



A theoretical perspective to inform assessment and treatment strategies for animal hoarders

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ABSTRACT

Animal hoarding is a poorly understood, maladaptive, destructive behavior whose etiology and pathology are only beginning to emerge. We compare and contrast animal hoarding to the compulsive hoarding of objects and proceed to draw upon attachment theory, the literature of personality disorder and trauma, and our own clinical experience to propose a developmental trajectory. Throughout life, there is a persistent struggle to form a functional attachment style and achieve positive social integration. For some people, particularly those affected by a dysfunctional primary attachment experience in childhood, a protective, comforting relationship with animals may form an indelible imprint. In adulthood, when human attachment has been chronically problematic, compulsive caregiving of animals can become the primary means of maintaining or building a sense of self. Improving assessment and treatment of animal hoarders requires attention to contributing psychosocial conditions, while taking into account the centrality of the animals to the hoarder's identity, self-esteem and sense of control. It is our hope that the information presented will provide a basis upon which clinicians can focus their own counseling style, assessment, and methods of treatment.

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Animal hoarding is defined as failure to provide minimal standards of care for animals; lack of insight about that failure; denial of the consequences of that failure; coupled with obsessive attempts to maintain

and even increase the number of animals in the face of these failures and deteriorating conditions (Patronek, 1999). The consequences of animal hoarding include starvation, illness, and death of animals, neglect of self and others, and household destruction. This is in contrast to legitimate rescue, sheltering or caregiving efforts, which maintain standards for animal welfare. The anonymous quote below, from a concerned family member of an animal hoarder, is illustrative of the psychological implications of animal hoarding:

My sister fits the profile of a hoarder who is close to a major meltdown. She has about 80 dogs, 13 cats, puppies, pregnant dogs, a house in disarray, a severe recurrent depression, post-traumatic stress disorder, a borderline personality disorder, and our family is at the end of energy and resources. I have talked to all available agencies: the humane society, social services, physicians, my sister's social worker, psychiatrists, veterinarians, etc. Now, I am disappointed that I have found very little help to change this situation. Animal hoarding with accompanying mental illness is devastating to all parties, especially the innocent animals.

Pleas such as this from animal hoarders and/or their families are consistent with the burdens reported for compulsive hoarding of inanimate objects (Tolin, Frost, Steketee, & Fitch, 2008; Tolin, Frost, Steketee, Gray, & Fitch, 2008; Wilbram, Kellett, & Beal, 2008), and highlight the urgency of remedying the dearth of empirical work in this area. Animal hoarding is not an uncommon problem. One study has indicated animals may be involved in as many as one-third of compulsive hoarding cases in community-based samples (Frost, Steketee, & Williams, 2000), yet there is only limited mention of animals in the hoarding literature (e.g., Jeffreys & Moore, 2008; Maier, 2004; Pertusa et al., 2008).

Compulsive hoarding of objects is discussed as a component of so-called Diogenes Syndrome (a term that appears to be falling out of favor to describe cases of adult self-neglect characterized by severe squalor), but there has been only limited mention of animal hoarding in the squalor literature (e.g., Polythress, Burnett, Naik, Pickens, & Dyer, 2006; Snowdon, Shah, & Halliday, 2007). Furthermore, as Maier (2004) and Snowdon et al. (2007) have noted, the literature on squalor contains few citations to literature on compulsive hoarding, and vice-versa. Animal hoarding is only just beginning to be recognized as occurring comorbidly with adult self-neglect among adult protective service professionals (Nathanson, *in press*). Not surprisingly, animal hoarding continues to receive negligible attention by the psychological community, either in theoretical or applied work.

The impact of this omission is significant. From a population perspective, animal hoarding directly affects at least 3000 persons per year, devastates considerably more families and relationships, threatens the health of minors and dependent adults, incurs significant costs to communities, and harms hundreds of thousands of animals annually (Berry, Patronek, & Lockwood, 2005; Frost, Steketee, & Williams, 2000; Hoarding of Animals Research Consortium (HARC), 2002; Patronek, Loar, & Nathanson, 2006). Furthermore, it is our impression from passive surveillance of media reports and from complaints to humane law enforcement authorities, that incidence is increasing. There is quantitative evidence to support this impression. Analysis of records in one on-line national database of animal cruelty cases indicates a five-fold increase in reports of animal hoarding incidents from 2000 to 2006.¹

Based on inquiries we receive either from colleagues or through the criminal justice system, it appears therapists have little knowledge of animal hoarding and often feel unprepared to deal with requests to assess these very challenging clients. Yet, state legislatures continue to amend animal cruelty statutes to allow or require psychiatric or psychological examination and counseling for persons convicted of

certain forms of cruelty to animals², which can include animal hoarding. Increased awareness and guidance for therapists is needed.

This paper attempts to lay out a more comprehensive theoretical base for both empirical studies of animal hoarding and for developing therapeutic approaches to treating animal hoarders. We each draw upon 20 years of experience, either in the area of counseling as related to the human-animal bond and pet loss, services for elders or persons with disabilities, and animal hoarding (JNN), or humane law enforcement, epidemiology, and veterinary medicine (GJP). The range of these interactions includes structured client interviews, court-ordered and voluntary counseling sessions with hoarders, extended communications with family members of hoarders (e.g., Nathanson, *in press*), reviews of hundreds of media reports (including Arluke et al., 2002), interaction with hoarders and their animals through humane law enforcement investigations (e.g., Patronek, 2004) and surveys of professionals in animal welfare (e.g., Berry et al., 2005). We also acknowledge the contribution of our colleagues in the Hoarding of Animals Research Consortium (HARC, 2008), who participated in substantive discussions about interviews and clinical assessments over a ten year period (1997–2006). Our hope is that experts in psychology and psychiatry will reflect upon these observations and move this dialogue about animal hoarding to a new level of discussion and analysis.

1. Historical understanding of animal hoarding

The pathological accumulation of large numbers of companion animals was first described by Worth and Beck (1981). In 1999 and 2002, this phenomenon was formally defined as animal hoarding and explored in more depth in two case series of $n=54$ (Patronek, 1999) and $n=71$ (HARC, 2002). It was clear from these early reports that animal hoarding was not about pet-keeping or sheltering gone awry, since extreme animal suffering in conjunction with strong attachment was inconsistent with all previously described theoretical notions about the human-animal bond (Beck & Katcher, 1996; Patronek, 2008; Vermeulen & Odendaal, 1993).

Anecdotal descriptions in animal welfare publications initially described this phenomenon as 'collecting' (Frost & HARC, 2000). However, the term 'collecting' seemed more appropriate to the deliberate accumulation of material as a benign hobby, whereas animal hoarding had much more in common with characteristics and behaviors described for compulsive hoarding of objects ('object hoarding'). These include massive accumulation of large numbers of objects of seemingly minimal utility or value, difficulty discarding, cluttered living spaces, distorted beliefs about the importance of possessions, excessive emotional attachment to possessions, procrastination, disorganization, and information processing and decision-making deficits (Frost & HARC, 2000; Frost & Hartl, 1996; Saxena, 2008a).

Initially, the Obsessive–Compulsive Disorder (OCD) model frequently applied to object hoarding seemed the most parsimonious model for understanding animal hoarding (Frost & HARC, 2000). Given the limited efficacy in compulsive hoarding for treatments shown effective in OCD (Steketee & Frost, 2003), in conjunction with the trend to recognize hoarding as a distinct syndrome, particularly in the absence of other symptoms of OCD (Grisham, Brown, Liverant, & Campbell-Sills, 2005; Saxena, 2008a; Saxena, 2007; Saxena et al., 2002; Wu & Watson,

¹ For an on-line database listing details of over 1500 hoarding cases, see www.pet-abuse.com/database.

² State statutes allowing or requiring psychological evaluation for animal cruelty include: RK. CODE. ANN. Section 5-62-101 (2007); California Penal Code . Section 597(g) (2007). COLO. REV. STAT. Section 18-9-202 (2007); DEL. CODE ANN. tit. 11, Section 4362 (2007); FLA. STAT. ANN. Section 828.12(a) (2007); GA. CODE. ANN. Section 16-12-4(d) (2007); IND. CODE Section 35-46-3-12(d) (2007); IOWA CODE ANN. Section 717B.3A (2007); KAN. STAT. ANN. Section 21-4310(d)(1) (2007); ME. REV. STAT. ANN. tit. 17, Section 1031(3-B) (2007); MD. CODE ANN., CRIMINAL LAW Section 10-604(b)(2) (2007); MICH. COMP. LAWS Section 750.50(b)(4) (2007); MINN. STAT. Section 343.21(10)(4); MO. ANN. STAT. Section 566.111(3)(3) (2007); N.M. STAT. ANN. Section 30-18-1(g) (2007); OHIO REV. CODE ANN. Section 959.99(e)(4) (2007); OR. REV. STAT. Section 167.350(4) (2007); 18 PA. CONS. STAT. ANN. Section 5511(a)(2)(ii) (2007); R.I. GEN. LAWS Section 4-1-36 (2007); TENN. CODE ANN. Section 39-14-212 (2007); UTAH CODE ANN. Section 76-9-301(9)(a) (2007); VA. CODE ANN. Section 3.1-796.122(g) (2007); WASH. REV. CODE Section 16.52.200(6) (2007); W. VA. CODE Section 61-8-19(h)(1) (2007).

2005; Zohar, Hollander, Stein, Westenberg, & The Cape Town Consensus Group, 2007), we believe the most fruitful path for conceptualizing intervention and treatment is to contrast animal hoarding with compulsive object hoarding rather than with OCD per se.

2. Contrasting animal hoarding vs. object hoarding

Compulsive hoarding has been defined as acquisition of and failure to discard objects that appear useless or of limited value, having living spaces sufficiently cluttered to preclude activities for which spaces were designed, and causing significant distress or impairment in functioning, with clinical significance reached when clutter renders the living space unsuitable for its intended function (Frost & Hartl, 1996). Such a definition likely never anticipated the involvement of living beings and the distinctiveness of that interaction, nor the capacity of the hoarded possession to suffer. Although hoarded animals may have nominal monetary worth, there is broad societal acceptance that companion animals differ from inanimate property. Animals are protected against deliberate abuse or neglect and abandonment by animal cruelty statutes in every state (Otto, 2007), and indeed, in some cases, animals may have considerable monetary value (e.g., purebred dogs or cats, exotic birds, livestock). Thus, concepts such as “uselessness,” “having limited value,” or “failure to discard” applied to inanimate objects are not particularly relevant when defining animal hoarding.

For animal hoarding, the relationship between clutter and function can be somewhat indirect, since it may not always be the acquired animals so much as the filth associated with failure to provide them proper care that renders living spaces unusable. Clutter seems to be more the consequence of failure to discard trash and other items, particularly those associated with attempting to care for the animals (e.g., food, food containers, cages, newspapers, bedding, litter) and the resulting deterioration in living space that occurs secondary to failure to maintain an organized household (HARC, 2002). There is little evidence that animal hoarders regard objects associated with clutter as having any special value. Therefore, with respect to clutter, animal hoarding seems to have more overlap with the conditions reported in discussions of squalor than object hoarding (Snowdon et al., 2007).

2.1. Age of onset and gender predisposition

It has been reported that onset of compulsive object hoarding typically occurs in childhood and early adolescence (Grisham, Frost, Steketee, Kim, & Hood, 2006), whereas animal hoarders typically are middle age or older when identified (Patronek, 1999; HARC, 2002). The significance of this difference is unclear, since most children would have little opportunity to hoard animals, even if such a predisposition were present. Conversely, for object hoarders, although symptoms may first be reported at a young age, clinically problematic compulsive hoarding may take a decade or more to be recognized (Grisham et al., 2006). Thus, the age differential in clinical presentation for animal and object hoarding may be narrower than it appears.

Women are disproportionately overrepresented in animal hoarding, accounting for 76% of 54 cases (Patronek, 1999) and 83.1% of 71 cases (HARC, 2002) in two different case series. The reason for this marked gender disparity remains unknown. However, these results are consistent with studies of compulsive object hoarders (Steketee, Frost, & Kyrios, 2003) and elderly hoarders (Steketee, Frost, & Kim, 2001) in which women comprised 70.5% and 73% of the total sample, respectively. By contrast, in a sample from a community-based study of 742 individuals with personality disorder, the prevalence of hoarding was twice as high among men (Samuels, Bienvenu, Grados et al., 2008).

2.2. Comorbid psychopathology

Compulsive hoarding of objects occurs comorbidly with a wide range of Axis I and Axis II psychopathology (Pertusa et al., 2008; Samuels,

Bienvenu, Grados et al., 2008; Samuels, Bienvenu, Pinto, et al., 2008), with hoarders exhibiting greater interpersonal difficulties compared to community controls (Grisham, Steketee, & Frost, 2008). However, numerous factors contribute to the difficulty of drawing conclusions about the prevalence of specific comorbid conditions or their consistency of association with object hoarding. As Steketee and Frost (2003) have noted, specific disorders are not consistently reported across studies. Additional challenges include the lack of formal diagnostic criteria for compulsive hoarding (Steketee et al., 2003), evidence that compulsive hoarding is neurobiologically distinct from non-hoarding OCD (Saxena, 2008b), and continued uncertainty about whether hoarding should be classified as a form of OCD, an impulse control disorder, or a clinically distinct syndrome (Abramowitz, Wheaton, & Storch, 2008; Grisham et al., 2005; Pertusa et al., 2008; Saxena, 2007; Wu & Watson, 2005). Saxena (2007) has emphasized that patients with hoarding behavior but lacking other symptoms of OCD would likely have been excluded from studies of OCD patients selected based upon non-hoarding symptoms of OCD, which suggests that psychopathology in compulsive hoarders would tend to be under-reported.

Squalor is often a prominent feature of animal hoarding. The association between premorbid personality and living in squalor has been reported (Polythress et al., 2006). Snowdon et al. (2007) has drawn attention to the lack of psychiatric diagnoses, other than personality problems, among persons living in squalor. However, indicators of frontal lobe dysfunction in these individuals have been noted, and may include social withdrawal, disinhibition, lack of empathy and concern for others (Snowdon et al., 2007). In-depth clinical assessments (as conducted by Nathanson) of a severely affected population of animal hoarders, primarily associated with humane law enforcement interventions, have similarly suggested a wide array of comorbid psychological conditions, including Axis II disorders.

With respect to social functioning and interpersonal problems, at the time cases are discovered, animal hoarders are typically socially isolated, living alone, unpartnered, and often estranged from family (Patronek, 1999). Nevertheless, there are hoarders, particularly those presenting themselves as a legitimate shelter or rescue group, who whether by desire or need, appear highly networked with other individuals who help enable and sustain their behavior, either through facilitating animal acquisition or by assisting with animal care. Still others may be married, and/or living in a multigenerational family household.

In our experience, the behaviors, values, feelings, and expressed thoughts of animal hoarders are entirely consistent with their self-perception as caregivers, suggesting that animal hoarding is largely an ego-syntonic disorder. This observation is supported by numerous communications we have received from family and friends of hoarders, a very representative case report (Marquis, 1996), as well as hoarder's own accounts of their stories (Arluke & Vaca-Guzman, 2005). Furthermore, a link between object hoarding and personality disorder has been demonstrated. In one study, 37 OCD hoarders were found to have greater personality disorder symptoms than 34 community controls (Frost, Steketee, Williams, & Warren, 2000). In a factor analysis of scores of 75 OCD outpatients, high scores on the hoarding dimension were strongly correlated to Axis II diagnoses as well as the number of personality disorders (Mataix-Cols, Baer, Rauch, & Jenike, 2000). These observations are consistent with Samuels, Bienvenu, Grados et al. (2008), who reported that among the participants in a community-based sample of persons with personality disorder, the odds of hoarding increased with the number of personality disorder traits.

Samuels, Bienvenu, Pinto, et al. (2008) have described sex-specific differences in prevalence of numerous clinical correlates of object hoarding in 151 men and 358 women with OCD, selected due to having a sibling with OCD. In particular, relationships between hoarding and specific personality disorders and dimensions (e.g., schizotypal and dependent) were stronger among women than among men. Another study of 289 female and 184 male OCD patients (Wheaton, Timpano, Lasalle-Ricci, & Murphy, 2008) reported a greater prevalence of comorbid psychological disorders among women with hoarding symptoms

compared to men. Our experience with animal hoarders who are men is too limited to suggest any gender-specific differences in clinical expression of comorbid conditions.

2.3. Role of inanimate objects vs. animals

In compulsive object hoarding, the hoarded items have been described as providing a sense of security, identity, and emotional comfort, and as being extensions of self (Frost & Hartl, 1996; Frost, Hartl, Christian, & Williams, 1995; Steketee et al., 2003). Furthermore, many object hoarders exhibit hypersentimentality with respect to possessions, and may attribute human-like qualities to them, valuing them like friends or loved ones. In animal hoarding, there is also high emotional attachment, with many owners forming a relationship with their pet analogous to human–human relationships (Harker, Collis, & McNicholas, 2000). This attachment can be so profound that animals may be more highly valued than human family members.

The feelings applied to inanimate objects as outlined above can only be magnified when applied to a living creature having the capacity for reaction. This is an important clinical distinction. For example, most individuals would find it preposterous to describe their car or house as loving them back, even though the possessions themselves were the object of great affection. Therefore, it is our belief that the profound attachment to hoarded animals, which is often intertwined with a sense of mission to rescue animals (Patronek et al., 2006), has qualitative differences from the relationship between a hoarder and even their most dearly held inanimate objects. The effect of the potential for affection to be returned and reflected back by an animal should not be underestimated. This ability creates a profoundly different interaction than is possible with inanimate objects, because it is both engaging and free of conflict, even though both may provide greater constancy and reliability compared to human relationships.

A recent clinical study has illustrated how the relationship between a hoarder and his or her animals has a unique and powerful potential to bolster a sense of self. Brown (2007) utilized a non-clinical convenience sample of 24 adults recruited from animal rescue groups to examine how animals might function as selfobjects (e.g., objects which “evoke, maintain, and give cohesion to the self”) (Wolf, 1988, p. 63, as quoted in Brown, 2004, p.70). Participants in that study were self-described as deeply attached to animals; whether or not any could have been hoarders is unknown. Those interviews revealed that animals were particularly important as twinship selfobjects, a finding quite uncommon in human relationships (Brown, 2007). A twinship selfobject is described as providing a relationship that is intensely intimate, with shared understanding as a soulmate and a feeling of oneness (Brown, 2004; Brown, 2007; Silverstein, 1999). Furthermore, as Brown (2007) emphasizes, a twinship selfobject should have a soothing effect essential to “repairing an injury to self-esteem.” The explanation offered for this effect was that animals were intensely focused on the person, adept at reading non-verbal cues, unable to judge, criticize, or give advice, and could not disagree with a person’s interpretation of how they feel or what they want. Nevertheless, as Brown (2007) has noted, the potential reciprocal nature of this relationship may always be unbalanced, being defined primarily by what the person wanted to believe, with the true reality of the animals’ situation (which can include but not be limited to boredom, fear, starvation, illness, and death), being met with denial or defensiveness.

2.4. Acquisition and accumulation

In one of the first empirical studies of non-food compulsive hoarding, the primary source of possessions was from failure to discard, rather than from acquiring more objects compared with non-hoarders (Frost & Gross, 1993). For object hoarding, the acquisition component of the behavior is less well understood, being examined primarily with respect to compulsive buying and the acquisition of free or discarded items or giveaways (Steketee & Frost, 2003). Not

surprisingly, many compulsive buyers also suffer from compulsive hoarding (Mueller et al., 2007).

Animal hoarders appear to acquire animals through both passive and active methods (Patronek et al., 2006). Some may accumulate an excessive number because they develop a reputation in the community as a place where people can drop off unwanted pets. In some cases, numbers increase simply through failure to spay or neuter the animals, resulting in uncontrolled breeding. Yet many other hoarders demonstrate willful intent to obtain animals through actively seeking unwanted pets via newspaper advertisements, bulletin board notices, adoption from animal shelters or via the Internet. In some cases, these attempts are aggressive and deceptive, with the hoarder misrepresenting him or herself as legitimate rescue, sheltering, or pet hospice efforts. These hoarders frequently state that no one else could provide sufficient care, and almost invariably exhibit intense resistance to downsizing.

2.5. Role of trauma and triggering events

An association between compulsive (object) hoarding and traumatic life events has been demonstrated in a sample of 180 individuals with OCD (Cromer, Schmidt, & Murphy, 2007). In another case-control study, a sample of 36 (object) hoarders reported significantly more types of trauma and more frequent traumatic events, particularly sexual and physical abuse, and having something taken by force, than did 36 control participants (Hartl, Duffany, Allen, Steketee, & Frost, 2005). In a sample of 51 people with hoarding problems (Grisham et al., 2006), 27 (55%) reported a positive or negative stressful life event occurring prior to onset of hoarding; these individuals also reported an earlier age of onset compared with those who did not report a stressful life event.

There is little information about the events preceding onset of animal hoarding, which typically is clinically identified in mid-life or later (HARC, 2002; Patronek, 1999). In some case histories of animal hoarders, deterioration appears to occur quite suddenly, whereas in others it is more gradual. In our experience, a traumatic event, such as loss of an unusually stabilizing adult relationship (e.g., one which is long-term, self-defining, affect-regulating, exclusive), a serious health crisis, or loss of a major bodily function often precedes full-blown animal hoarding and may play a precipitating role. Individual differences in the processing of trauma also likely help determine the actual impact of a traumatic life event. Lee (2006) has discussed how, in a person predisposed due to personality disorder, a serious stressor could have a deleterious effect on frontal and limbic cortical function, potentially leading to lasting problems in emotional information processing.

It has also been noted that persons with attachment disturbances and personality traits suggesting self-regulatory defects may be at increased risk of complicated grief following loss (Prigerson et al., 1997). Complicated grief is a pathological grief reaction distinct from a normal bereavement reaction, having symptoms resembling post-traumatic stress disorder, and often associated with extreme fears of abandonment. By taking advantage of animals’ ability to provide unconditional love, some animal hoarders appear to become enmeshed in a pattern of complicated grief, in which the animals serve a path, albeit a futile one, towards healing.

2.6. Need for control

Frost et al. (1995) have described how object hoarders have great concern about maintaining control over possessions, and resent unauthorized touching or rearrangement (Frost et al., 1995). Building on this finding, Steketee et al. (2003) have discussed how fear of uncertainty may lead object hoarders to pursue unsustainable strategies for control. In our experience, control seems to be a universal feature of animal hoarders. Furthermore, unlike inanimate objects, living creatures are, by virtue of their own mortality, impermanent possessions. This may create even greater anxiety over issues of control. Indeed, it is not uncommon for animal hoarders to refuse to acknowledge death of animals, and carried to an extreme, control can be manifested by failure to dispose or deliberate

storage of dead bodies. In our experience, the issue of control figures prominently into hoarders' resistance to adopt out animals they have "saved." Indeed, when a rescue followed by adoption program begins to turn into a rescue and retain policy, this may be a warning sign for transition from legitimate caregiving into animal hoarding.

2.7. Lack of insight

Compulsive object hoarders typically have diminished insight (Frost & Hartl, 1996), with recognition that a problem exists occurring years after onset of symptoms such as acquiring, failing to discard, and clutter (Grisham et al., 2006). However, with object hoarding, the lack of insight primarily affects the environment, and less so the objects themselves. One of the most perplexing facets of animal hoarding is that in the face of professed love and desire to care for animals, there can be tremendous animal neglect and suffering. Invariably, an animal hoarder will ignore, minimize, or deny adverse events as obvious as starvation, severe illness, and death along with environmental effects of the hoarding, such as household destruction.

In our judgment, hoarders' indifference to squalor and patent animal suffering appears to indicate a profound lack of insight and could be suggestive of dissociation. Dissociation is an expected reaction to threats to the integrity of the self, which, for an animal hoarder, could involve self-image and professed mission when their activities or control is challenged. Indeed, the presence of a subclinical dissociative component in some human–animal relationships has previously been demonstrated. In a study of 232 undergraduates and 73 veterinary technician students, Brown and Katcher (1997) found that attachment to pets was significantly correlated with dissociation, $r=0.24$, $p=0.01$, measured on the Dissociative Experiences Scale (Bernstein & Putnam, 1986) and absorption, $r=0.47$, $p=0.01$, measured on the Tellegen Absorption Scale (Tellegen & Atkinson, 1974). These results were replicated in a study of 113 veterinary technicians; pet attachment was significantly correlated with dissociation ($r=0.37$, $p<0.01$) as well as three dissociation subscales (imaginative involvement-absorption ($r=0.38$, $p<0.01$), activities of dissociated states or amnesia ($r=0.30$, $p<0.01$) and depersonalization–derealization ($r=0.24$, $p<0.05$)) (Brown & Katcher, 2001).

The association of adverse family environmental factors such as inconsistent parenting and discipline during childhood with dissociation in adulthood have been recognized (Lyons-Ruth, Dutra, Schuder, & Bianchi, 2006). As Cassidy and Mohr (2001) have suggested, children of abusive or frightening caregivers are placed in a position of accepting an intolerable vision of themselves as hated. These children may attempt to cope by suspending processing of the contents of their caregiver's, as well as their own, minds, which may reduce their capacity for reflecting on other's mental states. It has also been reported that individuals who experience early trauma may defensively inhibit their capacity to mentalize (e.g., understand or empathize with the mental states of others) to avoid having to think about their caregiver's apparent intent to harm them (Dinn, Harris, & Raynard, 1999; Fonagy, 2000). Trauma has the potential to alter structure and function of the developing brain. For example, abuse and neglect may alter prefrontal and limbic circuits, resulting in impaired facial emotion processing in children (Lee, 2006).

As will be discussed, childhood histories of parental abandonment, abuse, and neglect are commonly reported by adult animal hoarders. Thus, we contend it is quite plausible that any deficit developed in ability to mentalize or to process facial, postural, or behavioral indicators of animal distress would inevitably impair the hoarder's appreciation of the subjective experiences of sentient animals. Derealization symptoms that can be associated with dissociation (Holmes et al., 2005) may also help explain the apparent lack of insight of animal hoarders. Threats to the hoarder's way of life, which could include interference from outsiders or deterioration and sickness of the animals, could in turn reinforce the need to dissociate in order to maintain their desired world view.

3. Developmental factors to consider

Grisham et al. (2006) have suggested that compulsive hoarding develops as a result of conditioned emotional responses associated with certain thoughts and beliefs. Our experience with animal hoarders suggests early childhood events, particularly dysfunctional or absent parenting, as well as how a child responds to these and other traumas, plays an important role in shaping beliefs and future behaviors concerning animals. Therefore, understanding the specific role of animals during child development and/or adult experiences is essential to appreciating the ego-syntonic components of animal hoarding behavior.

3.1. Attachment to animals in childhood

Melson (2001, 2003) has described the positive aspects of pet ownership and interaction during healthy child development. Her findings indicate that pets are readily accessible and perceived to be safe; consequently, children derive emotional support from pets, share secrets with pets, and believe pets can be confidants with no risk of betrayal. Children may consider ties with pets to be lasting and dependable. Pets also allow development of nurturance skills, and may even be used to triangulate family communication. Kidd and Kidd (1995) reported how in a study of 242 grade school children's drawings, those who owned pets drew their pets significantly closer to their self-figure than to human family members ($p<0.01$). Triebenbacher (1998) interviewed a sample of 94 boys and 80 girls in preschool through grade 5 and examined their relationship with pets. Children perceived pets as family members and special friends, and as providers of emotional support. This bond is so powerful that even preschoolers are able to articulate the reciprocal nature of the relationship. In addition, Alper (1993) and Brown (2004) have discussed how animals may play valuable roles in fulfilling the selfobject needs of children, providing acceptance and support that contribute to a positive self-image.

The importance of secure attachment in early childhood for normal emotional development and regulation is well-established (Cassidy & Mohr, 2001; Levy, 2005; Lyons-Ruth et al., 2006). Attachment is so essential that when primary caregiver attachment fails, the alternative is to develop a relationship with a secondary attachment figure (Flores, 2004; Levy, 2005; Nakash-Eisikovits, Dutra, & Westen, 2002; Young, 2005). The reliance on companion animals during childhood, as reported by many animal hoarders in our clinical samples, highlights the need to explore the role of pet attachment in less-than-ideal developmental situations, when something is needed to buffer, as Lyons-Ruth et al. (2006) have described, the "hidden trauma of caregiver unavailability". For example, it might be logical to assume that through their ability to provide predictable intimacy and security without fear of rejection, animals could play a major role in helping children facing stressful, chaotic, or traumatic situations by serving as an alternative attachment figure.

Rynearson (1978) has suggested that children in dysfunctional families may use the pet, which is consistently receptive as an object of love and care, as a means of escape and as a substitute for human relationships. Rynearson argues that such an attachment may become pathological because it focuses on an animal figure that responds too narrowly, compared to a mature human adult. For example, unlike a human caregiver, a companion animal cannot provide guidance for a child. Nevertheless, to paraphrase Young (2005, p. 11), this child–animal interaction may nevertheless serve as "the heartbeat for all future relationships".

3.2. Disordered attachment and personality disorders

In circumstances when a secure attachment figure is consistently unavailable, children are at risk of a disorganized attachment style, resulting in a concept of self as unlovable, a longing for intimacy coupled with actions that demonstrate concern about dependency and rejection, and a fear of closeness (Cassidy & Mohr, 2001). In this worst case scenario when an organized attachment strategy cannot form, a

child's internal working models of human caregivers can become fragmented, incoherent, and incompatible (Main & Solomon, 1990). The disorganized attachment style that can result is closely correlated with, and may predispose an individual to, personality disorders (Agrawal, Gunderson, Holmes, & Lyons-Ruth, 2004; Levy, 2005; Nakash-Eisikovits et al., 2002; Page, 2001). Childhood adversity and physical discipline in particular were also significantly associated with object hoarding in a community-based sample of persons with personality disorder (Samuels, Bienvenu, Grados et al., 2008), $p < 0.001$, as well as in another community sample (Hartl et al. (2005), $p = 0.001$).

Primary traits associated with various types of personality disorders (summarized by Livesley, 2007) are, in our experience, frequently expressed in animal hoarders. These include anxiousness, avoidant or insecure attachment, cognitive dysregulation, conduct problems, egocentrism, emotional reactivity, exploitativeness, lack of empathy, narcissism, hostile dominance, oppositionality, and suspiciousness. These traits are particularly obvious in the type of hoarder termed the "exploiter hoarder," who has marked psychopathic characteristics,³ including lack of empathy towards people or animals (Patronek et al., 2006). Although we acknowledge the potential buffering capacity of a non-human attachment figure during childhood, we agree with Rynearson (1978) that it seems unlikely animals could fully counteract the predisposition to personality disorder and other pathology associated with early attachment deficits (Cassidy & Mohr, 2001; Lyons-Ruth et al., 2006).

3.3. Compulsive caregiving and self-repair

It has been noted that children whose experiences leave them unable to form an organized attachment strategy frequently reorganize their attachment behaviors into controlling strategies designed to maintain caregiver involvement (Cassidy & Mohr, 2001; Lyons-Ruth et al., 2006; Main & Solomon, 1990). The relationship of hoarders to their animals appears remarkably similar to that noted for compulsive caregivers and their human dependents. A compulsive need for control, coupled with a desire to continue accumulation despite deteriorating conditions, is almost universal in our experience with animal hoarders. Thus, it is not surprising that these individuals have been described as "addicted" to animals.

Compulsive caregiving has been described as selecting vulnerable individual(s) with a (perceived) sad or difficult life and giving that care obsessively, whether wanted or not, and whether the cared-for has actually suffered a real loss, or is just believed to have done so (Bowlby, 1980, as cited in Flores, 2004, p. 66). This care may be of value to the cared-for individual for a period, but eventually becomes an intensely undesired relationship when the cared-for objects to the loss of independence and choice (Flores, 2004; Rynearson, 1978). Flores (2004) has provided a compelling argument for an empirical link between attachment disorder and compulsive caregiving, particularly with respect to how unsatisfactory attachment during childhood leaves a person vulnerable to addictive-type behaviors in an effort to self-repair. Young (2005) has also discussed how accumulation and control can be utilized to attempt to mitigate internal pain, but emphasizes that such a strategy is doomed to failure as it only further diminishes the self. It seems perfectly consistent that similar attempts would be equally unsuccessful when applied to animals.

Although the soothing presence of companion animals during childhood may have already established a fertile soil for developing compulsive caregiving and a controlling interdependent relationship with animals, not every animal hoarder has a history of deep attachment to animals in childhood. Indeed, need for selfobject responsiveness is not confined to childhood, and persists throughout adult life (Brown, 2004). Therefore, it is not surprising that some people may first seek to establish self-reparative relationships with animals following positive experiences with pets in adulthood (Brown, 2004).

Attachment theory provides an appealing foundation for understanding how and why this might occur, but is only just beginning to be applied to the study of human–animal relationships. For example, Beck and Madresh (2008) used the Relationship Questionnaire and the avoidance and anxiety scales from the Experiences in Close Relationships–Revised Questionnaire to compare relationships with pets and romantic partners. Pet relationships were rated as more secure than for partners on every measure. As Sanders (1990) has noted, self-definition of being worthy of affection can be reinforced by a stable, emotionally rewarding, non-judgmental relationships with animals.

Although the paths to hoarding may vary, animals would seem to be the perfect focus for these attempts at self-reparative relationships because there is clearly an ample supply of those perceived to be disadvantaged (e.g., unwanted, sick, stray, feral) and who cannot refuse "care," being easily held captive or controlled. Thus, animals may be the solution for the person agonizing over how to satisfy their longing for intimacy in the face of a paralyzing fear of rejection and abandonment by humans. Indeed, by positioning him/herself as a rescuer, shelter or hospice, a hoarder may believe s/he has acquired a socially acceptable persona and use this to deflect external criticism of his/her failed efforts to properly care for animals.

4. Clinical approach to animal hoarding

Similar to object hoarding, animal hoarding is a difficult clinical problem to manage. Grisham et al. (2006) have emphasized that compulsive hoarding is a consistent predictor of treatment dropout, failure, or worse outcome in patients with OCD. Steketee and Frost (2003) have emphasized the tendency of compulsive object hoarding to run a chronic and unchanging course. In our experience, without counseling intervention, recidivism in animal hoarding is the norm and may approach being universal (Berry et al., 2005; Marquis, 1996).

As Saxena (2008a) has noted, there have been no controlled trials of pharmacotherapy or cognitive behavioral therapy for object hoarding. However, open trials have shown some value for both serotonin reuptake inhibitors and cognitive behavioral therapy, used alone or in combination (Hartl & Frost, 1999; Saxena, 2008a; Saxena, Brody, Maidment, & Baxter, 2007; Tolin, Frost, & Steketee, 2007). There are no published data available concerning intervention and treatment in animal hoarding. For therapists, this is significant because, increasingly, psychological assessment and/or treatment are likely to be ordered or requested as part of pre-trial proceedings, negotiated settlements, or conditions of probation for hoarders convicted of animal cruelty. It is our hope that the information presented in this paper will provide a basis upon which clinicians can use to focus their own approach, counseling style, assessment and methods of treatment.

We believe it is most effective if the clinician approaches a case with a broad perspective and without any presupposition of OCD. S/he should be comfortable diagnosing and treating a wide spectrum of psychological disorders, and the more severe Axis II disorders in particular (e.g., personality disorders). Addressing these comorbid disorders, as well as exploring issues of loss, complicated grief, vulnerability, isolation, and attachment, may help mitigate animal hoarding behavior, or at least facilitate intervention. Truly understanding the role of the animals throughout the hoarder's life is critical, and the nature of those relationships with respect to the centrality of the animals to the hoarder's identity, self esteem, and sense of control must be fully probed for effective counseling.

4.1. Pitfalls

There are pitfalls that must be recognized and overcome in order for counseling to be productive in these situations. For example, at the most basic level, there have been cases where therapists assumed that, once the animals were removed (e.g., after prosecution), the problem was solved, failing to appreciate that filth and compromised living spaces

³ For an interesting case history, see Marquis (1996).

were the result of the obsessive need to accumulate animals, and not the cause of the hoarder's difficulties.

As Dinn et al. (1999) have emphasized, long-term traumatic childhood stress can generate considerable anxiety and promote development of a cognitive style characterized by exaggerated threat appraisal. This can result in a state of enhanced responsiveness and a lowering of the threshold for stimulation, resulting in hypervigilance to cues that signify threats to the status quo (Dinn et al., 1999). In our experience, exaggerated threat appraisal and hypervigilance are quite common among animal hoarders, who tend to be very wary of authorities or anyone offering help, particularly if help is perceived to involve downsizing or intrusion into their sphere of control. Overcoming such resistance to improve their conditions is a major barrier to intervention and establishing a therapeutic relationship. For hoarders whose primary relationship has been animals, it may be very difficult to relate to or trust another person.

When a treatment plan is initiated, it may be further complicated by a plethora of cognitive impairments, including lack of insight, poor abstract reasoning, difficulty understanding cause and effect, poor problem solving skills, and difficulty organizing, planning, and executing a task. Additionally, as delineated above, these highly complex cases are likely to require long-term counseling intervention which the hoarder feels is an unjustified intrusion into their 'peaceable kingdom'.

4.2. Mandated therapy

Most counseling referrals for animal hoarding are not self-initiated, thus an inconsistent or non-compliant response commonly occurs. Often therapy is mandated as part of a law enforcement process related to prosecution for animal cruelty. Since animal hoarders have little motivation to seek or comply with treatment, as well as pay for services, consistent and substantive communication between the therapist and the parole officer is necessary to monitor compliance and to ultimately confirm that the terms and conditions prescribed by the clinician have been fulfilled in order that the client-counselor relationship can be maintained. In those circumstances, the following criteria must be addressed:

- Specification of the individual(s) involved in both providing and monitoring treatment
- Provision of information about the role of animals in the situation to the treating professional(s)
- Specification of the length and frequency of counseling
- Stipulation of terms for monitoring during the probationary period, ideally with the involvement of an animal welfare professional
- Identification of resources for payment of mental health services and the fulfillment of its total cost
- Provision of a summary report to the probation officer or court

5. Future research

We present this paper to encourage additional studies and more comprehensive approaches to clinical intervention in animal hoarding. To date, our data are primarily from cross-sectional studies focusing on hoarding situations that represent the culmination of many years of adverse life experiences and stressors. A longitudinal portrait of hoarders' lives is needed, and in some case could be obtained through interviews of their adult children or siblings.

Patterns of childhood, adolescent, and adult attachment to animals need to be investigated in more depth, with due attention to the range of developmental factors and life events that may contribute to over-reliance on companion animals for attachment and support. As Lyons-Ruth et al. (2006, p.70) emphasize with respect to childhood experience, caregiver unavailability may be a "hidden trauma...woven into the fabric of interaction between caregiver and infant... that does not stand

out as a salient event to the observer." A better understanding of life experience immediately prior to onset of hoarding is critically needed to elucidate the role of traumatic triggering events and complicated grief. Comorbid psychological disorders need to be explored in more depth using validated diagnostic instruments. The preliminary typology of hoarders that has been proposed (i.e., overwhelmed caregiver, rescuer, and exploiter hoarders) (Patronek et al., 2006) remains to be confirmed in clinical samples, and correlated with other measures of psychological status. All of this information is needed if intervention and therapy are to become data driven. We trust that this paper will encourage such efforts.

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