI Item No.	Item Wording
1	I could not tolerate it if I were to get rid of this
2	Throwing away this possession is like throwing away a part of me
6	Losing this possession is like losing a friend
8	Throwing some things away would feel like abandoning a loved one
9	Throwing this away means losing a part of my life
10	I see my belonging as extensions of myself; they are part of who I am
13	This possession is equivalent to the feelings I associate with it
16	Throwing some things away would feel like part of me dying
22	This possession provides me with emotional comfort
23	I love some of my belongings the way I love some people

Note. SCI= Saving Cognitions Inventory.

The emotional attachment subscale emerged as one of four subscales in the development of the SCI designed to measure attitudes and beliefs about possessions in hoarders (Steketee et al., 2003). The initial measure was piloted on individuals with compulsive hoarding ($N=95$), OCD without hoarding ($N=21$) and a community control group ($N=40$). Exploratory factor analysis yielded four factors: (1) emotional attachment to possessions, (2) memory for possessions, (3) control over possessions, and (4) responsibility for possessions. The emotional attachment subscale accounted for the largest amount of variance (55%), however unlike the other subscales it did not significantly predict hoarding severity. All subscales demonstrated good internal consistency, with known groups, convergent and divergent validity. Steketee et al.'s (2003) study was appraised as high quality in the current review. A key limitation was the use of participants who self-reported receiving a clinical diagnosis of OCD.

All other measures of emotional attachment to objects utilised in the review studies were unstandardised, including the Attachment to Possessions Questionnaire (Frost, et al., 1995; Haws, Walker-Naylor, Coulter, & Bearden, 2012) the Possessions Comfort Scale (Hartl, Duffany, Allen, Steketee & Frost, 2005) and specific items measuring emotional reactions to discarding in the Hoarding Scale (Frost & Gross, 1993). Nedelisky and Steele (2009) also used adapted measures from the interpersonal attachment field. Psychometric validation of these unstandardised and adapted measures has been unfortunately lacking. Furthermore, the authors failed to report all scale items, preventing understanding of their definition of emotional attachment to objects in hoarding.

Evidence for Emotional Attachment to Objects in Hoarding

Frost and Gross (1993) provided the first empirical examination of emotional attachment to objects in hoarding. As part of a structured interview, hoarders ($N=32$) rated, on a Likert scale, the prevalence of four thoughts influencing discard. Results illustrated "this means too much to me to throw away" was the third most prevalent thought ($M=3.8$) indicating that sentimental saving was a frequent occurrence. In the follow-up study, hoarders ($N=20$) and community controls ($N=50$) completed the 21-item Hoarding Scale developed for the study to assess hoarding behaviours. Results from scores on specific items of the Hoarding Scale indicated that hoarders reported higher levels of emotional attachment, including feelings of loss when discarding items, and loving possessions in a manner akin to loving people.

The Frost and Gross (1993) study was poor quality as hoarders were a self-identified community sample, unlikely to be representative of the hoarding population. Hoarding was defined as saving a large number of items, not part of a collection, with a large percentage of saved items going unused. This definition falls short of current

definitions of hoarding (Frost & Hartl, 1996), and therefore it might not be possible to generalise the results. The authors note that in study two, there might have been hoarders in the non-hoarding group, potentially confounding results. Finally, assessment of emotional attachment was via individual items on the Hoarding Scale and, whilst authors reported increased emotional attachment in hoarders according to these items, no statistics were provided to evidence this.

Frost et al. (1995) were the first researchers to assess emotional attachment to objects in hoarding using a specifically designed scale of possession attachment. Sample one comprised undergraduate students (N=101), and sample two (N=52) comprised self-reported chronic savers. The Hoarding Scale (Frost & Gross, 1993), and a newly developed 18-item Attachment to Possessions questionnaire were administered. Results indicated a significant positive correlation between reported hoarding and emotional attachment to possessions in both students, $r(101)$=0.52, p<0.01, and chronic savers $r(52)$=0.45, p<0.01. The authors concluded that hoarders were hypersentimental about their possessions, exhibiting strong emotional attachments to possessions, deriving comfort and security from them. The quality of Frost et al.'s study was low. The sample was non-clinical and predominantly female; thus participants were unlikely to be representative of the hoarding population. Utilisation of a purpose designed questionnaire to assess emotional attachment to objects improved on Frost and Gross's (1993) study, however the psychometric foundations were not established and therefore reliability and validity issues arise.

Pertusa et al. (2008) provided evidence that hoarders report emotional attachment as one of two reasons for saving. Reasons for hoarding possessions were assessed as part of an interview administered to hoarders with OCD (N=25), and hoarders without OCD (N=27). Hoarders without OCD reported intrinsic value and emotional attachment as the sole reasons for their hoarding behaviour, whilst hoarders

with OCD gave additional reasons including obsessions or compulsions. This study evidenced that in hoarders without OCD, emotional attachment alongside intrinsic value was reported as the key reason for saving. The study was of high quality. Hoarders were predominantly recruited from non-clinical settings; however, only participants with scores in the clinical range on the Saving Inventory Revised (Frost, Steketee, & Grisham, 2004) were included. Thus participants were more likely to reflect hoarding populations.

Evidence of an emotional attachment to objects in hoarding is also inferred from the results of two studies investigating the categorisation processes of personal versus non-personal objects. Wincze, Steketee and Frost (2007) recruited participants with hoarding (N=21), OCD without hoarding (N=21), and non-psychiatric control participants (N=21). First, participants sorted objects, commonly found in hoarder's homes, into piles that made sense to them and second they sorted index cards of the names of personal objects. Results illustrated that hoarders demonstrated categorisation difficulties with personal items, but not non-personal items, compared to the control groups. Hoarders also reported greater distress following the personal sort. The authors concluded that objects' meaning impacts on categorisation, making it more difficult to sort personal items, possibly due to stronger emotional attachment. Wincze et al.'s study was appraised as moderate quality. Importantly, participants were categorised into study groups using the Anxiety Disorders Interview Schedule for DSM-IV (DiNardo, Brown, & Barlow, 1994) rather than by self-report. However, participants were recruited from the community, with free group treatment offered at the end of the study. Given that hoarders are considered less likely to seek treatment (Damecour & Charron, 1998), the participants therefore might not have been reflective of the hoarding population. In the personal sorting task, items were listed on index cards, and therefore results might reflect difficulty with sorting index cards rather than personal items.

Grisham, Norberg, Williams, Certoma and Kadib (2010) extended Wincze et al.'s (2007) work through utilising real personal items in the categorisation tasks. Participants included hoarders ($N=23$), those with a mood or anxiety problem who did not hoard ($N=17$) and a non-clinical control population ($N=20$). Results indicated that hoarders took significantly longer to sort personal versus non-personal objects and index cards. Thus, hoarders had more difficulty in sorting personal items compared with non-personal items, with anxiety levels remaining higher after sorting personal items. The authors acknowledged that sorting duration might be due to a variety of factors, including emotional attachment to objects. Grisham et al.'s study was of high quality. Importantly, participants were categorised into groups according to the Anxiety Disorders Interview Schedule for DSM-IV (DiNardo et al., 1994) and hoarding was diagnosed using a Hoarding Rating Scale (Tolin, Frost & Steketee, 2007) reducing reliance on self-report. Limitations included the self-selected, predominantly female community sample, which might limit the generalisability of findings to the hoarding population.

Cherrier and Ponnor (2010) provide evidence of emotional attachment to possessions using a video ethnography study designed to investigate motivations to accumulate items and reluctance to discard items. Self-identified functional hoarders ($N=8$) completed unstructured interviews, designed to gain a personal description of their hoarding. Results indicated that emotional connection to the past emerged as a key reason for hoarding. Participants reported that keeping possessions retained memories, thus maintaining an emotional connection with the past. Specifically, objects were able to embody a special event, place or person, instigating the same emotions from the past. This study was of low quality as formal measures of hoarding were absent, descriptions of clutter were limited, and therefore the emotional attachments reported might be typical of the general population. Functional hoarders were differentiated from OCD

hoarders in that participants did not report an impact of hoarding behaviours on their lifestyle. However, given that relatives often report difficulties where hoarders do not (Tolin, Fitch, Frost, & Steketee, 2010) collateral reports from relatives would have been valuable.

Further evidence of heightened emotional attachment to objects in hoarding comes from consumer psychology. Haws et al. (2012) developed the concept of "product retention tendency" to conceptualise the tendency to retain possessions. In contrast to hoarding, product retention tendency is conceptualised as a non-pathological form of "keeping behaviour". As part of a series of studies, Haw's et al. examined the relationship between these different forms of keeping behaviour and emotional attachment to objects. Undergraduate students (N=186) completed the Saving Inventory-Revised (Frost, Steketee, & Grisham, 2004), Frost et al.'s (1995) Attachment to Possession Questionnaire and a Product Retention Tendency scale developed for the study. Results indicated that both product retention tendency and hoarding were positively associated with possession attachment; however, hoarding was associated with much stronger emotional attachment to possessions. Haws et al.'s study was appraised to be of moderate quality. The key limitation was the use of undergraduate students, which made the sample unrepresentative of the hoarding population.

In summary, these studies provide preliminary evidence for an association between emotional attachment to objects and hoarding, as hypothesised in Frost and Hartl's (1996) model. However, the only two studies that directly investigated emotional attachment to objects in hoarding (Frost & Gross, 1993; Frost et al., 1995) were of poor quality. There is moderate quality evidence to suggest that hoarders without OCD report emotional attachment as a key reason for hoarding (Pertusa et al., 2008). Whilst results from categorisation studies indicate that hoarders have more difficulties categorising personal objects (Grisham et al., 2010; Wincze et al., 2007),

further research is required to directly examine whether emotional attachment contributes to this finding. Moderate quality evidence suggests emotional attachment to objects in hoarding is stronger than in non-pathological forms of keeping behaviour (Haw's et al., 2012). Generalisation of findings to hoarders is questionable in all studies, given that participants were predominantly drawn from non-clinical or student samples and were self-selected. Whilst the above studies suggest initial evidence for emotional attachment to possessions in hoarders, the study designs do not shed light on the differences between emotional attachment to objects in hoarders and other clinical populations. A significant difference would imply this is a heightened phenomenon in hoarding, warranting further exploration and targeted intervention.

Comparisons of Emotional Attachment to Objects in Hoarding and in Control Groups

Three studies had an appropriate design and reported sufficient data to calculate effect sizes to illustrate differences in emotional attachment to objects between hoarders and control groups. First, in developing the SCI, Steketee et al., (2003) administered the scale to hoarders (N=95), individuals with OCD without hoarding (N=21) and a community control group (N=40). The hoarding group scored significantly higher on the SCI emotional attachment subscale (M=40.0, SD=14.6) in comparison with clinical (M=22.2, SD=13.2) and community controls (M=19.5, SD=10.6). Computed effect sizes were large (Cohen, 1992) for both hoarders versus clinical controls (d=1.3) and for hoarders versus community controls (d=1.6).

Second, as part of a study exploring interpersonal difficulties Grisham, Steketee, and Frost (2008) administered the SCI to hoarders (N=30), non-hoarding anxious or depressed participants (N=30) and a non-clinical community control group (N=30). The hoarding group scored significantly higher on the SCI emotional attachment subscale

(M=40.6, SD=15.3) in comparison with clinical (M=21.6, SD=12.6) and community

controls (M=14.6, SD=6.1). Computed effect sizes, were large (Cohen, 1992) for both

hoarders versus clinical controls (d=1.4) and for hoarders versus community controls

(d=2.4).

Third, as part of their study exploring experience of trauma in hoarders, Hartl et

al. (2005) administered the Possessions Comfort Scale to hoarders (N=26) and a non-

clinical community control group (N=36). The hoarding group scored significantly

higher on the Possessions Comfort Scale (M=101.6, SD=39.0) in comparison with

community controls (M=60.9, SD=29.7). The computed effect size was large (d=1.2;

Cohen, 1992).

In summary, the mean differences in emotional attachment between hoarders

and both clinical (d=1.4) and community control groups (d=1.7) indicate a large effect

(Cohen, 1992). This suggests that, as hypothesised by Frost and Hartl (1996),

heightened emotional attachment to objects appears to be a phenomenon specific to

hoarders.

Characteristics of Emotional Attachment to Objects in Hoarding

Most findings regarding emotional attachment to objects in hoarding contribute

evidence to whether this phenomenon exists or not. However, some studies have

provided evidence regarding the characteristics of emotional attachment to objects,

including relationship with hoarding severity, development of attachments, attachment

type and possible links with trauma and interpersonal difficulties.

In the only experimental study, Grisham et al. (2009) prospectively examined

attachment formation to a newly acquired object. Participants included those with OCD

without hoarding (N=27) and those with OCD with hoarding (N=35). The Saving

Inventory-Revised (Frost, et al., 2004), the SCI (Steketee et al., 2003) and a developed

13-item Object Attachment Questionnaire were administered to measure hoarding severity, hoarding related beliefs and object attachment, respectively. Participants were provided with a keyring, requested to look at it twice daily, and keep it with them at all times during the week experimental period. The Object Attachment Questionnaire was administered immediately after receiving the keyring and again a week later. Results showed that attachment to the keyring grew proportionately for all participants, irrespective of hoarding severity. Initial attachment to the keyring emerged as the best predictor of attachment one week later. In addition, beliefs about the emotional value of possessions, and acquisition behaviours, as measured by the SCI, emerged as the only unique contributors to initial object attachment. The authors concluded that object attachment was not related to hoarding severity, remained stable over time, and was associated with beliefs about acquisition and the emotional value of possessions.

Grisham et al.'s (2009) study was of moderate quality. Although formal diagnostic measures were not utilised, self-reported hoarding was within the clinical range. However, the sample was recruited through an OCD conference. Therefore, participants might have had greater insight into their difficulties than typically reported in the hoarding population (Frost, Tolin, & Maltby, 2010). The Object Attachment Questionnaire was unstandardised and scale items were not reported, therefore the exact concept under investigation was not established. Furthermore, the sensitivity of the Object Attachment Questionnaire has not been established and so the lack of difference in emotional attachment over time might reflect questionnaire measurement problems not stability of object attachment over time. Further investigation is also required to determine whether findings generalise to other objects.

Nedelisky and Steele (2009) provided the first detailed exploration of the nature of the attachment to objects in hoarding, using a methodology from the field of interpersonal attachment. Participants with OCD with hoarding symptoms (N=14) and

without hoarding symptoms (*N*=16) completed the Reciprocal Attachment Questionnaire (West, Sheldon, & Reiffer, 1987) and the five-minute speech sample (Magana et al., 1986) to assess interpersonal attachment. These measures were also adapted to examine the construct of object attachment. Contrary to hypotheses, hoarders did not exhibit more insecure attachment to people, or more secure attachment to objects, compared with non-hoarders. However, hoarders did demonstrate significantly higher fear of losing their objects, greater levels of compulsive care seeking from objects, and less ability to use their objects in times of need. Qualitative statements indicated a strong emotional attachment to objects, although often of an ambivalent form.

Nedelisky and Steele's (2009) study was of moderate quality. Importantly, a clinician administered diagnostic interview of OCD (Yale-Brown Obsessive Compulsive Scale; Goodman et al., 1989) and a clinical cut off on the Saving Inventory-Revised (Frost et al., 2004) was used to differentiate hoarders from non-hoarders. Limitations included a small sample size, thus generalisation of findings is limited. Furthermore, the authors adapted measures from the interpersonal attachment literature to assess object attachment; therefore reliability and validity of measures were not established.

As part of a study exploring interpersonal difficulties and emotional intelligence, Grisham et al. (2008) administered the SCI (Steketee et al., 2003) to hoarders (*N*=30), non-hoarding anxious or depressed participants (*N*=30) and a non-clinical community control group (*N*=30). The hoarding group scored significantly higher on the SCI emotional attachment to possessions subscale in comparison with control groups. Hoarding related beliefs, as measured by the SCI, were not strongly related with interpersonal difficulties, measured using the Inventory of Interpersonal Problems – Circumplex Version (Alden, Wiggins, & Pincus, 1990). The authors propose that the

findings challenge Fromm's (1947, cited in Grisham et al., 2008) assumption that hoarders are socially dysfunctional and thus form attachments to possessions in place of attachments to people. This study was appraised to be of high quality.

Hartl et al. (2005) investigated the potential for possessions to act as safety signals in hoarding. They suggested that such an emphasis on safety might indicate evidence of trauma, and proposed that hoarders might subsequently turn to possessions for emotional comfort. It was hypothesised that in comparison to community controls, hoarders would have experienced more traumatic events, and subsequently derive greater comfort and protection from possessions. Hoarding participants ($N=26$) and a community control group ($N=36$) completed postal questionnaires. The 31-item Possessions Comfort Scale developed for the study assessed different aspects of emotional attachment to objects including physical and emotional comfort, vulnerability and loneliness. Exposure to trauma was assessed using the Traumatic Events Scale-Lifetime (Gershuny, Cloitre, & Otto, 2002). Results indicated that hoarders reported significantly greater levels of attachment, security and comfort from their possessions. Amongst hoarders, emotional attachment to possessions was not correlated with hoarding severity. Hoarders also reported a significantly greater frequency of traumatic events. The authors conclude that emotional attachment to objects might develop from hoarders coming to trust the safety and security of objects due to the experience of interpersonal traumatic events. However, it was acknowledged that this study does not provide evidence of a causal link, and the authors call for future studies to investigate whether trauma precedes hoarding onset. This study was of moderate quality. Limitations included the unstandardised measure of emotional attachment developed in the study, telephone screening of participants and a self-selected community sample.

Kellett et al. (2010) provided a detailed insight into the nature of emotional attachment to objects using interpretative phenomenological analysis. A self-selected,

purposive hoarding sample (*N*=11) was interviewed about their everyday experience of hoarding. All homes were visited bar one and were deemed to meet the environmental criteria for hoarding. A key subordinate theme emerging from the analysis was an emotional attachment to the hoarded item. All participants reported a distinct and strong emotional attachment to their possessions. Two subthemes emerged relating to emotional attachment to objects including anthropomorphising objects and a sense of fusion between the hoarder and their possessions. In terms of anthropomorphising, participants endowed objects with human like qualities and in terms of a sense of fusion, participants reported feeling their possessions were a part of them, finding it difficult to delineate boundaries between who they were and what they owned. Kellett et al.'s (2010) study was of high quality. Limitations included lacking descriptions of the participants and a lack of validated clinical measures of hoarding. Importantly, the analysis validation methods were sound, ensuring findings were grounded in the data.

In summary, there is moderate evidence to suggest that emotional attachment to objects is not correlated with hoarding severity (Grisham et al., 2009; Hartl et al., 2005). Moderate quality evidence suggests that emotional attachment to possessions is instant (Grisham et al., 2009). However, in light of methodological limitations, further research is indicated to establish whether this attachment increases over time (Grisham et al., 2009). Initial evidence suggests that hoarders might have a more insecure attachment to their objects, although this is based on findings using interpersonal attachment assessments, which need to be standardised for use in object attachment (Nedelisky & Steele, 2009). To date, findings regarding the relationship between interpersonal difficulties or trauma, and hoarding are correlational, and therefore no firm conclusions concerning causality can be drawn (Grisham et al., 2008; Hartl, et al., 2005). Qualitative evidence expands the construct of emotional attachment suggesting hoarders might anthropomorphise their possessions or feel a sense of fusion with them (Kellett et al.,

2010). Further research will be required to examine whether this finding generalises across hoarders.

Impact of Intervention on Emotional Attachment to Objects

Two studies provide evidence pertaining to the impact of intervention on emotional attachment in hoarding. Frost, Pekarevea-Kochergina and Maxner (2011) demonstrated that hoarding specific CBT interventions reduce emotional attachment to objects. In two studies, Frost et al. investigated the effectiveness of a biblio-based support group based on Tolin, Frost and Steketee's (2007) self-help book for hoarding. Hoarders (N=17 in study one, N=11 in study two) recruited in the community attended a 13-session support group. The SCI (Steketee et al., 2003) was administered pre-, mid- and post-treatment and at one-month follow-up. In study one, results indicated that emotional attachment significantly decreased between pre-(M=34.3, SD=17.9) and post-treatment (M=26.8, SD=15.1). The authors recognised a key limitation of study one was reliance on self-report and so in study two, the Hoarding Rating Scale Interview (Tolin et al., 2007) was administered. Results of study two indicated that scores on the emotional attachment subscale of the SCI significantly decreased between pre-treatment (M=32.7, SD=11.1) and follow-up (M=24.0, SD=9.3), although post-treatment there was no significant difference (M=26.5, SD=11.5). The average effect size across study one and two, calculated for the purpose of this review, for pre-post differences was moderate (d=0.50; Cohen, 1992). Results of these studies indicate that bibliotherapy interventions targeted at hoarding behaviours significantly reduce emotional attachment to objects and that this is a moderate effect. This study was of high quality. Generalisation of findings was limited by a predominantly female, Caucasian, small N sample. Without a control group, gains made by participants cannot

be firmly attributed to the intervention. Importantly, in this study, follow-up data was collected at one month providing some evidence of short-term maintenance of gains.

Whilst Frost et al.'s (2011) intervention targeted all areas of Frost and Hartl's (1996) CBT model of hoarding, an intervention targeted specifically at the emotional attachment to objects has been reported. Kellett and Knight (2003) expand the emotional attachment construct of Frost and Hartl's CBT model of hoarding, by defining a specific cognitive distortion, termed object-affect fusion (OAF). In OAF, feelings associated with the object become merged with the actual object. Kellett & Knight suggest that objects become part of the hoarder's identity, and thus discard threatens the hoarder's sense of self.

Kellett (2006) provides single-case experimental evidence regarding the effectiveness of object-affect fusion informed CBT in hoarding. The participant was seen in clinical services and reported difficulties with discarding. A domiciliary visit confirmed significant clutter in living spaces. Ideographic measures were collected for a three-week baseline period and for 34 weeks during intervention, including daily number of objects discarded and perceived ease of discard. The intervention comprised 22 CBT sessions based on Frost and Hartl's (1996) hoarding model, and informed by Kellett and Knight's (2003) OAF concept. Results indicated an increased ability to discard objects during treatment, and clinically significant reductions in symptoms of poor mental health. This study was of low quality. Whilst the participant was recruited from a clinical setting, a hoarding specific measure was not administered to assess the effectiveness of the intervention. Furthermore, given that the intervention was focused on reducing object-fusion processes, a specific measure of emotional attachment to objects would have been valuable. In addition, without follow-up data, maintenance of gains was not determined.

In summary, evidence regarding the impact of intervention on emotional attachment to objects is limited. Whilst there is some high quality evidence to suggest that intervention targeted at Frost and Hartl's (1996) CBT model reduces emotional attachment (Frost et al., 2011), sample sizes were small and without a control group gains cannot be firmly attributed to the intervention. Higher quality research is required to confirm whether targeting object-affect fusion specifically, reduces emotional attachment to objects (Kellett, 2006).

Conclusions

Whilst there is considerable anecdotal evidence in relation to emotional attachment to objects in hoarding, the current review highlights that empirical evidence is limited to a basic understanding of this phenomenon. Out of the 15 studies identified, only four were purposefully designed to investigate emotional attachment to objects with the remaining findings being extracted from studies with an alternate focus. This highlights a significant gap in the extant literature given the centrality of the concept in the clinical model of hoarding (Frost & Hartl, 1996; Steketee & Frost, 2007). Additional purpose designed studies are required to advance understanding of this concept.

Review findings support the existence of heightened emotional attachment to objects in hoarding, as hypothesised in Frost and Hartl's (1996) model. Hoarders report emotional attachment as a key reason for their hoarding (Pertusa et al., 2008). Furthermore, moderate to high quality evidence suggests that hoarders have stronger emotional attachment to objects than both clinical (Grisham et al., 2008; Steketee et al., 2003) and non-clinical populations (Grisham et al., 2008; Hartl et al., 2005; Steketee et al., 2003), including those engaging in non-pathological forms of keeping behaviour (Haws et al., 2012). The large effect sizes suggest this is an important phenomenon within hoarding.

A key finding of this review is moderate quality evidence indicating that emotional attachment to objects is not related to hoarding severity (Hartl et al., 2005; Grisham et al., 2009; Steketee et al., 2003). This implies that hoarding severity does not correspond with more intense feelings of emotional attachment to possessions. Thus, whilst emotional attachment emerges as a key concept across hoarders, other factors are also at play in determining severe hoarding.

The exact nature of the emotional attachment to objects in hoarding remains poorly understood. First, there is no evidence to identify the valence of emotions at the centre of emotional attachment to objects in hoarding. Whilst Steketee and Frost (2007) hypothesised that both positive and negative emotions influence hoarding behaviour, to date, no research has investigated this theory. Second, the exact definition of emotional attachment to objects in hoarding remains unclear. Future research should aim to deconstruct the concept of emotional attachment to objects, examine the different types of emotional attachment (e.g. hypersentimentality, objects as safety signals, identity attachment) and investigate whether they have a different relationship with hoarding. This may have useful clinical implications. For example, hoarders who feel objects are part of their identity might require different interventions to hoarders who need objects to feel safe. Finally, further research is also required to investigate emerging hypotheses around the link between emotional attachment to objects, traumatic events, and interpersonal difficulties (Grisham et al., 2008; Hartl et al., 2005; Nedelisky & Steele, 2009).

Initial evidence suggests hoarding-specific interventions reduce emotional attachment to objects. However, the results must be interpreted with caution given the study limitations. Future research is needed to examine the added value of specifically targeting emotional attachment in hoarding (Kellett & Knight, 2003). This could be

achieved using a controlled trial where one group receives hoarding-specific CBT, whilst the other receives OAF-informed CBT (Kellett & Knight, 2003).

Several methodological concerns were identified. Samples were predominantly non-clinical community participants, and so generalisation of findings is limited. Participants were principally self-selected suggesting that participants had insight into their difficulties and the motivation to address them; thus they might not be representative of hoarders who tend to lack insight (Frost et al., 2010). Most studies utilised self-report assessments of hoarding behaviours, which might not be reliable given the discrepancy in difficulties reported by hoarders and carers (Tolin et al., 2010). Classification of hoarding varied across studies, which leaves cross study comparisons open to criticism. Measurement of emotional attachment also varied across studies. Future research should aim to further validate the psychometric properties of the SCI (Steketee et al., 2003) and authors should utilise established measures of emotional attachment to objects, to ensure certainty around the construct under investigation.

In summary, findings indicate that hoarders exhibit heightened emotional attachment to objects. Deconstructing the concept of emotional attachment to objects will prove valuable in gaining a deeper understanding of its influence on hoarding. Future research should aim to replicate current findings utilising more rigorous methodologies and advance knowledge of the nature and formation of emotional attachment to objects in hoarding. Clinically, all professionals working with this client group should be aware of heightened emotional attachment to objects in hoarding, in order to aid understanding and intervention.

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Section Two

Professionals' Experience of Working with Compulsive

Hoarding: A Q-Sort Study.

Abstract

Objective. The potential burden of compulsive hoarding for individuals, families, and society has been well documented. However, the burden on professionals attempting to work with this client group remains largely unexplored**.** Therefore, the central objective of the current study was to explore professionals' experience of working with hoarders.

Design. A Q-methodological study was conducted.

Methods. Semi-structured interviews (*N*=5) were conducted with professionals from the fields of mental health, housing and environmental services experienced in working with hoarders. Data from the interviews were analysed using thematic analysis to identify a pool of statements, which were used to develop a 49-item Q-set. Subsequently, the Q-sort, a measure of perceived organisational support and a measure of job-related wellbeing were administered to professionals (*N*=36) experienced in working with hoarders.

Results. Q-analysis indicated that a three-factor solution was the simplest conceptual structure to explain variance in the data. The factors were interpreted and three professional viewpoints towards working with hoarding were identified: (1) therapeutic and client focused, (2) shocked and frustrated and (3) accepting, but task focused.

Conclusions: Professionals emphasise different aspects of their work with hoarders and experience it in distinct ways. Characteristics associated with the different viewpoints included work-related affective wellbeing and years in occupation. Professional role was also considered a possible contributor to viewpoint. Directions for future research are discussed and clinical implications of the study findings considered.

Professionals' Experience of Working with Compulsive Hoarding: A Q-Sort Study.

What is Compulsive Hoarding?

Whilst knowledge is building regarding the prevalence (Mueller, Mitchell, Crosby, Glaesmer, & Zwaan 2009), phenomenology (Pertusa et al., 2008), epidemiology (Timpano et al., 2011) and aetiology (Iervolino et al., 2009) of hoarding, the evidence base regarding treatment is in its infancy (Muroff, Bratiotis, & Steketee, 2011). Hoarding behaviours have been reported in the context of several neurological and psychiatric conditions including schizophrenia, brain injury, eating disorder, dementia, and obsessive-compulsive disorder (OCD; Eslinger & Damasio, 1985; Frankenburg, 1984; Frost, Krause, & Steketee, 1996; Hwang, Tsai, Yang, Liu, & Lirng, 1998; Luchins, Goldman, Lieb, & Hanrahan, 1992). Researchers have focused most on co-morbidity with OCD, assuming hoarding is an OCD symptom (Steketee, & Frost, 2003). However, Saxena et al. (2002) reported hoarding as the primary symptom in only 11% of a large OCD sample. Furthermore, a high percentage of individuals with hoarding behaviours exhibit no other OCD symptoms (Samuels et al., 2008). Recently therefore, growing evidence suggests that hoarding might be best viewed as a discrete disorder, classified separately, and with its own diagnostic criteria (Mataix-Cols et al., 2010).

Compulsive hoarding has been primarily defined as difficulties with the acquisition of and the failure to discard possessions, resulting in excessive clutter that precludes the activities for which living spaces were designed (Frost & Hartl, 1996). Significant distress and impairment is associated with hoarding behaviours (Frost & Hartl, 1996). Frost and Hartl's (1996) cognitive-behavioural model conceptualises hoarding as a multifaceted problem, arising through difficulties in four areas: (1) behavioural avoidance of discard; (2) erroneous beliefs about the nature of possessions;

(3) information processing deficits; and (4) emotional attachment to possessions. Acquisition in hoarding occurs through both buying possessions and acquiring free items (Frost, Tolin, Steketee, Fitch, & Selbo-Bruns, 2009). Discard creates such high anxiety, that avoidance behaviours ensue (Kyrios, Steketee, Frost, & Oh, 2002). High input and low output from the home result in accumulations that prevent homes functioning as intended (Frost & Hartl, 1996). Rooms can become piled from floor to ceiling with seemingly useless possessions, and traversed using narrow walkways, or sometimes never entered due to the volume of clutter (Frost, & Hartl, 1996). Cluttered environments create increased risk of falls, fires, unsanitary conditions and poor physical health (Steketee & Frost, 2003). Compulsive hoarding therefore has an environmental impact that is absent from other OCD compulsions, where rituals are entirely mental or behavioural (Kellett, 2007). Due to the environmental, social and psychological components of hoarding, different professionals can become involved in management and intervention, including mental health, environmental, fire and social service professionals (Slatter, 2007).

Intervention in Compulsive Hoarding

As little as 5% of hoarders receive professional help and, historically, hoarding disorder has proved difficult to treat (Frost, Steketee, & Greene, 2003; Tolin, Frost, & Steketee, 2012). Hoarders exhibit beliefs around perfectionism and magical ideas about discarding objects that significantly interfere with existing OCD style exposure and response prevention approaches (Kozak & Foa, 1997). Treatment adherence is also often poor, with hoarders failing to complete treatment-related exercises and inter-session assignments (Christensen & Greist, 2001; Tolin, Frost & Steketee, 2007). The presence of hoarding behaviours in OCD predicts poor outcome in both pharmacological and behavioural therapies (Mataix-Cols, Rauch, Manzo, Jenike &

Baer, 1999; Winsberg, Cassic, & Korran, 1999). More recently, the delivery of
interventions around Frost and Hartl's (1996) cognitive-behavioural model of hoarding
has shown promise (Steketee, Frost, Tolin, Rasmussen, & Brown, 2010; Tolin, et al.,
2007). However, remission rates remain low, drop-out high and the majority of
hoarding participants remain symptomatic post-treatment (Muroff et al., 2011).

Whilst psychotherapy focuses on the mental health of the hoarder, other
agencies become involved at an environmental level. For example, complaints from
neighbours might activate input from housing departments whilst environmental health
is informed if waste removal, pest control or physical health risk assessments are
required (Chartered Institute of Environmental Health; CIHE, 2009). Clearance
becomes mandatory when the hoarder is deemed to have broken health, sanitation or
anti-social behaviour regulations (CIHE, 2009). In the short term, statutory action
effectively clears the home, but such interventions often have a poor prognosis, due to
the lack of necessary behavioural change (Perrissin-Fabert, 2006).

The Burden of Compulsive Hoarding

Hoarding creates substantial familial, economic and social burden, with the
condition labelled a community health problem (Frost, Steketee & Williams, 2000).
Tolin, Frost, Steketee, & Fitch (2008) found that living in a severely cluttered
environment during childhood led to increased family strain and childhood distress. A
qualitative investigation of the experiences of family members highlighted that carers
struggle with both the environmental and interpersonal aspects of hoarding (Wilbram,
Kellett, & Beail, 2008). Regarding economic and social burden, Tolin, Frost, Steketee,
Gray, and Fitch (2008) reported higher levels of work impairment, obesity, chronic and
severe medical concerns and a five times higher rate of utilising mental health services
in those with compulsive hoarding. In addition, 8-12% of hoarders had either been

evicted or threatened with eviction due to their hoarding, and 0.1-3% had had a child or elder removed from their care. Tolin, Frost, Steketee, Gray et al. (2008) propose that compulsive hoarding represents a significant public health burden in regard to occupational impairment, poor physical health and social service need.

Professionals' Experience of Working with Hoarding

Whilst research has considered the potential burden of hoarding behaviours from individual, family, social and economic perspectives, to date the perspective of professionals working with this client group remains largely unexplored. Reports from UK environmental health services indicate that working with compulsive hoarding constitutes a demanding and costly aspect of work (Perrissin-Fabert, 2006). Professionals working with hoarding face frequent difficulties and dilemmas, particularly given hoarders lack of insight into their behaviour (Frost, Steketee, Youngren, & Mallya, 1999). Professionals also face further challenges in the form of exposure to unpleasant or hazardous conditions in hoarders' homes (Bexson, 2005). Exposure to such hazardous and unpleasant working conditions has been associated with poorer wellbeing and mental health in home care workers, and also decreased employee performance in wider professional groups (Denton, Zeytinoglu, & Davies, 2002; Kahya, 2007).

Given the complex nature of hoarding, resistance to treatment strategies, and the potential physical risk, it is possible that professionals working with hoarders find such work challenging. Professionals frequently report frustration when working with hoarders and anecdotal reports suggest feelings of helplessness, high rates of burnout, and negative perceptions of hoarding behaviours (Bexson, 2005; Frost, Tolin, & Maltby, 2010; Tolin, et al., 2012). Environmental health officers report a high personal emotional toll of undertaking clearance (Perrissin-Fabert, 2006). Despite these difficult

emotional responses, it is critical for professionals to restrain the expression of such feelings or judgements about the hoarders' living conditions (Bratiotis, Schmalisch, & Steketee, 2011, p.17). Thus in working with hoarders, professionals might have to suppress their emotions, a form of emotional labour, which has been linked with stress and burnout (Grandey, 2000).

Given the high levels of rejecting and hostile attitudes towards hoarders identified in the family literature (Tolin, et al., 2008) it is important to consider the nature of relationships with professionals. Tolin et al. (2012) conducted an online survey of the attitudes and experiences of 84 self-identified healthcare or service professionals, with experience of working with hoarding. Participants were professional organisers (*N*=60), healthcare workers (*N*=16) and social service workers (*N*=8). Results indicated that professionals felt significantly more frustrated, irritated, helpless and hopeless when working with hoarders compared to non-hoarding clients. Hoarders were rated as significantly harder to work with and were felt to benefit less from the work. The authors concluded that hoarders are at increased risk of experiencing poor working alliances with professionals and that professionals who work with hoarders are more likely to hold negative attitudes towards their clients.

The Current Study

Whilst Tolin et al.'s (2012) study reported that professionals find it more difficult to work with hoarders, it does not provide information on whether this is a universal professional viewpoint. Therefore, the central aim of the current study was to explore in detail how professionals experience working with hoarders. To meet the aim of the study, Q-methodology (Stephenson 1935) was utilised to identify the operant viewpoints. Q-methodology was adopted in the current study for four reasons. First, Q-methodology is an exploratory technique, recommended for topic areas that are little

understood (Redburn, 1975). Second, Q-methodology highlights the subjective viewpoints on a subject matter, from the perspectives of the participants taking part and is appropriate to questions regarding personal experience, values and beliefs (Baker, Thompson, & Mannion, 2006; Brown, 1996). Third, Q methodology benefits from the strengths of both qualitative and quantitative research methodologies and overcomes limitations inherent in these methods (Amin, 2000). Finally, Q-methodology has successfully been used to explore related topic areas including compulsive buying (Thornhill, Kellett, & Davies, 2012).

In summary, understanding the viewpoints of professionals working with hoarders is vital to inform intervention and support professionals in their work. To date, only one study has considered professional experience of working with hoarding, evidencing a gap in the extant literature. An explorative approach to understand this phenomenon is also currently lacking. Therefore, the current study utilises Q-methodology, an established method of understanding viewpoints, to provide an in-depth and innovative exploration of the subjective experiences of professionals working with hoarders.

Method

Introduction to Q-methodology

Q-methodology was developed to gain access to subjective viewpoints (Stephenson 1935). Q-methodology applies unique psychometric principles to qualitative data, to enable objective analysis of subjective information (Watts & Stenner, 2005). In its simplest form, Q-methodology can be considered an adaptation of Spearman's traditional method of factor analysis (Watts & Stenner, 2012). In Q-methodology, a by-factor person analysis is employed, whereby participants and not scale items are the variables (Watts & Stenner, 2005). Through this method, clusters of participants are identified who hold a similar viewpoint on a given topic (Watts & Stenner, 2012).

Q-methodology involves three stages. First, the Q-set is developed, which comprises a series of heterogeneous items relating to the subject under exploration. The Q-set constitutes statements making a unique assertion about the subject matter (Watts & Stenner, 2005). The Q-set can be elicited from several mediums including: academic literature, literary and popular texts, informal discussions and formal interviews (Watts & Stenner, 2005). Q-sets of between 40-80 statements are standard (Stainton Rogers, 1995). Watts and Stenner (2005) advocate generating a large pool of statements, and later refining the pool into a manageable Q-set. The items chosen for the final Q-set must broadly represent the opinions within the area under investigation (Watts & Stenner, 2005). Second, the Q-sort is administered to a group of participants who are selected based upon their "presumed interest" in the topic under exploration (Kitzinger, 1987). The aim is not to estimate population statistics, but to access diversity of viewpoint, therefore random samples are not relevant, and a purposive sample is recruited made up of individuals likely to hold pertinent viewpoints regarding the topic under investigation (Brown, 1996). Sample sizes are typically between 20 and 80

participants, enough to capture the available viewpoints (Van Exel & de Graaf, 2005). The sorting task involves ranking statements according to their personal psychological significance, within a quasi-normal distribution (Stainton-Rogers, 1991). For example, participants might be asked to rank statements along a dimension from *most agree* to *most disagree*. Finally, unique psychometric principles involving by-person factor analysis are applied to the qualitative Q-sort data, to identify common viewpoints operant in the sample. These viewpoints are interpreted to make sense of the experience of the participants.

In Q-methodology, the generalisation of research findings is limited; however, this is not the aim. Q-methodology uncovers the range of available viewpoints that would be expected in the wider population, but makes no claims about the frequency with which viewpoints would be expected (Watts & Stenner, 2012).

Participants

In the current study, the presumed interest used to select participants was 'worked with' compulsive hoarders. 'Worked with' was defined according to the following criteria:

1. Worked with individuals who meet Frost and Hartl's (1996) diagnostic criteria for compulsive hoarding:

- The acquisition of and failure to discard a large number of possessions that seem to be useless or of limited value.

- Living spaces sufficiently cluttered so as to preclude activities for which those spaces were designed.

- Significant distress or impairment in functioning caused by the hoarding.

2. Worked with a recent case of compulsive hoarding (within the past five years) and/or worked on multiple cases of compulsive hoarding in their career (3 or more cases).

3. Worked with individuals whose homes would score 4 or higher on the clutter image rating scale (Frost, Steketee, Tolin, & Renaud, 2008). This scale provides a series of pictures of rooms in various stages of clutter. Scores of stage 4 or higher, are considered to be sufficiently cluttered enough to impinge on functioning.

Participants for Phase 1 generation of Q-items were professionals (*N*=5) with extensive experience of working with hoarding. Professionals included a research psychologist, a social worker in adult mental health, a care manager in older adult mental health, a housing officer and an environmental health officer.

Participants for Phase 2 Q-sort were professionals (*N*=36) experienced in working with hoarding. The age of the sample ranged from 26 to 61 years (*M*=42.5, *SD*=9.3); 22 were female, 30 were White British, four Black British, one Asian British and one Irish British. Years in current occupation ranged from three months to 31 years (*M*=10.7, *SD*=7.7); 14 worked in mental health, 19 in housing, one in environment, and two in fire services. The number of hoarding cases worked on by individual participants ranged from 1 to 100 (*M*=10.58, *SD*=18).

Procedure

Ethical approval (Appendix B1) and research governance (Appendix B2) were obtained through the NHS and study sponsorship (Appendix B3) was obtained through the University prior to commencing the study. Potential participants were invited to take part in the study (Phase 1-Appendix C1; Phase 2-Appendix C2) and provided with study information leaflets (Phase 1-Appendix C3; Phase 2-Appendix C4). Interested participants provided written informed consent (Appendix D1). Participants sought

permission from their managers to ensure the organisation consented to their staff participating in the study, and agreed to the terms of participation (Appendix D2). Namely, that all information disclosed in interview was confidential unless issues of harm to the participant or their clients were identified.

Recruitment procedures.

Participants were recruited through a multi-professional compulsive hoarding network and a NHS Trust. The compulsive hoarding network comprised professionals from environmental health, fire, housing and mental health sectors, with a special interest in working with compulsive hoarding. To extend recruitment, participants recruited through these sources were asked to invite their colleagues to take part in the study.

Phase 1: devising a Q-set.

Due to the limited evidence regarding professionals' experience of working with hoarding, a naturalistic design was employed (McKeown, & Thomas, 1988). Specifically, the Q-set was developed from material derived through five semi-structured interviews with professionals experienced in working with hoarding. The interview schedule was initially piloted on a member of the research team and covered understanding of hoarding, participants' role with hoarders, affect associated with the work and successes and difficulties encountered in working with hoarding (Appendix E). Interviews were audio recorded and transcribed, with names replaced with codes to preserve anonymity.

Transcripts were analysed using thematic analysis (Braun & Clarke, 2006) with themes classified as recurrent ideas identified in the material, (Hayes, 2000). Three trainee Clinical Psychologists were employed as independent coders and trained in

thematic analysis. The coders were provided with a study synopsis including written guidelines on conducting the analysis (Appendix F1), and signed a confidentiality agreement (Appendix F2). The coders were provided with the theme of "the experience of working with hoarding" as a basic structure for their analysis. Coders were instructed to identify all and any statement they considered to be important to this theme, regardless of the number of statements generated.

Following analysis, a consensus meeting was held with the coders. Transcripts were considered line by line and coders communicated their identified statements. There was consensus amongst all three coders for 233 statements, which subsequently formed the pool of potential Q-set items. The research team subsequently examined the pool of statements, discarding statements that duplicated ideas and considering the potential contribution of each individual statement. The 49 most emblematic and specific statements were then selected (Appendix G1). Respondents' terminology was maintained in Q-items as research suggests this facilitates Q-sorting and decreases the potential for misinterpretation of respondents' meanings (McKeown & Thomas, 1988). A set of 49 statements was generated to enable a normal distribution to be achieved during the Q-sorting task (i.e. minus six, to plus six).

Phase 2: Q-sort administration.

The Q-sorting task was administered in person by the researcher to all participants at their place of work. A standard set of instructions was adhered to, and initially piloted on a member of the research team, to ensure clear and consistent administration of the task. Participants were provided with a written version of these instructions (Appendix G2), in addition to verbal prompts from the researcher. Participants were informed that they would be asked to complete a sorting task using

statements derived from interviews with other professionals with experience of working with compulsive hoarding.

Participants were presented with a shuffled pile of 5cm by 4cm white laminated cards. Written on each card was one of the 49 Q-set statements (Appendix G1). Participants were directed to sort the cards according to their own personal experiences of working with hoarding. The participants first familiarised themselves with the statements. Next, the participants sorted the statements into three piles: most agreed with, most disagreed with, and those that they were unsure/ neutral about. Following the initial sort, the participants were instructed in a forced-sort procedure using a fixed 13-point quasi-normal distribution grid (see Figure 1). The grid was placed in front of participants, portraying a scale ranging from −6 (*most strongly disagree*) through 0 (*neutral/not sure*), to +6 (*most strongly agree*). Participants were asked to focus on the 'most strongly agree' pile and select the one statement most like their personal experience of working with hoarding. They were instructed to place this statement in the grid location above +6. Participants were then instructed to focus on the 'most strongly disagree' pile and select the statement least similar to their experience of working with hoarding, and place this in the grid location above -6. Participants repeated this process, next choosing two further items from the 'most strongly agree' pile, then two items from the 'most strongly disagree' pile, placing them in locations above +5 and −5 respectively. This process was repeated, alternating between considering statements most representative, then least representative, of the participant's viewpoint, until the 'most strongly agree' and 'most strongly disagree' statements had been exhausted. At this point, participants were asked to choose cards from their third 'neutral' pile and complete the sort around zero. On completing the sort, participants were encouraged to consider the grid as a whole, and make adjustments as necessary. The researcher recorded the final sort and participants were given the

opportunity to provide comments regarding their experience of the task and how they

sorted the statements.

Figure 1. An illustration of the fixed 13-point quasi-normal distribution grid comprising

49 locations for the Q-statements.

Measures.

In addition to the Q-sorting task, Phase 2 participants completed a demographic

information sheet including age, gender, ethnicity, occupational sector, years in

occupation and number of hoarding cases (Appendix H1). The Clutter Image Rating

Scale (Frost, et al., 2008; Appendix H2), the Perceived Organisational Support Scale

(Eisenberger, Huntington, Hutchison, & Sowa, 1986; Appendix H3) and a work related

affective wellbeing scale, adapted for the current study from Warr (1990; Appendix H4)

were also administered. This psychometric information was collected to aid

understanding of the emerging patterns between clusters of participants found in the Q-analysis.

Clutter image rating.

The Clutter Image Rating (Frost et al., 2008) provides a series of nine pictures each, of a living room, bedroom and kitchen in various stages of clutter. Scores range from 1 (*least clutter*) to 9 (*most clutter*) for each room. Participants selected the photograph that resembled the level of clutter for each of the three rooms, for the most severe case of hoarding that they had worked with. The measure demonstrates high test-retest reliability and internal consistency (Frost et al., 2008). In the present study a mean composite score was calculated across the three rooms.

Perceived organizational support scale.

The Perceived Organisational Support Scale (Eisenberger et al., 1986) measured beliefs regarding employers' valuations of employees' contributions and care about employees' wellbeing. The scale was developed as a short, 8-item, version of the Survey of Perceived Organisational Support (Eisenberger et al., 1986). An example item was: "the organisation really cares about my wellbeing." Responses followed a seven point Likert scale, with answers ranging from 0 (*strongly disagree*) to 6 (*strongly agree*). The Perceived Organisational Support Scale has demonstrated high internal reliability ($\alpha = .97$; Eisenberger, Cummings, Armeli, & Lynch, 1997). In the current study, $\alpha = .90$.

Work related affective wellbeing.

Given that there was not an existing measure of occupational wellbeing in relation to working with hoarding, a scale was developed based on Warr's (1990) Work Related Affective Wellbeing scales to reflect the hoarding context. Two six-item subscales were derived: (a) feelings of anxiety/contentment and (b) depression/enthusiasm. Higher overall scores denoted better affective wellbeing. An example item was "during your experience of working with hoarding how much of the time has it made you feel: tense?" Responses were made on a five point Likert scale, with answers ranging from 1 (*never*) to 5 (*all of the time*). In the present study, $\alpha = .89$ for the anxiety/contentment subscale, and $\alpha = .82$ for the depression/enthusiasm subscale.

Planned Analysis

Demographic and questionnaire data were analysed using SPSS. Q-sort data was analysed using PQMethod (Atkinson, 1992).

Q-sort data analysis.

Factor analysis.

Raw data from the Q-sorts were entered into a data matrix. A pair-wise intercorrelation of individual Q-sorts produced a correlation matrix between participant's Q-sorts. Correlation of the Q-sorts identified the relationships between the ways in which participants sorted the statements and formed the raw data for all further analyses. Q-sorts were then factor-analysed, to reduce the many individual viewpoints of the participants to a set of factors. Each factor represented a cluster of people who ranked Q-set statements similarly and so represented a shared viewpoint about working with hoarding. In accordance with the Kaiser-Guttman criterion, factors were initially

considered if they had an eigenvalue of 1.00 or above. However, it is widely accepted that the Kaiser-Guttman criterion results in solutions containing overly large numbers of factors, especially with large data sets (Kline, 1994). Therefore, a scree test was conducted to visually inform factor extraction. Whilst statistical techniques guide factor extraction, the final factor structure and the associated viewpoints must be understandable (Watts & Stenner, 2012). Therefore, the most appropriate factor solution was derived through the combined use of four methods: consideration of eigenvalues, review of the scree plot, the percentage of variance explained by factors and the interpretability of the resultant factors. Principal Components Analysis was utilised to extract the factors from the data set. The resulting factor matrix was rotated using varimax rotation to obtain more interpretable results. Varimax rotation is the most frequently employed method in Q-Studies (Brown, 1980).

Finally, the factor loadings displayed in the rotated factor matrix were examined to identify which participants' Q-sorts contributed towards defining each factor. Participants Q-sorts were only taken to define a factor if they loaded significantly and solely on a given factor. Brown's equation (1980) was utilised to calculate significant factor loadings: [2.58 x (1 ÷ √number of items in Q-set)]. Confounding Q-sorts, where a participant loaded significantly on more than one factor, and non-significant Q-sorts, where a participant did not load significantly on any factor, were also identified. The amount of variance explained by the resultant factors was noted.

Preparation of factor estimates.

Having identified the defining Q-sorts for each factor, further analysis was conducted to examine the extent to which each defining Q-sort contributed to that factor. From this, factor estimates were developed, which are best estimate prototypical Q-sort configurations for each of the factors (Stainton-Rogers, 1995). Brown (1996)

advocates that to be reliable, a factor estimate should be derived from at least two Q-sorts. A weighted average was used for the factor estimate, thus Q-sorts with higher factor loadings contributed proportionally more to the final factor estimate than Q-sorts with relatively low factor estimates (Watts & Stenner, 2012). The weighting was applied to each Q-set item and scores for each Q-set item were summed to produce a total score. To enable cross factor comparison, total scores were converted to standardised z scores (Watts & Stenner, 2012). Prior to interpretation, the z scores for each individual item were rank ordered back into the 13-point quasi normal distribution, used for the original Q-sorting procedure, producing a factor array. Factor arrays enable the researcher to identify how the different statements have been sorted across the factors, thus informing factor interpretation.

Factor interpretation.

Following factor analysis, an iterative process of interpreting the resulting factors was undertaken to identify the different perspectives represented by each factor. As advocated by Watts and Stenner (2012) crib sheets were initially developed for each factor outlining highest and lowest ranked Q-items (i.e. statements that were most and least characteristic of that factor), items ranked higher in a given factor compared to other factors and items ranked lower in a given factor compared to other factors. Statements identified by PQMethod as significant and/or distinguishing for each factor were prioritised. Characteristics of the participants associated with the factors were also considered during interpretation, for example, demographic and psychometric information. Finally, factors were named according to their conceptual nature with each viewpoint presented in a narrative style with direct reference to the Q-set items (Watts & Stenner).

Data analysis of demographic and psychometric measures.

Demographic and questionnaire data were screened to minimise errors and means and standard deviations calculated. Where appropriate, Kruskal-Wallis tests were planned to examine potential differences between factors on demographic and psychometric data, with Mann Whitney follow-up of significant results to determine where differences occurred.

Results

Factor Analysis

The 36x36 correlation matrix revealed significant correlations between Q-sorts, which formed the basis for subsequent factor analysis. Consideration of eigenvalues of 1.00 or above yielded a nine-factor solution (Appendix I1). Visual inspection of the resulting scree plot (Figure 2) suggested a two or three factor solution. The unrotated factor matrix is illustrated in Appendix I2.
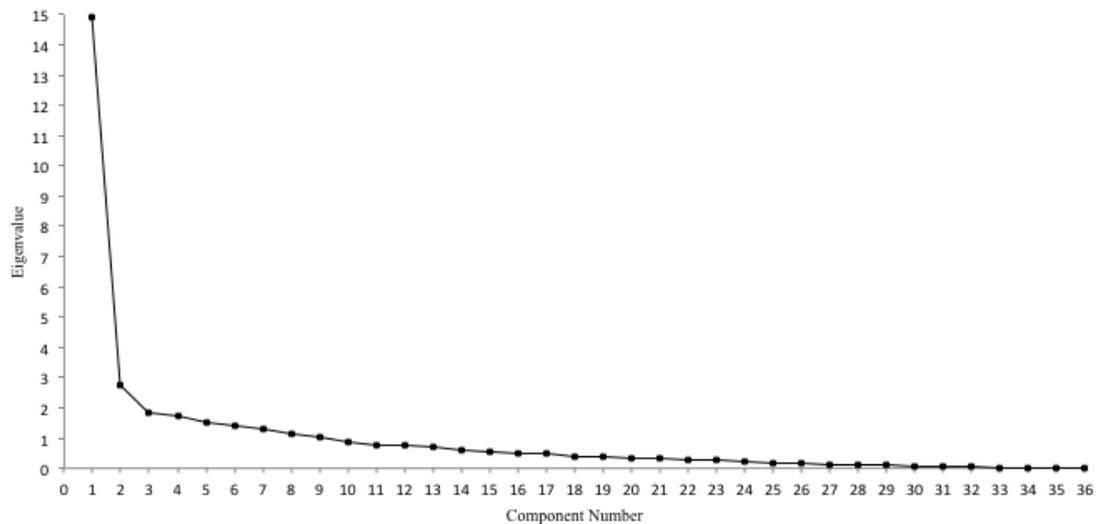
Figure 2. Scree plot illustrating the amount of variance explained by each factor.

Assessment of the structural difference between the two- and three-factor solutions indicated that the three-factor solution emerged from splitting the second factor of the two-factor solution into two. Refining the solution in this way led to an additional 5% of the total amount of variance being explained. The interpretability of both a two-factor and a three-factor solution were also considered and in the three-factor solution, the factors represented distinctly different viewpoints, and so a two-factor solution would have lost meaningful information. Therefore, taking into account eigenvalues, the amount of variance explained by potential factors, the scree plot and the interpretability of the solution, a three-factor solution was selected.

Three factors were subsequently specified in the principal components analysis and varimax rotation was conducted to yield the simplest factor structure. Table 1 contains the results of the principal components analysis and varimax rotation. The 36 Q-sorts are reduced to three factors. Factor loadings represent the extent to which each participant's Q-sort contributed towards defining each factor. For example, participant 33 (P33) contributed most to defining Factor A, participant 26 (P26) contributed most to defining Factor B, and participant 16 (P16) contributed most to defining Factor C. Participants' Q-sorts were only taken to define a factor if they loaded significantly and solely on a given factor. Using Brown's equation (1980), factor loadings ≥ 0.37 were significant at the $p < .01$ level. The outcomes of this process are illustrated by an asterisk in Table 1. As Table 1 shows, the three factors account for 22 of the 36 completed Q-sorts. Factor A comprised $N=15$ participants, Factor B ($N=2$) and Factor C ($N=5$). The Q-sort of P35 was non-significant and thirteen Q-sorts were confounded. Factor A accounted for 31% of total variance, Factor B 11% and Factor C 13%. The three factors combined accounted for 55% of total variance.

Table 1

Rotated Factor Matrix Illustrating Significant Factor Loadings

Participant	Factor A	Factor B	Factor C
P1	**.71***	.07	-.13
P2	.55	.51	.04
P3	-.45	-.31	-.39
P4	.59	.07	.41
P5	**.74***	.29	.06
P6	.67	.08	.42
P7	**.79***	.05	.17
P8	**.57***	.20	.15
P9	.13	.46	.58
P10	.58	-.14	.37
P11	**.57***	.29	.27
P12	**.67***	.31	.07
P13	**.63***	.10	.34
P14	.14	.13	**.66***
P15	.20	.19	**.43***
P16	.15	.03	**.71***
P17	.67	.23	.42
P18	**.70***	-.06	.35
P19	-.11	**.68***	-.03
P20	.58	.43	.27
P21	.59	.16	.45
P22	.61	.37	.19
P23	.17	.64	.49
P24	**.70***	.26	.27
P25	**.81***	.09	.30
P26	.17	**.73***	.02
P27	**.78***	.14	.27
P28	**.70***	-.02	.36
P29	.30	.10	**.63***
P30	.12	.06	**.50***
P31	.14	.69	.39
P32	**.51***	.27	.16
P33	**.83***	-.05	.20
P34	.38	.51	.28
P35	.13	.29	.28
P36	**.76***	.21	.12

Note. Significant factor loadings (≥ .37 on a single factor) are in boldface.
* $p < .01$.

Factor Estimates

In accordance with Brown (1996) all three factors outlined above were derived from two or more Q-sorts, therefore factor estimates were considered reliable. The three developed factor estimates are outlined in Table 2. Table 2 illustrates the ranking (based on the -6 to +6 distribution) and associated *z*-score assigned to each statement within each of the prototypical factor Q-sort configurations. Statements distinguishing between factors and the significance of these distinguishing statements are also illustrated in Table 2, by the symbols "a" and "*", respectively. For example, item 19 "the work is a very slow process" is a distinguishing statement for Factor B, and item 1 "hoarders are normal people" is a significantly distinguishing statement for Factor B. The columns of Table 2 illustrate the comparative rankings of statements, which characterise a particular factor. For example, in Factor A item 5 "I have respect for hoarders at all times" is ranked as +5, whereas item 48 "hoarding-it's a pitiful way of carrying on" is ranked as -5. The rows of Table 2 illustrate the comparative rankings of statements across all the factors. For example, item 20 "my relationship with the hoarder is key to the work" is ranked as +6 in Factor A, +4 in Factor B, and -2 in Factor C.

Table 2

Factor Arrays for Factors A, B and C, Illustrating Significant and Distinguishing

Statements

Item	Statement	Factor A	Z-score	Factor B	Z-score	Factor C	Z-score
1	Hoarders are normal people.	4	1.29	-2[a]*	-0.42	4	1.46
2	It's difficult to understand a hoarder's mindset.	-1	-0.16	-2	-0.53	0	-0.28
3	I often think 'oh my god' when I see the house.	-1[a]*	-0.36	2	0.76	1	0.45
4	I wonder how someone can live like this.	-1	-0.55	4[a]*	1.51	-1	-0.45
5	I have respect for hoarders at all times.	5[a]*	1.72	-4[a]*	-1.37	2[a]*	0.60
6	Hoarders have poor insight.	-3	-0.94	-4	-1.13	-1	-0.43
7	You help clear spaces and then go back later and it's just the same.	1	0.21	1	0.37	5[a]*	1.55
8	It's such a hard condition to treat.	2	0.59	1	0.38	3	1.08
9	It feels like an overwhelming problem to face.	2	0.54	0	0.00	3[a]*	1.28
10	It's shocking to see the way that hoarders live.	-3[a]*	-0.78	2	0.80	2	1.01
11	I'm not going to give up on them.	3[a]*	1.00	0	0.00	0	-0.14
12	Though it's just rubbish to me, its treasured by the hoarder.	4	1.46	0[a]*	-0.04	3	1.05
13	You wear yourself out challenging hoarders about their behaviour.	-2	-0.77	0	-0.09	0	-0.02
14	I feel sorry for hoarders.	-1	-0.53	-2	-0.42	-3	-1.10
15	Working with one hoarder could consume your whole working life.	0	0.10	-5[a]*	-2.12	0	-0.08
16	Hoarders' are grateful for my help.	1[a]*	0.21	-3	-1.08	-4	-1.14
17	When they are in denial, it makes the work very hard indeed.	3	0.91	3	0.85	5[a]*	1.92
18	The stench and the smell can really get to me.	-1	-0.48	1	0.29	0	-0.30
19	The work is a very slow process.	4	1.30	6[a]	2.35	4	1.42

Table 2 continued

Item	Statement	Factor A	Z-score	Factor B	Z-score	Factor C	Z-score
20	My relationship with the hoarder is key to the work.	6[a]	2.08	4[a]	1.27	-2[a*]	-0.81
21	I feel very intrusive into the hoarder's life.	2	0.67	2	0.56	1	0.19
22	I feel shocked by the emotional attachment hoarder's have to things	-4[a*]	-1.46	3	0.89	1	0.50
23	You have to hold all your thoughts and feelings in.	0	0.18	-1	-0.34	-2	-0.54
24	I find it incredibly frustrating.	-2	-0.66	4[a*]	1.61	-2	-0.84
25	I find it fascinating, how hoarders can justify keeping things	3[a*]	0.99	-1	-0.28	1	0.21
26	I'm not here to judge.	5	1.77	0[a*]	-0.06	4	1.37
27	My heart sinks when I am given a hoarding case.	-4	-1.40	1[a*]	0.04	-5	-1.50
28	You never get to an end point in the work; it's a continual battle.	0[a]	-0.03	-3[a]	-0.75	2[a]	0.60
29	I'm never quite sure when it's hoarding, or when its collecting.	1[a*]	0.42	-5[a*]	-1.89	-1[a*]	-0.43
30	I get anxious about what I will face and how bad it might be.	-3[a*]	-1.18	0	-0.19	0	-0.19
31	I think 'how has this happened?'	1[a*]	0.28	5[a*]	1.74	-3[a*]	-0.89
32	I feel appalled that people have got themselves into this state.	-5[a*]	-1.76	-1	-0.28	-2	-0.55
33	I struggle to get my head round the emotional attachment to things.	-4[a*]	-1.31	-1[a*]	-0.34	2[a*]	1.01
34	I worry that I am affecting my own health by being in the house.	-2[a]	-0.70	1[a*]	0.23	-4[a]	-1.32
35	I feel filthy after a home visit to a hoarder.	-2	-0.67	5[a*]	1.93	-4	-1.15
36	I feel angry with them.	-6	-2.46	-6	-2.16	-6	-2.26
37	Hoarders can detest me as a result of my work.	-2[a*]	-0.61	-4[a*]	-1.55	1[a*]	0.10
38	You invest so much time in them and they don't want help.	-3	-0.86	-2	-0.61	-1	-0.37
39	I feel I'm asking the impossible of them.	0[a]	0.11	3[a]	0.85	-3[a*]	-0.91

Table 2 continued

Item	Statement	Factor A	Z-score	Factor B	Z-score	Factor C	Z-score
40	I feel out of my depth and unequipped to work with hoarders.	0	-0.11	-2	-0.57	-1	-0.43
41	People hoard for a reason.	3	1.19	3	0.89	6[a]*	2.18
42	The work is physically draining.	0	-0.01	2	0.48	-2[a]*	-0.77
43	Hoarders are lovely people.	1	0.44	-3[a]*	-1.08	1	0.03
44	I need to take precautions in terms of my own safety.	2	0.75	1	0.47	-1[a]	-0.39
45	I don't feel I have the time to address the hoarding properly.	1	0.52	1	0.47	-3[a]*	-1.10
46	My work with hoarders feels like I am scratching the surface.	2	0.87	-1[a]*	-0.23	3	1.20
47	The legal powers are not very robust to deal with hoarding.	-1	-0.18	0	-0.19	0	-0.17
48	Hoarding - it's a pitiful way of carrying on.	-5	-1.68	-3[a]	-0.70	-5	-1.49
49	Hoarders go back on what they say they will do.	0	0.03	-1	-0.32	2[a]*	0.84

Note. [a] = Distinguishing statements. *$p < .01$.

Factor Comparison

Non-parametric analysis of the potential differences between factors on demographic and psychometric data was contra-indicated, due to the small resultant sample size in Factor B. Therefore, a non-statistical measure of group difference, based on the approach used to determine clinical difference was utilised (Ogles, Lunnen, & Bonesteel, 2001). This approach was considered to be a conservative method to assess differences between factors. A difference threshold was set, where scores greater than one standard deviation from the mean of other factors were considered noteworthy. Table 3 illustrates three noteworthy differences between factors on demographic and psychometric data: (1) Factor A professionals had worked for a greater number of years in their occupation; (2) Factor A professionals reported higher levels of job-related wellbeing for anxiety, and (3) all three factors were different in terms of job-related wellbeing for depression, with Factor A > Factor C > Factor B.

Table 3

Demographic and Measure Information

Demographic	Factor A	Factor B	Factor C	Non-defining participants
N	15	2	5	14
Age (Years)				
M	42.7	41.0	40.0	43.5
SD	8.3	21.2	13.1	8.2
Range	27-55	26-56	29-61	29-55
Group difference range	34.4-51.0	19.8-62.2	26.9-53.1	35.3-51.7
Gender *N* (%)				
Female	10 (67)	2 (100)	4(80)	6(43)
Male	5 (33)		1(20)	8(57)
Ethnicity *N* (%)				
White British	13(87)	2 (100)	4(80)	11(79)
Black British	2(13)		1(20)	2(14)
Irish British				1(7)
Years in Occupation (Years)				
M	11.7[a]	7.5[b]	8.7[b]	10.9[a]
SD	9.1	2.1	2.1	8.0
Range	0.25-31	6-9	7-12	0.5-30
Group difference range	2.6-20.8	5.4-9.6	6.6-10.8	2.9-18.9
Occupational sector *N* (%)				
Housing	9 (60)	1 (50)	4 (80)	5(36)
Mental Health	6 (40)	1 (50)		7(50)
Fire			1 (20)	1(7)
Environmental Health				1(7)
Number of hoarding cases				
M	7.3	9.0	9.0	14.9
SD	6.8	9.9	8.9	27.6
Range	2-20	2-16	3-24	1-100
Group difference range	0.5-14.1	-0.9-18.9	0.1-17.9	-12.7-42.5

Table 3 continued

Demographic	Factor A	Factor B	Factor C	Non-defining participants
Clutter Image Rating Scale				
M	7.3	6.4	7.1	6.9
SD	1.2	1.9	1.8	1.7
Range	5.0-9.0	5.0-7.7	5.3-9.0	4.3-9.0
Group difference range	6.1-8.5	4.5-8.3	5.3-8.9	5.2-8.6
Work related wellbeing anxiety/contentment subscale				
M	21.3^a	11.00^b	$14.4^{b,c}$	$19.3^{a,c}$
SD	3.8	2.8	5.5	4.3
Range	14-27	9-13	6-21	12-24
Group difference range	17.5-25.1	8.2-13.8	8.9-19.9	15-23.6
Work related wellbeing depression/ enthusiasm subscale				
M	24.5^a	14.5^b	$19.0^{c,d}$	20.9^d
SD	2.9	0.7	3.3	4.0
Range	17-29	14-15	16-24	12-27
Group difference range	21.6-27.4	13.8-15.2	15.7-22.3	16.9-24.9
Perceived Organisational Support				
M	38.5	31.5	35.4	34.1
SD	7.6	20.5	9.3	9.5
Range	27-48	17-46	21-47	15-48
Group difference range	30.9-46.1	11-52	26.1-44.7	24.6-43.6

Note. Superscripts indicate variables where non-statistical group differences between factors were present. Within each row, means with different superscripts illustrate noteworthy differences between factors.

Factor Interpretation

The three factors are interpreted below, highlighting the psycho-emotional experience of working with hoarders. The relevant statement numbers and associated rankings (based on the -6 to +6 distribution) are provided in brackets throughout the interpretations. For example, (12:+4) indicates that that part of the interpretation is based around statement 12, which was ranked at +4 for that factor. The crib sheets developed to interpret the factors are available in Appendix J.

Factor A: therapeutic and client focused.

Factor A had an eigenvalue of 11.20, explained 31% of study variance and contained 15 participants defined by being therapeutic and client focused. Participant demographics are outlined in Table 3. Seventeen Q-set statements distinguished Factor A from the other two factors, and 13 statements were significant at $p < .01$ (Table 2).

This cluster of professionals detail a client centred approach, emphasising the importance of the working relationship and an understanding of hoarding, paying less attention to the physically unpleasant nature of the work. These professionals demonstrated empathy through understanding that although some objects might seem like rubbish to them, they are treasured by the hoarder (12:+4). To a greater extent than other professionals, they emphasised a non-judgemental attitude (26:+5) and maintained respect for hoarders at all times (5:+5). Factor A professionals perceive hoarders as normal people (1:+4) and view the relationship with their hoarding client as paramount to their work (20:+6). Whilst acknowledging that change is a difficult task for hoarders, they do not view it as impossible (39:0). In contrast with other professionals, they retain hopefulness, do not give up on their clients (11:+3) and do not experience heart sink when they are allocated a hoarding client (27:-4).

Compared to professionals in Factor B and C, this cluster of professionals do not feel anxious about what they might face, and how bad a home might be (30:-3) and are less shocked by the conditions in the home of a hoarder (10:-3; 3:-1). There is no judgement that the hoarders have got themselves into this state (32:-5), or that hoarding is pitiful (48: -5). The emphasis on the relationship appears to foster good alliances; this factor contains the only professionals who feel that hoarders are slightly grateful for their help (16:+1), and who also slightly disagree that hoarders detest them as a result of the work (37:-2). These statements are consistent with the finding that Factor A professionals reported higher levels of job-related wellbeing when working with hoarding compared with professionals in other factors.

This cluster of professionals want to understand the hoarding and are fascinated by the processes hoarders use to justify keeping things (25:+3). In comparison with other professionals, they do not struggle to understand the concept of emotional attachment to possessions in hoarding (33:-4) and are not shocked by this emotional attachment (22:-4). More so than for other professionals, there is some uncertainty about what constitutes collecting versus hoarding (29:+1). The actual undertaking of the work is emphasised less by this cluster of professionals in comparison with Factor C professionals. Thus, they place less importance on getting to an end point in the work (28:0), although they acknowledge that change can be a slow process (19:+4).

Given the focus on an explicitly therapeutic approach it is perhaps unsurprising that six out of seven mental health workers defined the therapeutic and client focused factor. Of note, this cluster of professionals had worked in their occupation for longer than professionals in other factors.

Factor B: shocked and frustrated.

Factor B had an eigenvalue of 4.00, explained 11% of study variance and contained two participants defined by being shocked and frustrated with their work. Participant demographics are outlined in Table 3. Twenty one Q-Set statements distinguished Factor B from the other two factors, 16 of them were significant at $p < .01$ (Table 2).

This cluster of professionals emphasised how shocked they feel at the physical conditions within which hoarders live, describing frustrations and demonstrating ambivalence in understanding hoarding. In the experience of these professionals, working with hoarding is incredibly frustrating (24:+4), as if they are asking the impossible of the client (39:+3). Work with hoarders is experienced as a very slow process (19:+6). Such frustrations appear consistent with the finding that Factor B professionals reported the lowest levels of job-related wellbeing on the depression scale.

Factor B professionals feel shocked by the environmental conditions encountered in the homes of hoarders. When they enter a home, these professionals think, "how has this happened?" (31:+5), and wonder how somebody could live like in such conditions (4:+4). Such professionals find the working conditions unpleasant, feeling filthy after a home visit (35:+5). More than other professionals, they are concerned about the personal impact of these environmental conditions and worry slightly that their own health will be affected (34:+1). Such anxieties are consistent with these professionals reporting lower levels of job-related wellbeing on the anxiety scale compared to Factor A professionals.

Factor B professionals have a more negative perception of hoarders. They do not feel hoarders are normal (1:-2) or lovely (43:-3) people. They find it difficult to maintain respect for hoarders at all times (5:-4) and a non-judgemental attitude is not their highest priority (26:0). Unlike the other professionals, on receipt of a referral for

hoarding they experience slight heart sink (27:+1). Despite these views, Factor B professionals do not experience negative reactions from hoarders (37:-4), possibly because they recognise the value of the relationship as a key component in their work (20:+4).

Factor B professionals appear more ambivalent about understanding the nature of hoarding, in terms of understanding the emotional attachment to objects (33:-1) and the key concept "though it's just rubbish to me, it's treasured by them" (12:0). Despite the challenges these professionals experience in working with hoarders, they do feel capable in their work. They do not consider the work to be a continual battle, where an end point is never reached (28:-3) and they slightly disagree that the work is only scratching the surface of the problem (46:-1). This is possibly because they do not allow the work with one hoarder to consume their whole working life (15:-5). They feel confident in knowing when a case is hoarding and when it's collecting (29:-5). These professionals feel ambivalent towards ideas that hoarding is a difficult condition to treat (8:+1) or an overwhelming problem to face (9:0).

Factor C: accepting but task-focused.

Factor C had an eigenvalue of 4.70, explained 13% of study variance and contained five participants defined by being accepting, but task focused. Participant demographics are outlined in Table 3. Seventeen Q-set statements distinguished Factor C from the other two factors, 14 of them were significant at $p < .01$ (Table 2).

This cluster of professionals strike a pragmatic attitude towards their clients, and their homes, focusing less on emotions and more on the process of the work. When entering a cluttered home, for example, they do not think about how it has happened (31:-3). They maintain a respectful (5:+2), non-judgemental attitude in their work (26:+4), viewing hoarders as normal people (1:+4). Factor C professionals do not

experience feelings of dread or heart sink when a hoarding client is referred to them (27:-5). This cluster of professionals are not concerned about the personal impact of the work on their own health (34:-4), and are less concerned about personal safety issues (44:-1). These professionals do not feel filthy upon leaving the home of a hoarder (35:-4) and do not feel the work is physically draining (42:-2). These views appear consistent with the finding that Factor C professionals reported higher levels of job-related wellbeing on the depression subscale compared with Factor B professionals.

Factor C professionals strongly feel that people hoard for a reason (41:+6). However, more than other professionals they struggle to understand strong emotional attachments to possessions (33:+2). In the experience of this cluster of professionals, working with compulsive hoarding is challenging. Spaces are cleared, only to be refilled (7:+5) with hoarders to some extent agreeing on a plan of de-cluttering and then going back on what they said they would do (49:+2). When hoarders are in denial regarding their behaviour, it makes the work feel particularly difficult (17:+5) for these professionals and like an overwhelming problem to face (9:+3). Work is a slow process (19:+4), with a sense of never getting to an end point (28:+2). However, such challenges are not due to having too little time to address the hoarding properly (45:-3). More than other professionals, Factor C professionals experience hoarding clients as rejecting. They slightly feel that hoarders can detest them as a result of their work (37:+1) and are not grateful for their help (16:-4). This appears consistent with the finding that Factor C professionals reported lower levels of job-related wellbeing compared to Factor A professionals.

These professionals place less emphasis on the importance of their relationship with the client (20:-2) than do other professionals. In addition, more so than other professionals, Factor C professionals do not consider that they are asking the impossible of hoarding clients in asking them to discard objects (39:-3). Thus their expectations of

the work might be less realistic than other professionals and may leave them feeling ambivalent about whether they will give up on the hoarding clients (11:0).

Participants not Defining any Factor

The Q-sorts of 13 participants were confounded, with significant loadings on more than one factor and one participant did not load on any factor. Thus, these participants could not be taken to define any of the three factors. The demographics of these participants are outlined in Table 3. Group difference calculations indicted that these professionals had been in their occupation for longer than Factor B and C professionals, with no differences compared with Factor A professionals. They also had higher levels of job-related wellbeing in terms of anxiety and depression, compared to Factor B professionals. These professionals reported lower levels of job-related wellbeing on the depression scale compared to Factor A professionals.

Items not Distinguishing between Factors

Ten of the Q-set statements were non-significant in distinguishing between the factors, suggesting an overall professional viewpoint held by all. This generalised viewpoint is outlined below with the statement number and rankings for Factor 1, Factor 2 and Factor 3 listed in order in brackets.

None of the professionals feel angry with hoarders (36:-6; -6; -6). They all slightly disagree with the concept that hoarders have poor insight (6:-3; -4; -1), that a lot of time is invested and hoarders don't want help (38:-3; -2; -1) and that they feel sorry for hoarders (14:-1; -2; -3). The professionals do not have strong opinions about the legal powers involved in working with hoarding (47:-1; 0; 0), feeling unequipped in their work (40:0; -2; -1), understanding a hoarders mind-set (2:-1; -2; 0) or the possible smells encountered in their work (18:-1; 1; 0). All professionals slightly agree that

hoarding is a difficult condition to treat (8:+2; +1; +3) and that the nature of the work itself makes them feel intrusive on a hoarder's life (21:2; 2; 1)

Summary

Data analysis indicated that a three-factor solution was the simplest conceptual structure to explain the variance in the current study, and accounted for 55% of total variance. Three factors were identified: (1) therapeutic and client focused; (2) shocked and frustrated and (3) accepting but task focused. Job-related anxiety, job-related depression and years in occupation were the only variables associated with the different viewpoints.

Discussion

Whilst the challenges presented by hoarding have received considerable attention in the literature (Tolin, Frost, Steketee, Gray et al., 2008); to date the perspective of professionals working with this client group remains largely unknown. The current study therefore explored what it feels like to work with hoarders, via Q-methodology, an explorative approach designed to understand subjective viewpoints (Brown, 1996). Three distinct clusters of professionals emerged: (1) *therapeutic and client focused professionals* (2) *shocked and frustrated professionals* and (3) *accepting but task focused* professionals. The results illustrate that different professionals experience their work with hoarders in different ways, and emphasise diverse aspects of the work. Although distinctly different, all three viewpoints can be contextualised within the extant literature.

Distinct Professional Viewpoints on Working with Hoarders

The therapeutic and client focused viewpoint.

A therapeutic and client focused approach defined the experience of working with hoarders for Factor A professionals. The value of professionals adopting a client-centered approach is increasingly recognised as important in providing effective patient care (Irving, & Dickinson, 2004). The therapeutic and client focused professionals emphasised the importance of empathy, non-judgment and respect; concepts considered as core conditions for helping in person-centered approaches (Rogers, 1962). Furthermore, utilising empathic language when working with hoarders has been described as essential in promoting positive interactions (Bratiotis et al., 2011, p.17). Therapeutic and client focused professionals viewed their relationship with the client as key, and psychotherapy outcome research consistently evidences that effective alliances are an important factor in good outcome (Martin, Garske, & Davis, 2000).

Therapeutic and client focused professionals placed importance on trying to understand the nature of hoarding. Bratiotis et al. (2011, p.16) suggested that this is vital in order to form effective relationships with hoarders to promote change. A similar need to understand and formulate hoarding behaviour has been evidenced in family members who care for hoarders (Wilbram et al., 2008). Family members have linked understanding hoarding behaviour with hope for effecting meaningful change (Wilbram et al., 2008). It is therefore interesting that in the current study, the professionals that most emphasised the importance of understanding hoarding, were also those who exhibited most hope. Therapeutic and client focused professionals also placed importance on understanding emotional attachment to possessions, which has been hypothesised as a key contributor to hoarding behaviour (Frost & Hartl, 1996). Understanding this concept appears vital in working with hoarders, given that one of their greatest fears is that their treasured possessions will be mistreated by professionals entering their home (Bratiotis et al., 2011, p.94).

The shocked and frustrated viewpoint.

Shock and frustration defined the experience of working with hoarders for Factor B professionals. This corresponds with previous research where professionals reported higher levels of frustration when working with hoarders compared to non-hoarders (Tolin et al., 2012). Shocked and frustrated professionals also emphasised the emotional impact of the environmental conditions encountered during the work. Family members similarly report struggling with the environmental aspects of hoarding (Wilbram, et al., 2008) and Denton et al. (2002) identified that working in hazardous homes puts care workers at increased risk of poorer mental health and wellbeing.

Shocked and frustrated professionals held a more negative perception of hoarders; in accordance with studies reporting that hoarders are at higher risk of

negative attitudes from both family members and professionals (Tolin et al., 2008; 2012). Whilst other professionals have described working hard to control their initial shock at hoarder's homes (Bratiotis et al., 2011, p.6), in the current study, the 'shocked and frustrated professionals' did not agree with Q-set item 23 "you have to hold all your thoughts and feelings in." In one sense this might be considered positive, because it suggests that professionals are not suppressing their emotions, which has previously been linked with stress and burnout (Grandey, 2000). However, given that 'shocked and frustrated professionals' experience difficult emotional responses to the work, but do not report holding feelings in, their hoarding clients might be aware of these negative judgements. Hoarders report considerable shame about the conditions in their home (Cermele, Melendez-Pallitto, & Pandina, 2001), and therefore in order to facilitate engagement, restraining expressions of negative judgements appears critical (Bratiotis, et al., 2011, p.17).

Shocked and frustrated professionals were more ambivalent about understanding hoarding. This is contrary to Bratiotis et al.'s (2011, p.16) suggestion that a good understanding of the sources of hoarding behaviour is vital to form effective alliances. In contrast to the other viewpoints, shocked and frustrated professionals felt neutral towards the statement "though it's just rubbish to me, it's treasured by them." This might create conflict in the work, because, hoarders can react negatively when references to their possessions are negative, or devalue the worth they have imbued them with (Bratiotis et al., p.18). Shocked and frustrated professionals also felt ambivalent towards understanding hoarder's emotional attachment to objects, which is a central construct in hoarding behaviour (Frost & Hartl, 1996).

The accepting but task focused viewpoint.

An accepting but task focused viewpoint was evident in Factor C professionals. In contrast to other professionals, these professionals placed less emphasis on the relationship with the hoarder and focused on the challenges faced in the process of the work. They strongly endorsed the idea that having cleared spaces in hoarder's homes, further accumulations ensue. This corresponds with previous findings suggesting that clearance-focused work is effective in the short term, but often has poor long-term prognosis (Perrissin-Fabert, 2006; Wilbram et al., 2008). Accepting but task focused professionals emphasised the idea that when hoarders deny their difficulties it makes progress particularly difficult. This experience is echoed in previous research where poor insight has presented significant challenges during hoarding intervention (Frost et al., 2010). Accepting but task focused professionals found working with hoarding overwhelming, a finding similarly reported in professional organisers and family members (Bratiotis et al., 2011, p.162; Wilbram et al., 2008). More than other professionals, these individuals felt hoarders were not grateful for their help; a finding previously reported by Tolin et al. (2012). Focusing on the clearance element of the work, in a chronic condition such as hoarding, might lead to feelings of lack of personal accomplishment, which has previously been associated with burnout in social service professionals (Lloyd, King & Chenoweth, 2002). However, focusing on the task in hand might also serve a protective purpose for these professionals. It is possible that they have learned to compartmentalise emotion, buffering themselves from the emotional by-product of their work, in order to enable them to perform their expected role and focus on the clearance task (Ashforth & Humphrey, 1995).

Understanding the Distinct Professional Viewpoints

Analysis using a non-statistical measure of group difference indicated some limited associations between the demographic and psychometric variables and the different viewpoints outlined above. Therefore, a few possible explanations for the differences in viewpoints can be considered. First, the therapeutic and client focused professionals were shown to have, on average, worked in their occupation for longer. Increased experience may account for the relative absence of negative thoughts or feelings in relation to hoarders' homes, compared to professionals in the other two clusters. Qualitative comments gathered following the Q-sort task indicated that more experienced professionals reported growing accustomed to the environmental conditions of hoarders' homes over time, and no longer felt the sense of shock they had experienced when they first worked with hoarders. This relates to family experience of hoarding, where initial reactions to the clutter typically subside over time (Bratiotis et al., 2011, p.24). Given that viewpoints identified in Q-methodology are not considered to be the expressions of stable intra psychic characteristics such as attitudes (Watts & Stenner, 2005), with more experience, the individual viewpoints of professionals who found the environmental conditions shocking might change. A longitudinal Q-method study would be of interest to consider whether the identified viewpoints do shift over time.

Second, work-related wellbeing when working with hoarding, in terms of both anxiety and depression, was associated with the different viewpoints. Therapeutic and client focused professionals reported lower levels of anxiety (higher wellbeing) compared with the other two clusters of professionals. There were also differences in job-related depression, with therapeutic and client focused professionals reporting higher wellbeing than accepting but task focused professionals, who in turn reported higher wellbeing than shocked and frustrated professionals. Thus it appears that a

therapeutic and client focused viewpoint is associated with higher levels of wellbeing during hoarding work. Whilst both accepting but task focused professionals and shocked and frustrated professionals reported challenges in working with hoarders, the shocked and frustrated professionals also reported added difficulties in terms of coping with the environmental conditions. Similar difficulties have been evidenced in home care workers where exposure to hazardous and unpleasant working conditions was associated with poorer wellbeing (Denton et al., 2002). This added difficulty in coping with the environmental conditions might contribute to shocked and frustrated professionals exhibiting the lowest levels of job-related wellbeing in terms of depression. Future research would be useful in determining why environmental conditions appear to impact on the wellbeing of some professionals, but not others. Whilst the non-statistical assessment of group difference suggests differences between viewpoints in terms of job-related wellbeing, the direction of the influence cannot be established (i.e. wellbeing might influence viewpoint rather than vice versa). Again, a longitudinal study would be helpful to establish causality.

Due to limitations in statistically analysing categorical variables, it was not possible to firmly establish their relationship with viewpoint. However, inspection of descriptive data suggested that occupational role might possibly impact on viewpoint, given the high proportion of mental health professionals in Factor A. Whilst the study inclusion criteria stipulated that professionals had to have directly "worked with" hoarders, it would be expected that in diverse occupations the exact nature of the work would differ. For example, housing officers have a duty to ensure tenants abide by housing authority regulations, including making the property accessible to maintenance workers and therefore a pragmatic approach to clearance makes sense in terms of the role they have to undertake. Thus part of the difference between clusters might be due to the role professionals have with hoarders, and the training and culture associated with

their professional group. This idea is supported by the observation that six out of the seven mental health professionals that defined a factor were categorised as therapeutic and client focused. The therapeutic alliance is known to be of central importance in mental health professionals' work (Martin et al., 2000), and would therefore be expected to feature in their viewpoint. In addition, many hoarders seek treatment for concurrent difficulties, for example anxiety rather than their hoarding (Tolin, Meunier, Frost, & Steketee, 2011). Thus, in mental health services, professionals might have already established a good alliance with a client before hoarding comes to light and is addressed (Bratiotis et al., 2011, p.57). This might impact on the experience these professionals have when working with hoarders, which in turn would influence their viewpoint. Further, some disciplines, including mental health, might possibly be viewed as "friendly helpers", in contrast to those who are there to enforce health and safety regulations (Bratiotis et al., 2011, p.31). In the current study, environmental health and fire professionals in particular described their role in enforcing health and safety regulations and making the property safe. Thus, the impact of occupational role on viewpoint might be mediated by professionals' experiencing a different response from hoarders when they attempt intervention. However, the fact that the three viewpoints were not solely defined by occupational role, suggests that other variables are also important in determining professionals' viewpoint towards working with hoarding.

Finally, in the current study, the three-factor model accounted for 55% of the variance. Therefore, there are likely to be a number of other influences important in determining professionals' viewpoint towards working with hoarding that were not tapped in the current study.

Theoretical Implications

This study illustrates how Q-methodology is valuable in capturing subjective professional experience of working with hoarders. The current study uncovered authentic opinions and categorised professionals according to their viewpoints on working with hoarders (Amin, 2000). The only previous study exploring professional experience of working with hoarders used a quantitative internet survey method and concluded that hoarders were at higher risk of experiencing poor working alliances with professionals and that professionals who work with hoarders are more likely to hold negative attitudes towards their clients (Tolin et al., 2012). The current study replicates and extends this research by verifying the existence of a cluster of shocked and frustrated professionals, and importantly identifying two further clusters of professionals who did not exhibit negative views towards hoarders. Thus Q-method was able to confirm extant findings and also open avenues for further research.

Clinical Implications

Whilst preliminary and subject to confirmation, the findings identified in the current study have valuable implications for professional practice. The viewpoints highlight different needs amongst professionals, which might help to target training and support.

First, given that professionals are more likely to form effective relationships with clients if they have a good understanding of hoarding, education emphasising hoarding as a mental, behavioural and social problem is vital (Bratiotis et al., 2011, p.16). Conceptualising hoarding in this way reinforces the need for a multidisciplinary approach to intervention, which has proved effective (Bratiotis et al., 2011, p.30). Of key importance is the ability of professionals to recognise the complex and chronic nature of hoarding and understand that limited treatment adherence and poor insight are

core characteristics (Tolin et al., 2012). Increased understanding of these concepts might help to alleviate some of the frustrations experienced by shocked and frustrated and accepting but task focused professionals, by improving understanding of why the process of work is slow and why hoarders might go back on plans for clearance. The current study illustrates that there is also room for education around specific aspects of hoarding, particularly emotional attachment to objects. Strong emotional attachment to hoarded items is hypothesised as a central construct in hoarding (Frost & Hartl, 1996). However, in the current study, shocked and frustrated professionals felt ambivalent towards understanding this, and accepting but task focused professionals reported difficulties understanding the concept. Educating these professionals about the idea that a hoarder might love their possessions, for example a newspaper, in the way they love people (Steketee, Frost & Kyrios, 2003), might help them understand the significance of this concept. For accepting but task focused professionals, this knowledge might also help them to adjust their expectations about outcome. These professionals did not feel they were asking the impossible of hoarders in decluttering. Therefore, an improved understanding of emotional attachment to objects might help accepting but task focused professionals understand why clearance is so difficult for hoarders.

Second, recognising the emotional demands of working with hoarding and the need for support is vital for professionals (Bratiotis et al., 2011, p.28). Shocked and frustrated professionals and accepting but task focused professionals, in particular, found the work challenging, reporting lower levels of job-related wellbeing compared to therapeutic and client focused professionals. These former two clusters of professionals might, therefore, require additional support mechanisms, with an emphasis on self-care and supervision, a need previously recognised by Tolin et al. (2012).

Third, shocked and frustrated professionals might need some support in managing their initial reactions to entering a hoarded home, given their experienced

difficulties with the environmental conditions. Normalising these reactions might be important, whilst also emphasising the need to protect the hoarder from signs of negative judgement. Professionals should be provided with education around using respectful language, remaining non-judgemental, monitoring their non-verbal communications, and matching the client's language (Bratiotis et al., 2011, p.17). For example if a client refers to their hoard as a "collection", the professional should do the same; words such as "junk" label items as having no value. This training would improve professionals' ability to facilitate positive interactions with clients (Bratiotis et al., 2011, p.17).

Finally, shocked and frustrated professionals showed concern about the impact of working with hoarding on their own health. Bratiotis et al. (2011, p.28) emphasise the importance of ensuring physical safety when working in the homes of hoarders, and advocate that professionals should not feel concerned about wearing appropriate protective clothing during the work if needed. It is vital to make professionals feel as safe as possible, given that poor workplace conditions decrease employee performance (Kahya, 2007). Educating professionals in terms of appropriate health and safety when working with hoarding (e.g. wearing face masks and gloves when the home is exceptionally dirty; Bratiotis et al., 2011, p.28), and providing appropriate equipment, might help ease concerns around the impact of the work on their own health.

Study Limitations

Participant factors.

A number of participant factors may introduce limitations into the study. Participants were self-selected and predominantly recruited through a compulsive hoarding professional network. This may have distorted the sample to those who want to develop skill in this area, have a specific interest in working with hoarding, or who

feel more supported in this area of work (as opposed to professionals not part of a network). Furthermore, whilst the study attempted to recruit professionals from across the typical range of occupations involved in working with hoarders, including environmental health and fire services, the majority of participants were recruited from housing services. Additionally, all professionals were recruited from one city, thus the sample might not be representative of the wider population of professionals working with hoarders. Despite these issues, in Q-methodology the aim is not to generalise findings; therefore finding a representative sample is not fundamental (Brown, 1996).

Another possible limitation relates to the level of experience of working with hoarding required for inclusion in this study. Given that only a small proportion of hoarders receive intervention (Frost, et al., 2003), the benchmark was set at having worked with a hoarding client in the past five years. Although the majority of participants reported currently having hoarding clients on their caseload, those with 'old experience' may have had difficulty recalling their experience or their viewpoint may have changed. Future research should collect data relating to when participants last worked with a hoarding client, and how many hours of experience they have in working with hoarders.

Sample size.

In this study, 22 participants were involved in representing the final factors. Although such a sample size might be considered small by some, samples of this size are legitimate in Q-method research (Van Exel & de Graaf, 2005) and other studies have utilised samples of similar size (Thornhill et al., 2012).

Methodological factors.

The use of an adapted (unvalidated) measure to examine job-related affective wellbeing specific to working with hoarding should be noted. However, the job-related wellbeing scores had face validity when considered in relation to the factor interpretations, lending support to its validity as an adapted measure. Another possible limitation emerged through the decision to retain Q statements in the language of the initial interviewees. This decision was made because research suggests that this decreases the potential for misrepresenting meaning (McKeown & Thomas, 1988). However, when undertaking the Q-sorting task, several participants noted that some Q-statements, for example, "hoarders can detest me as a result of my work" were "extreme". However, the Q-sorting procedure allowed participants to agree or disagree on a continuum of psychological significance, and consideration of how professionals responded to the more extremely worded statements provided important insight into the viewpoint of the factors.

Finally, the planned non-parametric statistical analysis of demographic and psychometric data was limited due to the small number of participants who loaded on Factor B. It was therefore not possible to statistically determine which variables were significantly associated with the three professional viewpoints, and a non-statistical measure of group difference was utilised as a more conservative alternative. Unfortunately this method is not appropriate for categorical data, and therefore categorical variables were limited to description. However, given that demographic and psychometric data are predominantly collected to aid factor interpretation (Watts & Stenner, 2012), this does not represent a significant limitation for a Q-methodological study.

Future Research

Whilst the current study makes a valuable contribution to beginning to understand the experience of professionals working with hoarders, the evidence base remains in its infancy. Several avenues for further potential research are indicated. To explore whether the viewpoints identified in the current study participants are meaningful in the wider professional domain, replication using geographically diverse and additional professional groups would be useful. Furthermore, oversampling within occupations with a small N in the current study, for example environmental health, would enable further exploration of the effect of occupation on viewpoint. There is also scope to refine the Q-sort, given that 13 participants were confounded between factors and one participant did not load on any factor. Refining the Q-sort might better distinguish between the viewpoints of professionals, resulting in professionals fitting more neatly into discrete factors. It is possible that this would also identify additional viewpoints operant in professionals working with hoarders.

Additional methodologies would also be appropriate for future research. For example, a quantitative study using a questionnaire derived from the most emblematic Q-set items for each viewpoint could help determine the prevalence of viewpoints amongst professionals. In addition, an in-depth qualitative study of the discovered viewpoints would be valuable in beginning to understand which variables influence the development of particular viewpoints.

Whilst the current research identified three viewpoints towards working with hoarding, it provided no information regarding how the different viewpoints impacted on treatment outcome. Future research could therefore establish whether professional viewpoints are associated with role efficacy. Certain professionals might need to maintain a particular viewpoint, in order to be effective in their role. For example, a pragmatic, task focused viewpoint might be essential to a professional whose role is to

clear a hoarder's home to meet safety regulations. On the other hand, a therapeutic and client-focused viewpoint is likely to be required by a mental health professional, whose role is to engage the hoarder in behavioural change. Further, whilst shocked and frustrated professionals appeared to hold a more negative viewpoint towards hoarders, this study provided no information regarding the impact of this on their work with hoarders. It is possible that the value they placed on the relationship with clients might serve to ameliorate the difficulties they experienced in the work. Future research linking viewpoint to role effectiveness would have valuable implications for clinical effectiveness.

Conclusions

The current Q-methodological investigation of the experience of professionals (*N*=36) working with hoarders identified three distinct viewpoints: (1) therapeutic and client focused; (2) shocked and frustrated; and (3) accepting but task focused. The therapeutic and client focused professionals emphasised the importance of building an alliance with hoarders and maintaining respect at all times. In contrast, the accepting but task focused professionals emphasised the nature of the work and focused less on the relationship, although they maintained a non-judgemental, respectful stance. The shocked and frustrated professionals reported shock at the environmental conditions encountered in hoarder's homes, frustration with the work and exhibited a more negative view towards hoarders.

Therapeutic and client focused professionals had worked in their occupation for longer, and reported higher job-related wellbeing when working with hoarding cases compared to the other professionals. Accepting but task focused professionals reported lower levels of job-related depression (higher wellbeing) compared with the shocked and frustrated professionals. Occupational role was also considered a possible contributor to viewpoint.

Research to date highlights the increasing burden of hoarding on individuals, families, and society (Tolin, Frost, Steketee, Gray et al., 2008) and this research has investigated the burden on professionals. Understanding professionals' experience of working with this client group is vital in order to support them in delivering the best treatment. Future research should focus on confirming the viewpoints identified in the current study, considering the association between viewpoint and role effectiveness and establishing factors which influence the development of particular viewpoints. Importantly, the identified viewpoints highlight the different qualities and needs amongst professionals, which will enable targeted training and support.

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Section Three

Appendices

Appendix A: Quality Appraisal

Appendix A1: Quality Appraisal Framework

Appendix A2: Qualitative Appraisal Tables

Appendix A1: Quality Appraisal Framework

Developing a framework for critiquing health research

Does the title reflect the content?
↓
Are the authors credible?
↓
Does the abstract summarize the key
components?
↓
Is the rationale for undertaking the
research clearly outlined?
↓
Is the literature review comprehensive
and up-to-date?
↓
Is the aim of the research clearly stated?
↓
Are all ethical issues identified and
addressed?
↓
Is the methodology identified and justified?

Quantitative

Is the study design clearly identified, and is the
rationale for choice of design evident?
↓
Is there an experimental hypothesis
clearly stated?
Are the key variables clearly defined?
↓
Is the population identified?
↓
Is the sample adequately described and reflective
of the population?

Is the method of data collection valid and reliable?
↓
Is the method of data analysis valid and reliable?

Qualitative

Are the philosophical background and study
design identified and the rationale for
choice of design evident?
↓
Are the major concepts identified?
↓
Is the context of the study outlined?
↓
Is the selection of participants described
and the sampling method identified?

Is the method of data collection auditable?
↓
Is the method of data analysis credible and
confirmable?

Are the results presented in a way that is
appropriate and clear?
↓
Is the discussion
Are the results generalizable? ← comprehensive → Are the results transferable?
↓
Is the conclusion comprehensive?

Figure 1: - Research critique framework

Appendix A2: Quality Appraisal Tables

Quality appraisal of Quantitative Studies Evidencing Emotional Attachment to Objects in Hoarding

Criterion	Frost, Hartl, Christian, & Williams. (1995).	Frost and Gross (1993).	Frost, Pekareva-Kochergina, & Maxner (2011).	Grisham, Frost, Steketee, Kim, Tarkoff, & Hood (2009).	Grisham, Norberg, Williams, Certoma, & Kadib (2010).	Grisham, Steketee, & Frost (2008).	Hartl, Duffany, Allen, Steketee & Frost (2005).
Title reflects content	1	1	1	1	1	1	1
Credible authors	1	1	1	1	1	1	1
Abstract summarises key ideas	1	1	1	1	1	1	1
Clear rationale	1	1	1	1	1	1	1
Comprehensive literature review	1	1	1	1	1	1	1
Clear aims	1	1	1	1	1	1	1
Ethical issues identified	0	0	1	1	1	1	1
Methodology outlined and justified	1	1	1	1	1	1	1
Design identified and clear rationale given	0	0	0	1	1	1	1
Hypothesis stated and key variables defined	1	0	1	1	1	1	1
Population identified	1	1	1	1	1	1	1
Sample described and reflective of population	0	0	1	0	0	0	0
Method of data collection valid and reliable	0	0	1	0	1	1	0
Method of data analysis valid and reliable	1	1	1	1	1	1	1
Results presented in clear and appropriate way	0	1	1	1	1	1	1
Comprehensive discussion	0	1	1	1	1	1	1
Results generalisable	0	0	0	0	0	0	0
Comprehensive/ justified conclusion	1	1	1	1	1	1	1
Total Score	11	12	16	15	16	16	15

Quality appraisal of Quantitative Studies Evidencing Emotional Attachment to Objects in Hoarding

	Haws, Naylor, Coulter, & Bearden (2012).	Kellett (2006).	Nedelisky, & Steele (2009).	Pertusa et al. (2008).	Steketee, Frost, & Kyrios (2003).	Wincze, Steketee, & Frost (2007).
Criterion						
Title reflects content	0	1	1	1	1	1
Credible authors	1	1	1	1	1	1
Abstract summarises key ideas	0	1	1	1	1	1
Clear rationale	1	1	1	1	1	1
Comprehensive literature review	1	0	1	1	1	1
Clear aims	1	1	1	1	1	1
Ethical issues identified	1	1	1	1	1	1
Methodology outlined and justified	1	0	1	1	1	1
Design identified and clear rationale given	1	1	1	1	1	1
Hypothesis stated and key variables defined	1	0	1	1	1	1
Population identified	1	1	1	1	1	1
Sample described and reflective of population	0	0	1	0	0	0
Method of data collection valid and reliable	1	0	0	1	1	0
Method of data analysis valid and reliable	1	1	0	1	1	1
Results presented in clear and appropriate way	1	1	0	1	1	1
Comprehensive discussion	1	0	1	1	1	1
Results generalisable	0	0	0	0	0	0
Comprehensive/ justified conclusion	1	1	1	1	1	1
Total Score	14	11	14	16	16	15

Quality appraisal of Qualitative Studies Evidencing Emotional Attachment to Objects in Hoarding

Criterion	Cherrier, & Ponnor (2010).	Kellett, Greenhalgh, Beail, & Ridgway (2010).
Title reflects content	1	1
Credible authors	1	1
Abstract summarises key ideas	1	1
Clear rationale	1	1
Comprehensive literature review	0	1
Clear aims	1	1
Ethical issues identified	0	1
Methodology outlined and justified	0	1
Philosophical background and design identified with rationale	0	1
Major concepts identified	0	1
Context of study outlined	1	1
Participant selection described and sampling method identified	0	0
Method of data collection auditable	1	1
Method of data analysis credible and confirmable	0	1
Results presented in clear and appropriate way	1	1
Comprehensive discussion	1	1
Results transferable	1	0
Comprehensive/ justified conclusion	1	1
Total Score	11	16

Appendix B: Study Approvals

Appendix B1: Ethical Approval

Appendix B2: Governance Approval

Appendix B3: Sponsorship Approval

Appendix B1: Ethical Approval

NHS

National Research Ethics Service

NRES Committee East Midlands - Derby 2

The Old Chapel
Royal Standard Place
Nottingham
NG1 6FS

Telephone: 0115 8839436
Facsimile: 0115 8839294

20 July 2011

Miss Kathryn Holden
Trainee Clinical Psychologist
University of Sheffield
Clinical Psychology Unit
Western Bank
Sheffield
S10 2TN

Dear Miss Holden

Study title:	**The experience of working with compulsive hoarding: a Q-sort study.**
REC reference:	**11/EM/0262**

The Proportionate Review Sub-committee of the NRES Committee East Midlands - Derby 2 Research Ethics Committee reviewed the above application on 19 July 2011.

Ethical opinion

On behalf of the Committee, the sub-committee gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

Ethical review of research sites

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion" below).

Conditions of the favourable opinion

The favourable opinion is subject to the following conditions being met prior to the start of the study.

Management permission or approval must be obtained from each host organisation prior to the start of the study at the site concerned.

Management permission ("R&D approval") should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements.

Guidance on applying for NHS permission for research is available in the Integrated Research Application System or at http://www.rdforum.nhs.uk.

This Research Ethics Committee is an advisory committee to the East Midlands Strategic Health Authority
*The National Research Ethics Service (NRES) represents the NRES Directorate within
the National Patient Safety Agency and Research Ethics Committees in England*

Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.

For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.

Sponsors are not required to notify the Committee of approvals from host organisations.

It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).

You should notify the REC in writing once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. Confirmation should also be provided to host organisations together with relevant documentation.

Approved documents

The documents reviewed and approved were:

Document	Version	Date
Covering Letter		05 July 2011
Evidence of insurance or indemnity		21 February 2011
Investigator CV	1	04 July 2011
Letter from Sponsor		21 February 2011
Other: CV - Dr Kellett	1	04 July 2011
Other: Letter seeking organisational consent		
Other: Phase 1 Interviews	1	31 January 2011
Other: Phase 2 sorting task	1	31 January 2011
Other: Organisation access letter	1	31 January 2011
Other: Interview Schedule	1	31 January 2011
Participant Consent Form	1	31 January 2011
Participant Information Sheet: Phase 1	1	31 January 2011
Participant Information Sheet: Phase 2	1	31 January 2011
Protocol	2	31 January 2011
Questionnaire: Standardised	1	31 January 2011
Questionnaire: Unstandardised	1	31 January 2011
REC application	76275/22953 9/1/790	05 July 2011

Membership of the Proportionate Review Sub-Committee

The members of the Sub-Committee who took part in the review are listed on the attached sheet.

Statement of compliance

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees (July 2001) and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

After ethical review

<u>Reporting requirements</u>

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study

The NRES website also provides guidance on these topics, which is updated in the light of changes in reporting requirements or procedures.

<u>Feedback</u>

You are invited to give your view of the service that you have received from the National Research Ethics Service and the application procedure. If you wish to make your views known please use the feedback form available on the website.

Further information is available at National Research Ethics Service website > After Review

11/EM/0262	Please quote this number on all correspondence

With the Committee's best wishes for the success of this project

Yours sincerely

PP

Mr Phil Hopkinson
Chair

Email: carol.marten@nottspct.nhs.uk

Enclosures: List of names and professions of members who took part in the review

"After ethical review – guidance for researchers"

Copy to: Mr Richard Hudson
Research and Innvoation Services Academic Services
The University of Sheffield
New Spring House, 231 Glossop Road
S10 2GW

Ms Yiwee Harland, Research Development Unit
Old Fullwood Road
Sheffield
S10 3TH

Appendix B2: Governance Approval

Sheffield Health and Social Care
NHS Foundation Trust

Miss Kathryn Holden
Trainee Clinical Psychologist
University of Sheffield
Clinical Psychology Unit
Western Bank
Sheffield
S10 2TN

Research Development Unit
Fulwood House
Old Fulwood Road
Sheffield
S10 3TH

Tel: 0114 2718804
Fax: 0114 2716736

E-mail: shsrc@shsc.nhs.uk
www.shsc.nhs.uk
Thursday, August 04, 2011

Dear Miss Holden

Project ref: **ZM94**
Full Project Title: **The Experience of Working with Compulsive Hoarding (A Q-Sort Study)**

I am pleased to tell you that Sheffield Health and Social Care NHS Foundation Trust agrees to act as a Patient Identification Centre for yourself.

Participant Information Centres (PICs) are organisations from which Clinicians or clinical units refer potential participants to the research team based in another organisation, for assessment and possible recruitment to a study. PICs can include research units undertaking support functions, such as project management, site monitoring, data analysis or report writing. PICs are not considered to be research sites, which are defined as organisations responsible for participant-related research procedures specified in the protocol, including recruitment and informed consent. (Governance checks for Participant Identification Centres, NIHR CSP Version 4.1, 30 October 2009.)

We also advise you of the following conditions which apply to all Patient Identification Centres at the above Trust:

1. You will also need to seek our approval for every future change to protocol or project title.

2. As Chief Investigator, you have an obligation to report all research-related Serious Adverse Events (SAEs).

Please note that the above Trust does not indemnify the research site, host organisation or the participants in relation to the management of the research. Indemnity arrangements are the responsibility of the research sponsor.

We wish you every success with the project and please feel free to contact us if you need further assistance from this office.

Yours sincerely

Nick Bell
Director

cc   Richard Hudson
        Project File
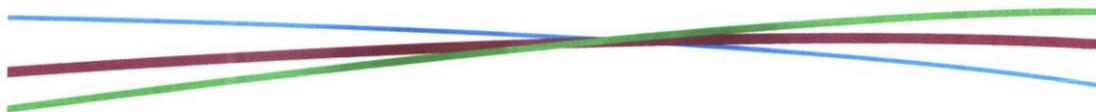
Appendix B3: Sponsorship Approval

	Department Of Psychology.
The University Of Sheffield.	**Clinical Psychology Unit.** Doctor of Clinical Psychology (DClin Psy) Programme Clinical supervision training and NHS research training & consultancy.

Clinical Psychology Unit	Telephone: 0114 2226570
Department of Psychology	Fax: 0114 2226610
University of Sheffield	Email: dclinpsy@sheffield.ac.uk
Western Bank	Please address any correspondence to Ms. Christie
Sheffield S10 2TP UK	Harrison, Research Support Officer

21st February 2011

To: Research Governance Office

Dear Sir/Madam,

RE: Confirmation of Scientific Approval and indemnity of enclosed Research Project

Project title: The experience of working with compulsive hoarding: a Q sort study
Investigators: Kathryn Holden (DClin Psy Trainee, University of Sheffield); Dr Stephen Kellett (Academic Supervisor, University of Sheffield).

I write to confirm that the enclosed proposal forms part of the educational requirements for the Doctoral Clinical Psychology Qualification (DClin Psy) run by the Clinical Psychology Unit, University of Sheffield.

Three independent reviewers appointed by the Clinical Psychology Unit Research Sub-committee have scientifically reviewed it.

I can confirm that all necessary amendments have been made to the satisfaction of the reviewers, who are now happy that the proposed study is of sound scientific quality. Consequently, the University will also indemnify it, and would be happy to act as research sponsor once ethical approval has been gained.

Given the above, I would remind you that the Unit already has an agreement with your office to exempt this proposal from further scientific review. However, if you require any further information, please do not hesitate to contact me.

Yours sincerely

Dr. Andrew Thompson
Director of Research Training

Cc. Kathryn Holden; Dr Stephen Kellett

Appendix C: Study Information

Appendix C1: Phase 1 Invitation to Participate

Appendix C2: Phase 2 Invitation to Participate

Appendix C3: Phase 1 Information Sheet

Appendix C4: Phase 2 Information Sheet

Appendix C1: Phase 1 Invitation to Participate - Interviews

On University of Sheffield headed paper.

DATE

Dear Sir/Madam

I am a Trainee Clinical Psychologist, studying at the University of Sheffield. Alongside Dr Stephen Kellett, Consultant Clinical Psychologist, I am conducting a research study to investigate staff experience of working with individuals who compulsively hoard. The study will involve completing a few short questionnaires and undertaking an interview to explore your experiences of working with compulsive hoarding.

I enclose an information sheet with additional details regarding the study. Once you have read the information provided, please contact me on KLHolden1@sheffield.ac.uk if you would be willing to participate in the study. Alternatively, if you are unable to access e-mail, you can leave a message with the Research Support Officer on 0114 2226650, and I will return your call.

Yours Faithfully

Kathryn Holden – Trainee Clinical Psychologist

Under the Supervision of Dr Stephen Kellett, Consultant Clinical Psychologist

Appendix C2: Phase 2 Invitation to Participate – Sorting Task

On University of Sheffield headed paper.

DATE

Dear Sir/Madam

I am a Trainee Clinical Psychologist, studying at the University of Sheffield. Alongside Dr Stephen Kellett, Consultant Clinical Psychologist, I am conducting a research study to investigate staff experience of working with individuals who compulsively hoard. The study will involve completing a few short questionnaires and undertaking a card sorting task regarding personal attitudes towards working with compulsive hoarding.

I enclose an information sheet with additional details regarding the study. Once you have read the information provided, please contact me on KLHolden1@sheffield.ac.uk if you would be willing to participate in the study. Alternatively, if you are unable to access e-mail, you can leave a message with the Research Support Officer on 0114 2226650, and I will return your call.

Yours Faithfully

Kathryn Holden – Trainee Clinical Psychologist

Under the Supervision of Dr Stephen Kellett, Consultant Clinical Psychologist

Appendix C3: Phase 1 Information Sheet - Interviews

Information Sheet

Exploring the experience of staff members working with individuals who compulsively hoard.

You are invited to participate in a research study conducted by Kathryn Holden, Trainee Clinical Psychologist at the University of Sheffield. It is important that you understand why the research is being conducted and what it will involve, before you decide to take part. Please read the following information carefully, and discuss it with others if you wish. If anything is not clear, or you would like further information, please contact me. Thank you for reading this information sheet.

What is the purpose of the study?
This study aims to increase understanding of what it is like for staff members working with people who compulsively hoard. We hope the results of this study can be used to develop more effective ways to support staff in their work with individuals who compulsively hoard.

What will be involved if I agree to participate in the study?
We would like to meet with you and ask a set of questions concerning your experiences of working with individuals who compulsively hoard. We will also ask you to fill in a short questionnaire. The interviews will last approximately one hour. You may refuse to answer any questions you do not wish to answer. The interviews will be tape recorded, but the information will remain confidential and your name will not be used in the research.

Do I have to take part?
NO. It is up to you whether you wish to participate or not. If you do decide that you want to take part, then you will be given this information sheet to keep and asked to sign a consent form.

Can I withdraw from the study?
YES. You are free to withdraw from the study at any time without giving a reason.

When and where will the interviews take place?
We can arrange the interviews at the University of Sheffield, Psychology Department, or at your place of work. The interviews will be carried out at a time that is convenient for you, and will be arranged between you and the researcher.

Will the information obtained in the study be confidential?
Everything you say will be treated in confidence. Should the researcher be concerned of risk to you or another person, confidentiality will be breached and the appropriate

parties involved. In this event, the researcher will discuss this with you first. Names will not be mentioned when reporting study results. Care will be taken to ensure that individuals cannot be identified from the details included in the study write-up.

What if I feel upset by the content of the interviews?
It is not expected that the questions asked will cause distress to participants. In the unlikely event that you feel upset when considering your experiences of working with hoarding, you will be able to discuss this with the interviewer, Kathryn Holden (Trainee Clinical Psychologist) who is supervised by Dr Steve Kellett (Consultant Clinical Psychologist).

Will I have access to the research findings?
YES. All participants will be able to access a summary of the main research findings following completion of the study. The summary will be made available online, and you will be provided with a link to allow access to this information.

What happens if I wish to complain about the way in which the study is conducted?
If you have any reason to complain about any aspect of the way in which the study has been conducted or the way you have been treated during the course of the study, please contact the Principal Investigator, Dr. Steve Kellett, **S.Kellett@sheffield.ac.uk**, 0114 2226537

Thank you for your time.

Appendix C4: Phase 2 Information Sheet- Sorting Task

Information Sheet

Exploring the experience of staff members working with individuals who compulsively hoard.

You are invited to participate in a research study conducted by Kathryn Holden, Trainee Clinical Psychologist at the University of Sheffield. It is important that you understand why the research is being conducted and what it will involve, before you decide to take part. Please read the following information carefully, and discuss it with others if you wish. If anything is not clear, or you would like further information, please contact me. Thank you for reading this information sheet.

What is the purpose of the study?
This study aims to increase understanding of what it is like for staff members working with people who compulsively hoard. We hope the results of this study can be used to develop more effective ways to support staff in their work with individuals who compulsively hoard.

What will be involved if I agree to participate in the study?
If you agree to participate in the study, then you will be asked to complete a short questionnaire and carry out a simple sorting task. This will involve sorting a series of statements about attitudes towards working with individuals who compulsively hoard, according to how much you agree or disagree. Participation will take approximately 45 minutes in total. Your responses will remain confidential, and your name will not be used in the research.

Do I have to take part?
NO. It is up to you whether you wish to participate or not. If you do decide that you want to take part, then you will be given this information sheet to keep and asked to sign a consent form.

Can I withdraw from the study?
YES. You are free to withdraw from the study at any time without giving a reason.

When and where will the interviews take place?
We can arrange the interviews at the University of Sheffield, Psychology Department, or at your place of work. The interviews will be carried out at a time that is convenient for you, and will be arranged between you and the researcher.

Will the information obtained in the study be confidential?

Everything you say will be treated in confidence. Should the researcher be concerned of risk to you or another person, confidentiality will be breached and the appropriate parties involved. In this event, the researcher will discuss this with you first. Names will not be mentioned when reporting study results. Care will be taken to ensure that individuals cannot be identified from the details included in the study write-up.

What if I feel upset by the content of the interviews?
It is not expected that the questions asked will cause distress to participants. In the unlikely event that you feel upset when considering your experiences of working with hoarding, you will be able to discuss this with the interviewer, Kathryn Holden (Trainee Clinical Psychologist) who is supervised by Dr Steve Kellett (Consultant Clinical Psychologist).

Will I have access to the research findings?
YES. All participants will be able to access a summary of the main research findings following completion of the study. The summary will be made available online, and you will be provided with a link to allow access to this information.

What happens if I wish to complain about the way in which the study is conducted?
If you have any reason to complain about any aspect of the way in which the study has been conducted or the way you have been treated during the course of the study, please contact the Principal Investigator, Dr. Steve Kellett, S.Kellett@sheffield.ac.uk, 0114 2226537

Thank you for your time.

Appendix D: Consent

Appendix D1: Participant Consent Form

Appendix D2: Letter Seeking Management Consent

Appendix D1: Participant Consent Form

Department Of Psychology.
Clinical Psychology Unit.

Doctor of Clinical Psychology (DClin Psy) Programme
Clinical supervision training and NHS research training &
consultancy.

Title of the Project: Exploring the experiences of staff members working with individuals who compulsively hoard.

Name of Researcher: Kathryn Holden (Trainee Clinical Psychologist)

1. **I confirm that I have read and understood the information sheet explaining the above research project and I have been given the opportunity to ask questions about the project**

2. **I understand that my participation in this study is entirely voluntary and that I am free to withdraw at any time, without providing any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline**

3. **I understand that my responses will be kept strictly confidential and I understand the limits to confidentiality. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identifiable in reports resulting from the research.**

4. **I consent to the interviews being audio taped.**

5. **I agree to participate in the above research project.**

_____   _____   _____
Name of Participant   Date   Signature

_____   _____   _____
Lead Researcher   Date   Signature
To be signed and dated in presence of the participant

Appendix D2: Letter Seeking Management Consent

On University of Sheffield headed paper.

DATE

Dear Sir/Madam

I am a Trainee Clinical Psychologist, studying at the University of Sheffield. Alongside Dr Stephen Kellett, Consultant Clinical Psychologist, I am conducting a research study to investigate staff experience of working with individuals who compulsively hoard. The study will involve completing a few short questionnaires and undertaking a card sorting task regarding personal attitudes towards working with compulsive hoarding.

I would like to seek permission to invite members of your organisation who work with hoarding to participate in the study. I enclose an information sheet with additional details regarding the study. Once you have read the information provided, please contact me on KLHolden1@sheffield.ac.uk if you consent to individuals employed within your organisation to participate in the study.

Yours Faithfully

Kathryn Holden – Trainee Clinical Psychologist

Under the Supervision of Dr Stephen Kellett, Consultant Clinical Psychologist

Appendix E: Interview Schedule

Appendix E: Interview Schedule

1. Tell me what you know about hoarding.

2. Describe your role in helping people who compulsively hoard.

3. Tell me what it is like to do this work.

4. How do you feel when you first enter the home of somebody who compulsively hoards?

5. What does it feel like to work with an individual who compulsively hoards?

6. What problems have you encountered when working with individuals who compulsively hoard?

7. Tell me about any successes you have had when working with individuals who compulsively hoard.

8. Give me five words to describe a typical hoarder.

9. Have you noticed any factors that make it more or less difficult to work with somebody who compulsively hoards?

10. As a professional, how well equipped do you feel to work with individuals who compulsively hoard?

11. What do you think the tendency to compulsively hoard says about a person?

12. Why do you think people have this problem?

Appendix F: Coder Information

Appendix F1: Coder Information Sheet

Appendix F2: Coder Confidentiality Form

Appendix F1: Coder Information Sheet

Information for Coders

Study Overview

The current study aims to explore the subjective experience of professionals working with individuals who compulsively hoard. Phase-One of the study involves interviewing five professionals in the areas of mental health, housing, environmental services and social work. From these interviews, key statements relating to the experience of working with hoarding will be derived to produce a Q-set. In Phase-Two, additional professionals will be recruited to take part in the Q-sort. This project will provide the first empirical evidence about staff experience of working with hoarding.

Coding

You have been asked to participate in the project as a coder, and will be part of a group of three coders. Your role will involve analysing the five interview transcripts according to the guidelines overleaf. The interviews are with a Research Psychologist in the field of hoarding, a Social Worker in adult mental health, a Care Manager in older adult mental health, a Housing Officer and an Environmental Protection Officer. To preserve confidentiality, the transcripts have been anonymised.

Guidelines are provided over the page to help you code the interview transcripts. There are two key elements to the coding:

1. Find all statements or sections of text within the interviews that relate to: "the experience of working with hoarding."

2. Identify themes that occur within the transcript, which might be important to "the experience of working with hoarding" but are not explicit in the text.

Consensus Meeting

As discussed, we will all meet together again, along with Dr Steve Kellett in January 2012. During this meeting we will discuss the outcome of your analyses and there will be an opportunity to debrief should any matters arise during the coding process. The purpose of this meeting is to consider your individual interview analyses and the differences and similarities between coders. Together we will then generate a pool of potential statements about the experiences of professionals working with hoarding.

If you have any further questions please contact me on pcp09klh@sheffield.ac.uk

Thank you for your invaluable help with this research project!

Coding Guidelines

1. Read all of the transcripts to familiarise yourself with the material.

2. Re-read the transcripts one at a time. Underline or highlight statements or sections of text that you consider important to *"the experience of working with hoarding."* This might include but is not limited to:

   - Feelings
   - Thoughts
   - Beliefs
   - Attitudes
   - Experiences
   - Behaviours
   - Assumptions
   - Roles

   Any section of text can be identified as important.

3. Consider the underlined text, and create a code in the margin, which captures the essence of the text.

3. Consider the transcript and see if it is possible to identify any ideas that occur within the transcript, which might be important to "the experience of working with hoarding" but are not explicit in the text.

4. Re-read the transcripts with your codes in mind, and consider whether it is possible to identify any further relevant material that illustrates the codes.

If you have any difficulties with the coding, please do not hesitate to contact me. Thank you.

Appendix F2: Coder Confidentiality Form

Coder Confidentiality Form

Project title: Exploring the experiences of staff members working with individuals who compulsively hoard.

Researcher's name: Kathryn Holden

The transcripts you are coding have been collected as part of a research project. The transcripts are anonymous, but may contain information of a personal nature, which should be kept confidential and not disclosed to others. Maintaining this confidentiality is of utmost importance to the University.

We would like you to agree:

Not to disclose any information you may read in the transcripts to others,

To keep the transcripts in a secure locked place when not in use, and

To show your coding only to the relevant individual who is involved in the research project.

If you feel that anyone included in the transcripts is known to you, we would like you to stop coding immediately and inform the person who has commissioned the work.

Declaration
I have read the above information and I understand that:

1. I will discuss the content of the transcripts only with the individual involved in the research
project

2. I will keep the transcripts in a secure place where they cannot be seen by others

3. I will treat the coding of the transcripts as confidential information

4. If the person being interviewed in the transcripts is known to me I will undertake no further coding work on the transcripts

I agree to act according to the above constraints

Your name _____

Signature _____

Date _____

Appendix G: Q-Sort

Appendix G1: Final Q-Set

Appendix G2: Q-Sort Instructions

Appendix G1: Q-Set

Final Q-set Items.

Number	Statement
1	Hoarders are normal people.
2	It's difficult to understand a hoarder's mindset.
3	I often think 'oh my god' when I see the house.
4	I wonder how someone can live like this.
5	I have respect for hoarders at all times.
6	Hoarders have poor insight.
7	You help people to clear spaces and then go back later and it's just the same.
8	It's such a hard condition to treat.
9	It feels like an overwhelming problem to face.
10	It's shocking to see the way that hoarders live.
11	I'm not going to give up on them.
12	Though it's just rubbish to me, its treasured by the hoarder.
13	You wear yourself out challenging hoarders about their behavior.
14	I feel sorry for hoarders.
15	Working with one hoarder could consume your whole working life if you let it.
16	Hoarders' are grateful for my help.
17	When they are in denial, it makes the work very hard indeed.
18	The stench and the smell can really get to me.
19	The work is a very slow process.
20	My relationship with the hoarder is key to the work.
21	I feel very intrusive into the hoarder's life.
22	I feel shocked by the emotional attachment hoarder's have to odd things.
23	You have to hold all your thoughts and feelings in.
24	I find it incredibly frustrating.
25	I find it fascinating, how hoarders can justify keeping things
26	I'm not here to judge.
27	My heart sinks when I am given a hoarding case.
28	You never get to an end point in the work; it's a continual battle.
29	I'm never quite sure when it's hoarding, or when its collecting.
30	I get anxious about what I will face and how bad it might be.
31	I think 'how has this happened?'
32	I feel appalled that people have got themselves into this state.
33	I struggle to get my head round the emotional attachment to things.
34	I worry that I am affecting my own health by being in the house.
35	I feel filthy after a home visit to a hoarder.
36	I feel angry with them.
37	Hoarders can detest me as a result of my work.
38	You invest so much time in them and they don't want help.
39	I feel I'm asking the impossible of them.
40	I feel out of my depth and unequipped to work with hoarders.
41	People hoard for a reason.
42	The work is physically draining.
43	Hoarders are lovely people.
44	I need to take precautions in terms of my own safety.
45	I don't feel I have the time to address the hoarding properly.
46	My work with hoarders feels like I am scratching the surface.
47	The legal powers are not very robust to deal with hoarding.
48	Hoarding - it's a pitiful way of carrying on.
49	Hoarders go back on what they say they will do.

Appendix G2: Q-Sort Instructions

Q-Sort Instructions

This task involves sorting 49 statements related to the experience of working with compulsive hoarding. All the statements come from interviews with professionals who have experience of working with hoarders.

We would like you to **consider your own personal experience** of working with hoarding as you complete this task. Remember all responses will be kept anonymous as outlined in the consent form.

1. Place the sorting grid in front of you. The grid shows a scale from, -6 (disagree with/ least like your experience) through 0 (neutral/ not sure) to +6 (agree with/ most like your experience)

2. Read all the statement cards and sort them into three approximately equal piles:
    - Statements most like your experience/ agree with
    - Statements least like your experience/ disagree with
    - Statements you feel neutral about/ unsure of

3. Look at the 'most like your experience/agree with' pile. Choose one card that is most like your experience, and place it above +6 in the grid.
4. Look at the 'least like your experience/ disagree with' pile. Choose one card that is least like your experience and place it above -6 in the grid.

5. Continue this process in the following order:
    - Choose 2 cards from 'most like experience' pile and place in grid above +5
    - Choose 2 cards from 'least like experience' pile and place in grid above -5
    - Choose 3 cards from 'most like experience' pile and place in grid above +4

- Choose 3 cards from 'least like experience' pile and place in grid above -4

- Choose 4 cards from 'most like experience' pile and place in grid above +3

- Choose 4 cards from 'least like experience' pile and place in grid above -3

- Choose 5 cards from 'most like experience' pile and place in grid above +2

- Choose 5 cards from 'least like experience' pile and place in grid above -2

- Choose 6 cards from 'most like experience' pile and place in grid above +1

- Choose 6 cards from 'least like experience' pile and place in grid above -1

- Place the remaining 7 cards in the grid above 0.

*Note - when you run out of cards in the 'most like experience' and 'least like experience' cards, use cards from the third 'neutral/ unsure of' pile.

6. Consider the finished grid and check whether you have sorted the cards in a way that best reflects your own personal experience of working with hoarding. Move any cards which you feel are in the wrong order.

7. The researcher will note down the order in which you have sorted the cards.

8. Provide any comments or reflections on the experience of completing the task. You may wish to share your thought processes behind rating the statements.

Thank you for your participation

Appendix H: Demographic and Psychometric Measures

Appendix H1: Demographic Information Sheet

Appendix H2: Clutter Image Rating Scale

Appendix H3: Perceived Organisational Support

Appendix H4: Job-related Well-being Scale

Appendix H1: Demographic Information Sheet

Demographic Information Sheet

Participant Number ....

Age ....

Gender ....

Ethnicity ....

Occupation ....

Years in occupation ....

Years in current role ....

Number of hoarding cases worked with ………………………………………………

Appendix H2: Clutter Image Rating Scale

Clutter Image Rating Scale: Kitchen

Please select the photo below that most accurately reflects the amount of clutter in your room.
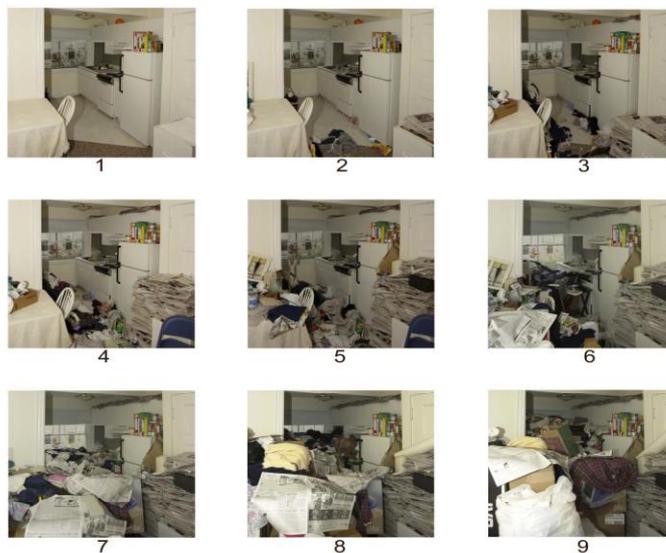
Clutter Image Rating: Bedroom

Please select the photo that most accurately reflects the amount of clutter in your room.

Clutter Image Rating: Living Room

Please select the photo below that most accurately reflects the amount of clutter in your room.

Appendix H3: Perceived Organisational Support Scale

Participant Number:

Perceived Organisational Support Scale (Eisenberger et al., 1986)

Listed below are statements that represent possible opinions that YOU may have about working for your employer. Please indicate the degree of your agreement or disagreement with each statement by filling in the box on your answer sheet that best represents your point of view about your employer. Please choose from the following answers:

0	1	2	3	4	5	6
Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Moderately Agree	Strongly Agree

	0	1	2	3	4	5	6
1. The organisation values my contribution to its wellbeing.							
2. The organisation fails to appreciate any extra effort from me.							
3. The organisation would ignore any complaint from me.							
4. The organisation really cares about my wellbeing.							
5. Even if I did the best job possible, the organisation would fail to notice.							
6. The organisation cares about my general satisfaction at work.							
7. The organisation shows very little concern for me.							
8. The organisation takes pride in my accomplishments at work.							

Appendix H4: Job-Related Well-being Scale

Participant No.

Job-related affective well-being scale

Please complete the following twelve questions by placing a cross in the box of the response which most fits with your experience of working with hoarding.

During your experience of working with hoarding how much of the time has it made you feel:

	Never	Occasionally	Some of the time	Most of the time	All the time
1. Tense					
2. Calm					
3. Relaxed					
4. Worried					
5. Anxious					
6. Comfortable					

During your experience of working with hoarding how much of the time has it made you feel:

	Never	Occasionally	Some of the time	Most of the time	All the time
1. Miserable					
2. Depressed					
3. Optimistic					
4. Enthusiastic					
5. Motivated					
6. Gloomy					

Appendix I: Factor Analysis Data

Appendix I1: Table of Eigenvalues and Variance

Appendix I2: Unrotated Factor Matrix

Appendix I1: Table of Eigenvalues and Variance Explained

Eigenvalues and Variance Explained.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	14.91	41.41	41.41	14.90	41.40	41.40	11.20	31.00	31.00
2	2.74	7.61	49.02	2.70	7.60	49.00	4.00	11.00	42.00
3	1.83	5.09	54.11	1.80	5.10	54.10	4.70	13.00	55.00
4	1.72	4.78	58.88						
5	1.49	4.15	63.03						
6	1.43	3.98	67.01						
7	1.28	3.55	70.56						
8	1.12	3.12	73.68						
9	1.03	2.87	76.55						
10	0.88	2.45	79.00						
11	0.77	2.14	81.14						
12	0.77	2.13	83.27						
13	0.68	1.90	85.17						
14	0.59	1.63	86.80						
15	0.56	1.57	88.37						
16	0.49	1.37	89.74						
17	0.47	1.31	91.04						
18	0.41	1.14	92.18						
19	0.37	1.04	93.22						
20	0.35	0.98	94.19						
21	0.31	0.87	95.07						
22	0.28	0.79	95.85						
23	0.28	0.77	96.62						
24	0.24	0.66	97.28						
25	0.17	0.48	97.77						
26	0.15	0.42	98.19						
27	0.13	0.37	98.56						
28	0.12	0.32	98.88						
29	0.11	0.30	99.18						
30	0.08	0.23	99.41						

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	
31	0.08	0.21	99.62				
32	0.05	0.14	99.76				
33	0.03	0.09	99.86				
34	0.03	0.08	99.94				
35	0.01	0.03	99.97				
36	0.01	0.03	100.00				

Appendix I2: Unrotated Factor Matrix

Unrotated Factor Matrix

Sorts	Factors							
	1	2	3	4	5	6	7	8
1	.56	-.35	-.32	.23	-.01	.00	.14	-.04
2	.64	.13	-.37	-.19	.08	-.18	.13	-.01
3	-.65	-.15	-.05	.36	-.09	-.38	-.04	.02
4	.70	-.10	.16	-.32	-.12	.19	.25	-.06
5	.73	-.12	-.28	.38	-.14	.11	-.21	.10
6	.77	-.13	.14	-.09	.19	-.30	.19	-.06
7	.75	-.30	-.07	.02	-.11	-.16	.16	.16
8	.61	-.08	-.11	-.29	-.36	.01	.12	.30
9	.53	.50	.20	.02	-.38	-.19	-.07	.03
10	.60	-.27	.24	.07	.16	.17	.19	.24
11	.69	.03	-.06	-.01	.21	-.07	.00	-.26
12	.69	-.08	-.27	.23	-.11	-.18	-.28	-.07
13	.71	-.13	.08	-.33	-.05	.10	-.03	-.10
14	.46	.27	.43	.23	-.29	-.11	-.05	-.42
15	.42	.20	.21	-.21	.08	.65	-.28	-.04
16	.46	.20	.53	.31	-.21	-.12	.28	.08
17	.82	-.01	.06	-.08	.06	-.08	-.12	-.14
18	.72	-.28	.15	.10	-.06	.05	-.24	.30
19	.12	.57	-.36	-.32	.31	-.21	-.01	-.07
20	.74	.14	-.14	.00	.02	.24	-.16	-.02
21	.74	-.01	.15	.03	.26	.14	-.16	.10
22	.71	.05	-.18	.13	.38	-.09	.03	-.20
23	.57	.59	.03	.07	-.02	-.02	-.10	.22
24	.79	-.05	-.08	.14	-.11	.01	-.05	-.17
25	.84	-.24	.01	.00	-.05	-.12	-.01	-.15
26	.39	.49	-.41	.14	-.07	-.02	.22	.41
27	.81	-.19	-.03	.03	.20	-.19	-.06	.24
28	.74	-.24	.14	-.21	-.10	.06	.19	.04
29	.57	.15	.39	-.31	.10	-.37	.00	.14
30	.34	.17	.35	.38	.50	-.07	-.29	.14
31	.52	.61	-.08	-.22	-.07	-.07	-.09	-.10
32	.59	.01	-.13	.15	-.36	.00	-.29	.00
33	.76	-.38	.00	-.14	.18	.01	-.10	.02
34	.61	.31	-.13	.19	-.04	-.41	.23	.01
35	.33	.26	.05	.44	.25	.15	.54	-.10
36	.75	-.18	-.19	.04	-.14	.11	.11	-.34

Appendix J: Factor Interpretation Crib Sheets

Appendix J: Factor Interpretation Crib Sheets

Factor 1 Crib Sheet
Items ranked at +6 and +5 and +4
- My relationship with the hoarder is key to the work (+6)
- I'm not here to judge (+5)
- I have respect for hoarders at all times (+5)
- Though it's just rubbish to me, it's treasured by them (+4)
- Hoarders are normal people (+4)
- The work is a very slow process (+4)

Items ranked higher in Factor 1 array than in other factor arrays
- My relationship with the hoarder is key to the work (+6)
- I have respect for hoarders at all times (+5)
- I'm not here to judge (+5)
- Though it's just rubbish to me, it's treasured by them (+4)
- I find it fascinating how hoarders justify keeping things (+3)
- I'm not going to give up on them (+3)
- I need to take precautions in terms of my own safety (+2)
- Hoarders are grateful for my help (+1)
- You have to hold all your thoughts and feelings in (0)
- I feel out of my depth and unequipped to work with hoarders (0)
- I feel sorry for hoarders (-1)

Items ranked lower in Factor 1 array than in other factor arrays
- I often think "oh my god" when I see the house (-1)
- The stench and smell can really get to me (-1)
- The legal powers are not very robust to deal with hoarding (-1)
- You wear yourself out challenging hoarders behaviour (-2)
- It's shocking to see the way hoarders live (-3)*
- I get anxious about what I will face and how bad it will be (-3)
- You invest so much time and they don't want help (-3)
- I struggle to get my head around the emotional attachment (-4)
- I feel shocked by the emotional attachment to odd things (-4)
- I feel appalled people have got themselves in this state (-5)

Items ranked at -6 and -5 and -4
- My heart sinks when I am given a hoarding case (-4)
- I struggle to get my head around the emotional attachment (-4)
- I feel shocked by the emotional attachment to odd things (-4)
- I feel appalled people have got themselves into this state (-5)
- Hoarding, it's a pitiful way of carrying on (-5)
- I feel angry with them (-6)

Factor 2 Crib Sheet

Items ranked at +6 and +5 and +4
- The work is a very slow process (+6/ 2.35)
- I feel filthy after a home visit to a hoarder (+5/ 1.93)
- I think "how has this happened?" (+5/1.74)
- I find it incredibly frustrating (+4/1.61)
- I wonder how someone can live like this (+4/1.51)
- My relationship with the hoarder is key to the work (+4/1.27)

Items ranked higher in Factor 2 array than in other factor arrays
- The work is a very slow process (+6)
- I think "how has this happened?" (+5)
- I feel filthy after a home visit to a hoarder (+5)
- I wonder how someone can live like this (+4)
- I find it incredibly frustrating (+4)
- I feel shocked by the emotional attachment to odd things (+3)
- I feel I'm asking the impossible of them (+3/0.85)
- The work is physically draining (+2)
- I often think "oh my god" when I see the house (+2)
- The stench and smell can really get to me (+1)
- I worry that I am affecting my own health (+1/0.23)
- My heart sinks when I am given a hoarding case (+1/0.04)
- I feel appalled people have got themselves in this state (-1)
- Hoarding it's a pitiful way of carrying on (-3/-0.70)

Items ranked lower in Factor 2 array than in other factor arrays
- It's such a hard condition to treat (+1)
- I'm not here to judge (0/-0.06)
- It feels like an overwhelming problem to face (0)
- Though it's just rubbish to me, it's treasured by them (0/-0.04)
- I find it fascinating how hoarders justify keeping things (-1)
- Hoarders can go back on what they say they will do (-1)
- My work with hoarders feels like I'm scratching the surface (-1/-0.23)
- Hoarder's are normal people (-2/-0.42)
- I feel out of my depth and unequipped to work with hoarders (-2)
- It's difficult to understand a hoarders mindset (-2)
- Hoarders are lovely people (-3/-1.08)
- You never get to an end point in the work (-3/-0.75)
- Hoarders can detest me as a result of my work (-4/-1.55)
- I have respect for hoarders at all times (-4/-1.37)
- Hoarders have poor insight (-4)
- Working with one hoarder could consume your whole work life (-5/-2.12)
- I'm never quite sure when its hoarding and when its collecting (-5/-1.88)

Items ranked at -6 and -5 and -4
- Hoarders have poor insight (-4)
- Hoarders can detest me as a result of my work (-4)
- I have respect for hoarders at all times (-4)
- I'm never quite sure when its hoarding and when its collecting (-5/-1.88)
- Working with one hoarder could consume your whole work life (-5/-2.12)
- I feel angry with them (-6)

Factor 3 Crib Sheet

Items ranked at +6 and +5 and +4
- People hoard for a reason (+6/2.18)
- When they are in denial it makes the work very hard indeed (+5/1.92)
- You help clear spaces and you go back and it's the same (+5/1.55)
- Hoarders are normal people (+4)
- I'm not here to judge (+4)
- The work is a very slow process (+4)

Items ranked higher in Factor 3 array than in other factor arrays
- People hoard for a reason (+6)
- You help clear spaces and you go back and it's the same (+5)
- When they are in denial it makes the work very hard indeed (+5)
- Hoarders are normal people (+4)
- My work with hoarders feels like I'm scratching the surface (+3)
- It's such a hard condition to treat (+3)
- It feels like an overwhelming problem to face (+3/1.28)
- I struggle to get my head around the emotional attachment (+2/1.01)
- Hoarders go back on what they say they will do (+2/0.83)
- You never get to an end point in the work (+2/0.59)
- Hoarders can detest me as a result of my work (+1/0.10)
- It's difficult to understand a hoarders mindset (0)

Items ranked lower in Factor 3 array than in other factor arrays
- I feel very intrusive into the hoarders life (1)
- I need to take precautions in terms of my own safety (-1/-0.39)
- My relationship with the hoarder is key to the work (-2/-0.81)
- You have to hold all your thoughts and feelings in (-2)
- The work is physically draining (-2/-0.77)
- I feel I'm asking the impossible of them (-3/-0.91)
- I think how has this happened (-3/-0.89)
- I don't feel I have time to address the hoarding properly (-3/-1.10)
- I feel sorry for hoarders (-3)
- Hoarder's are grateful for my help (-4)
- I worry that I am affecting my own health (-4)
- I feel filthy after a home visit to a hoarder (-4)
- My heart sinks when I am given a hoarding case (-5)

Items ranked at -6 and -5 and -4
- I worry that I am affecting my own health (-4)
- I feel filthy after a home visit to a hoarder (-4)
- Hoarder's are grateful for my help (-4)
- My heart sinks when I am given a hoarding case (-5)
- Hoarding, it's a pitiful way of carrying on (-5)
- I feel angry with them (-6)