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Hoarding in the Community: A Code Enforcement and Social Service Perspective

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ABSTRACT. Hoarding behaviors endanger individuals and their communities. Although there is a growing literature on clinically referred and elderly hoarders, there is limited information about hoarding behaviors beyond these contexts. This study examines the frequency, characteristics, and outcomes of cases involving hoarding encountered by code enforcement officials and social service staff. Prior to an in-service training, 236 social service staff members completed a 43-item survey about their experiences with cases involving hoarding. Respondents reported encountering between two and three cases per year. Although these hoarding cases were estimated to cost more than $3,700 in cleaning fees, 83% of respondents reported having received no prior training on dealing with hoarding. Survey responses suggested that hoarding situations were difficult to resolve and involved multiple community agencies. Collectively, hoarding behaviors appear to be a problem regularly encountered by social service members, who often serve as the initial point of contact. Along with increased training, future research is needed to develop and evaluate collaborative interagency protocols to manage this multifaceted problem. Empirically informed interagency protocols may facilitate the timely referral of community hoarders to mental health professionals and may lead to improved outcomes.

KEYWORDS. Compulsive hoarding, community health, animal hoarding, social service, interagency management

Compulsive hoarding is a mental health condition that is characterized by: 1) the acquisition of a large number of possessions that appear to be useless or of limited value; 2) the inability and/or subsequent failure to discard these acquired possessions; 3) living spaces sufficiently cluttered so as to preclude activities for which those spaces were designed; and 4) significant distress or impairment in functioning caused by hoarding behaviors (Frost & Hartl, 1996). Epidemiological

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studies suggest that somewhere between 2.3% and 14% of the general population have a significant problem with hoarding (Pertusa et al., 2010). When present, severe hoarding behaviors can cause economic and social burden to individuals (Tolin, Frost, Steketee, Gray, & Fitch, 2008) and result in a diminished quality of life (Saxena et al., 2011). Distinct from many other mental health conditions, hoarding behaviors not only pose a concern to the individual, but also present a considerable risk to the surrounding community (Frost, Steketee, & Williams, 2000).

Early accounts of hoarding suggested that these behaviors often occurred in older adults (15–25%; Marx & Cohen-Mansfield, 2003). Although a concern in older adults, hoarding behaviors have been reported to develop much earlier in life. Indeed, self-identified adult hoarders reported that their hoarding symptoms often developed prior to 20 years of age (Tolin, Meunier, Frost, & Steketee, 2010). As such, there appears to be a spectrum of saving and/or hoarding behaviors that develop and eventually cause impairment in functioning (Frost & Gross, 1993; Grisham, Frost, Steketee, Kim, & Hood, 2006). Although hoarding behaviors are suggested to occur across the spectrum of development, there has been minimal examination of hoarding behaviors in childhood through early adulthood (Coles, Frost, Heimberg, & Steketee, 2003; Storch et al., 2007, 2011).

Aside from examinations in elderly or aging populations, treatment-seeking samples have served as another cornerstone for information on hoarding behaviors. Clinically referred and treatment-seeking samples have yielded informative findings that have helped to characterize hoarding phenomenology (see Grisham & Norberg, 2010, for a review). Alternatively, it is mentionable that few hoarders seek treatment of their own volition for a variety of factors (e.g., limited insight, awareness, proximity of service providers; see Tolin, 2011, for further detail). For instance, clinical referrals and treatment-seeking behaviors are often precipitated at the request of family members, threat of eviction, or pending housing condemnation (Tolin, Fitch, Frost, & Steketee, 2010; Tolin et al., 2008). As such, cases presenting for clinical treatment may have chronic and persistent symptoms and/or may exhibit greater severity than cases that have not reached a treatment-seeking threshold. Indeed, there is a marked discrepancy between the report of symptom onset and the average age among treatment-seeking individuals (48–54 years of age; Saxena, Brody, Maidment, & Baxter, 2007; Steketee, Frost, Tolin, Rasmussen, & Brown, 2010). For those individuals who complete treatment, both cognitive-behavioral therapy (Ayers, Wetherell, Golshan, & Saxena, 2011; Steketee et al., 2010; Tolin, Frost, & Steketee, 2007) and psychopharmacology have been reported to produce modest reductions in hoarding-symptom severity (Saxena et al., 2007). Timely referrals for treatment that occur closer to symptom onset may bolster the modest reductions in hoarding-symptom severity offered by current treatments.

As mental health professionals primarily encounter severe hoarding cases mandated to treatment, there likely exists a spectrum of hoarding cases that remain unexamined. As an alternative to relying primarily on reports from mental health professionals, information provided by other professionals who encounter hoarding cases with community settings may offer useful insights. Because environmental and health-related risks posed by hoarding cases are often brought to the attention of social service and governmental agencies (e.g., social service agencies, code enforcement, and health departments), these agencies can provide a new perspective on the severity and characteristics of hoarding cases in the community.

Several research reports have relied upon third-party informants to gather information on hoarding behaviors (e.g., family members, nursing staff, and physicians). Frost and colleagues recognized the utility of community professionals' perspective and examined the frequency and nature of hoarding complaints encountered by the health department in Massachusetts during a 5-year period (Frost et al., 2000). Of the health department officials responding to the mailed surveys ($n = 88$), 64% reported encountering at least one hoarding complaint in the past 5 years, with most complaints lodged by neighbors, police, or fire department officials (Frost et al., 2000). Respondents described hoarders as having poor insight into the sanitation of their home, with less than a third of these cases indicating cooperation with health department officials to resolve the situation (Frost et al., 2000).

Similarly, Steketee and colleagues interviewed social service providers working with elderly adults to assess hoarding behaviors in relation to functional impairment, cognitive deficits, and other physical and psychological conditions (Steketee, Frost, & Kim, 2001). Health care providers ($n = 44$) reported that elderly hoarders were predominantly unmarried women who lived alone, and they described them as having poor insight into their symptoms and being resistant to change. Furthermore, Tolin and colleagues used an Internet survey to elicit information from families and friends of individuals with hoarding problems (Tolin, Fitch, et al., 2010). Informants rated the individual's hoarding severity and level of insight and estimated the individual's response to the same questions (Tolin, Fitch, et al., 2010). More than half of the 558 respondents reported that their respective individuals had poor-to-delusional insight into hoarding behaviors, and they believed the individuals would likely underreport hoarding severity. Across these examples, third-party informants appear to provide useful information that may have been overlooked had only mental health practitioners or hoarders themselves provided responses.

In summary, there is a spectrum of hoarding behaviors that are reported to exist, with few examinations of hoarding behaviors going beyond clinically referred and aging populations. Third-party informants who may often encounter hoarding cases in a community setting can provide detailed information on hoarding cases that may be unavailable to mental health professionals. In the present study, social service staff members and code enforcement officials responded to a survey about their professional experiences with individuals with hoarding behaviors. This report investigates the frequency, severity, and characteristics of hoarding situations encountered by these community-based professionals. Furthermore, this report explores the training received by these professionals and outcomes from their reported hoarding cases. First, we examined the frequency, cost, and resolution of hoarding cases identified in the community. Second, we investigated the previous training on hoarding received by code enforcement officials and adult social service workers. Third, we examined the characteristics of hoarding cases encountered by participants within the past year. Finally, we explored outcomes from these cases in detail to understand the current role of mental health professionals and other social service agencies (e.g., health departments, animal control) in these cases.

METHOD

Participants

Participants attended one of two in-service trainings conducted in the state of Florida that were led by study authors (J. F. M. and E. A. S.). In-service trainings provided information about the psychological model of hoarding behaviors, informed attendees about family and environmental contexts of hoarding cases, and offered strategies and resources to help manage hoarding situations. Respondents included 197 code enforcement officials (years of work experience, $M = 10.1$, $SD = 7.18$) and 39 adult social service workers (years of work experience, $M = 6.6$, $SD = 7.13$).

Procedures

Prior to the in-service training, participants were invited to complete a 43-item survey about their professional experience with hoarding. Surveys were passed out to all in-service training attendees. Attendees who were interested in participating completed the survey items, while those attendees who declined to participate did not complete the survey. This survey was modeled after the one used by Frost et al. (2000), included both multiple-choice and free-response questions, and was approved by the local institutional review board. In an attempt to calibrate respondents' responses about hoarding situations, the survey provided a definition of compulsive hoarding outlined by Frost & Hartl (1996). The survey began with a question about the frequency of cases encountered by the respondent that met criteria for the definition of compulsive hoarding within the past 12 months (1 item). This question was followed by several questions that assessed the nature and resolution of encountered hoarding cases (6 items). Additional questions focused on the financial costs associated with hoarding and the respondents' previous training on hoarding (6 items). If the

participant reported professionally encountering a hoarding case, then the participant was invited to complete detailed questions about their most recent hoarding case. These included questions about the personal characteristics of the reported hoarder, descriptions of the home environment, ratings of severity, and resolution of the case (30 items). A copy of the survey used is available from the authors by request.

Analysis

Data analyses were conducted using IBM Statistical Package for the Social Services Version 19 software. Descriptive statistics were calculated to ascertain the frequency, cost, resolution, and reoffense of hoarding cases. As the total number of social service staff was unavailable for the Department of Children and Families (DCF), only code enforcement responses were used to estimate the statewide prevalence of hoarding. Descriptive statistics were provided on respondents who professionally encountered a case involving hoarding within the past year. Respondents who omitted any survey items were removed from analysis using pairwise/listwise deletion.

RESULTS

Frequency, Cost, Resolution, and Reoffense of Hoarding

On average, respondents encountered between two and three cases that met criteria for compulsive hoarding during a 12-month period. Approximately two thirds of respondents (67%) reported encountering between one and five instances during the past year (see Table 1). Collectively, respondents reported that the average cost for clutter removal per case was $3,733. Although not mutually exclusive, responses to hoarding situations included materials being removed, referrals for counseling services, legal action, fines, and eviction. As more than a third of cases required a year or more to resolve, hoarding cases encountered in nonclinical settings appear to be a challenge. Indeed, difficulty resolving hoarding situations may help explain why 52% of respondents reported encountering a "repeat" hoarding offender within the past year.

Prevalence of Hoarding

There was no difference between the percentage of code enforcement and DCF social service staff that encountered a hoarding situation in the previous 12-month period ($p > .05$). As such, code enforcement responses were used to estimate hoarding prevalence rates. According to the Florida Association of Code Enforcement, approximately 2,500 enforcement officers serve the state population of more than 18 million people (M. Caskie, personal communication, September 29, 2011). Census data estimate that approximately 14,800,000 of these residents are older than 18 years of age (U.S. Census Bureau, 2010). Applying the distribution of case frequency reported by this sample of code enforcement officers (zero cases = 25%; one case = 20%; two cases = 24%; three cases = 12%; four cases = 7%; five cases = 5%; six cases = 7%), it was estimated that 4,900 cases meeting criteria for compulsive hoarding are encountered by code enforcement annually in Florida. Given this approximation, the 12-month prevalence rate was calculated to be 33 per 100,000. Applying the estimated median cost of clutter removal for these cases, costs associated with removing accumulated clutter totaled more than $8.3 million per year ($18.2 million per year if average cost is applied).

Service Training

Despite frequent encounters with hoarding, respondents disclosed that their respective departments did not have a standardized protocol for managing a hoarding situation (see Table 1). Moreover, most respondents indicated they had not received training on hoarding prior to the current in-service training. For those respondents who reported receiving prior training, the most common response was an attendance of a similar educational seminar.

Characteristics of Individuals With Hoarding Behaviors

Of the 236 respondents, 81% ($n = 191$) provided detailed information about a professional

TABLE 1. Frequency, Duration, Resolution, Reoffense, and Estimated Cost and Training on Hoarding ($N = 236$)

	N (%)	
Frequency of Hoarding Case Encountered		
Zero	57 (24%)	
One	43 (18%)	
Two	51 (22%)	
Three	34 (14%)	
Four	19 (8%)	
Five	11 (5%)	
Six or more	21 (9%)	
Duration Until Hoarding Case Resolved		
Less than 1 month	5 (2%)	
Between 1 and 3 months	37 (16%)	
Between 4 and 7 months	25 (11%)	
Between 8 and 12 months	29 (12%)	
More than 12 months	33 (14%)	
Situation not resolvable	60 (25%)	
Nonapplicable or missing	47 (20%)	
Responses and Resolutions to Hoarding Situation*		
Clutter/materials removed	113 (48%)	
Referred for counseling	83 (35%)	
Legal action	59 (25%)	
Fines levied	53 (22%)	
No resolution	39 (17%)	
Eviction	40 (17%)	
Other actions taken	32 (14%)	
Nonapplicable or missing	22 (9%)	
Encountered Repeat Offenders of Hoarding		
Yes	123 (52%)	
No	59 (29%)	
Nonapplicable	44 (19%)	
Previous Training on Hoarding Provided by Department*		
Yes	37 (15%)	
Educational seminar	25 (68%)	
Educational coursework	8 (22%)	
Pamphlet	5 (14%)	
Other	4 (11%)	
No	196 (83%)	
No response or missing	6 (2%)	
Existence of a Departmental Protocol to Address Hoarding		
Yes	23 (9%)	
No	200 (85%)	
No response or missing	13 (6%)	
	Mean (*SD*)	Median (Range)
Estimated Cleaning and/or Trash Removal Costs	$3,733.00 ($6,478)	$1,700 ($0–$50,000)

*More than one response could have been endorsed.

encounter with hoarding that occurred within the past 12 months. Across these community encounters, the most common demographic characteristics included being aged 46 to 75 years old (73%), Caucasian, and unmarried (64%; see Table 2). Consistent with previous third-party informants (Steketee et al., 2001; Tolin, Fitch, et al., 2010), hoarding cases frequently involved women more often than men. Although most individuals engaged in hoarding behaviors appeared to be retired or unemployed, some remained employed or received disability services. In approximately 95% of the reported cases, individuals who hoarded were reported to be either

TABLE 2. Characteristics of Hoarders ($N = 191$)

	N (%)
Age	
Younger than 30 years of age	7 (4%)
31–45 years	12 (6%)
45–60 years	66 (34%)
61–75 years	73 (38%)
75 years or older	22 (12%)
Not indicated or missing	11 (6%)
Gender	
Female	96 (50%)
Male	76 (40%)
Not identified or missing	19 (10%)
Race	
White/Caucasian	165 (86%)
Black	9 (5%)
Asian	1 (0.5%)
Hispanic/Latino	1 (0.5%)
Other	2 (1%)
Unknown, not identified or missing	13 (7%)
Marital Status	
Single	60 (31%)
Married/significant other	37 (19%)
Divorced	26 (14%)
Widowed	36 (19%)
Unknown, no response or missing	32 (17%)
Employment Status	
Employed	31 (16%)
Unemployed	45 (24%)
Retired	60 (31%)
On disability	27 (14%)
Student	1 (0.5%)
Unknown or missing	27 (14%)
Rationale for Hoarding*	
No explanation	80 (42%)
Emotional attachment	48 (25%)
Memory-related concerns	17 (9%)
Desire for control	9 (5%)
Responsibility for items	23 (12%)
Other rationale offered	16 (8%)
Insight Into Behavior	
No insight	56 (29%)
Little insight	74 (39%)
Moderate insight	35 (18%)
Insightful	16 (8%)
No response or missing	10 (5%)
Motivation to Change Behavior	
No motivation to change	63 (33%)
Little motivation to change	68 (36%)
Some motivation to change	40 (21%)
Moderate motivation to change	9 (5%)
Very motivated to change	2 (1%)
No response or missing	9 (4%)
Mental Health Treatment Status	
Yes	10 (5%)
No	77 (40%)
Unknown or missing	104 (55%)
Social and Community Contacts	
No friends or community involvement	48 (25%)
Few friends/little community involvement	57 (30%)
Some friends/some community involvement	17 (9%)
Regular friends/regular community involvement	11 (6%)
Unknown or missing	58 (30%)

*More than one response could have been endorsed.

not receiving any mental health service or having an unknown treatment status.

Detailed Characteristics of Hoarding Situations

Participants indicated hoarding complaints originated from multiple sources, which included neighbors, strangers, and local officials (e.g., fire department, police; see Table 3). Instances of hoarding were characteristically reported to be in single-family homes that were located in suburban neighborhoods and were described as "extremely cluttered." Most often, the clutter was reported to cause moderate-to-severe interference in daily functioning. Respondents reported that most to nearly all of each encountered home was difficult to walk through because of clutter. Across these reported situations, cases frequently presented fire and health risks to occupants, as well as health risks to the surrounding residential community (see Table 3).

Hoarding of Animals

Hoarding of animals was frequently reported across cases. When hoarding of animals was reported ($n = 129$), it regularly occurred alongside hoarding of inanimate objects as well (51%). Although hoarding of inanimate objects alone (without animals) occurred in 47% of the cases, animal hoarding alone appeared infrequently (2%).

Insight and Motivation to Change

Similar to other studies utilizing third-party informants (Tolin, Fitch, et al., 2010), individuals who hoarded were reported to have little to no insight into their behaviors (see Table 2). Additionally, most individuals did not provide any rationale for their hoarding behaviors. For those who attempted to justify their hoarding behaviors, emotional attachment and a sense of obligation toward hoarded items (e.g., animals) were the most commonly endorsed reasons. Respondents also indicated that individuals who hoarded expressed little to no motivation to change their current behaviors.

TABLE 3. Characteristics of Community Hoarding Reports ($N = 191$)

	N (%)
Initiation of Hoarding Complaints*	
Neighbor or fellow tenant	102 (53%)
Stranger	71 (37%)
Fireman or policeman	48 (25%)
Social service agency	29 (15%)
Relative	21 (11%)
Service person visiting home (e.g., nurse)	18 (9%)
Friend or acquaintance	17 (9%)
Anonymous or unknown	9 (5%)
Family member or roommate	6 (3%)
Type of Residence	
Single-family home	131 (69%)
Duplex	5 (2%)
Apartment or condo	14 (7%)
Mobile home	34 (18%)
Other housing	5 (3%)
No response or missing	2 (1%)
Type of Neighborhood	
Urban	45 (23%)
Suburban	114 (60%)
Rural	29 (15%)
No response or missing	3 (2%)
Level of Clutter	
Not at all cluttered	1 ($<$ 1%)
Somewhat cluttered	9 (4%)
Moderately cluttered	23 (12%)
Extremely cluttered	156 (82%)
No response or missing	2 (1%)
Interference	
No interference	14 (7%)
Mild interference	20 (11%)
Moderate interference	60 (31%)
Severe interference	56 (29%)
Extreme interference	34 (18%)
No response or missing	7 (4%)
Much of Home Was Difficult to Walk Through	
None	4 (2%)
Some	28 (15%)
Much	26 (14%)
Most	58 (30%)
All or nearly all	55 (29%)
No response or missing	20 (10%)
Hazards and Risks of Hoarding*	
No risk present	4 (2%)
Fire risk	140 (73%)
Health risk to occupants	140 (73%)
Health risk to residential community	108 (57%)
Other hazard and/or risk (e.g., falling)	16 (8%)

*More than one response could have been endorsed.

TABLE 4. Case Resolution ($N = 191$)

	N (%)
Resolution to Hoarding Cases*	
Hoarding not removed	35 (18%)
Hoarding removed	87 (46%)
Eviction	14 (7%)
Legal action taken	30 (16%)
Fine levied	19 (10%)
Referred to mental health services	53 (28%)
Other action taken	44 (23%)
Family Involvement in Resolution	
Yes	34 (18%)
Some involvement	41 (21%)
No	98 (51%)
No response or missing	18 (9%)
Response Team Involved in Resolution	
Yes	87 (46%)
Very resistant to response team	24 (28%)
Some resistance to response team	19 (22%)
Minimal cooperation with response team	28 (32%)
Cooperation with response team	14 (16%)
No response	2 (2%)
No	87 (46%)
No response or missing	17 (8%)
Agencies Involved in Resolving the Case*	
Animal welfare	52 (27%)
Mental health	56 (29%)
Fire department	53 (28%)
Police department	86 (45%)
Department of Aging	58 (30%)
Child welfare	12 (6%)
Justice system	40 (21%)

*More than one response could have been endorsed.

Situational Resolution

Multiple outcomes were reported for cases involving hoarding that included clutter being removed from the property, legal action, and fines levied (see Table 4). Notably, less than 30% of these detailed case reports indicated that the offenders were referred to mental health services. Family members of individuals who hoarded were reported to be mostly uninvolved in addressing the situation (see Table 4). In approximately half of the reported cases, a response team (e.g., clutter removal service) was used to resolve the situation, with most hoarding offenders exhibiting minimal to no cooperation. Along with response teams, multiple agencies (e.g., animal welfare, mental health, fire department, department of aging) were reported to be involved in resolving cases with hoarding (see Table 4).

DISCUSSION

The present study describes the frequency, cost, and resolution of hoarding cases encountered by code enforcement and social service

staff in community settings. Most sampled professionals encountered at least one hoarding case during the past year of service, which yielded a projected annual prevalence rate of 33 per 100,000 people. This estimation is substantially lower than rates reported by epidemiological studies (see Pertusa et al., 2010) but is consistent with other reports from social service samples (Frost et al., 2000). As described cases were reported to be extremely cluttered with individuals experiencing moderate-to-severe interference in daily functioning, it may be that a limited spectrum of hoarding behaviors was captured in this sample. Indeed, a baseline level of severity was needed to bring these cases to the attention of community professionals, and as a result, these projected prevalence rates are likely an underestimation of the true occurrence of the spectrum of hoarding that occurs within community settings.

For these reported cases, clutter removal fees were estimated to be $3,700 per case, which yields an annual estimated cost of $8.5 million. Although costly, these total expenses are likely an underestimation of the true cost of hoarding for two reasons. First, as mentioned before, the prevalence rates in the sample were lower than those that have been reported in epidemiological studies. As cases increase, so would the anticipated costs. Second, the projected costs only include clutter removal fees and do not account for case worker time and other relevant costs (e.g., legal fees, costs to landlords, additional costs to service providers). Indeed, community reports that have incorporated these broader costs have found markedly higher costs for hoarding behaviors. For example, the San Francisco Task Force on Compulsive Hoarding (SFTFCH) estimated that hoarding collectively costs $6.43 million per year to local landlord and social service providers (SFTFCH, 2009). Moreover, neither this report nor the SFTFCH estimation took into account the financial burden placed on individuals (e.g., health care, mental health care, job loss) or the additional costs associated with resolving hoarding cases (e.g., safety costs, legal and police costs, animal rescue costs).

Respondents found hoarding cases difficult to resolve and reported a likely chance of reoffense. These cases may have been difficult to resolve for several reasons. First, individuals who hoard are reported to exhibit resistance and may threaten violence when attempts are made to discard their hoarded items (Frost et al., 2000; Warren & Ostrom, 1988). As such, social service and code enforcement staff may be placed in difficult confrontational situations with no formal preparation. Second, respondents reported that many hoarders (25%) experienced extreme emotional attachment to their possessions. This substantial attachment may likely cause hoarders to not want to part with their revered possessions regardless of levied fines and impairment experienced. Third, and most importantly, respondents indicated that they had received minimal training on dealing with hoarding, and most did not have a standardized organizational protocol to follow in dealing with these complex cases. The minimal training and a lack of standardized protocols may impede social service staffs' ability to successfully navigate and resolve these complicated situations. Thus, there appears to be a clear need for improved formal training opportunities for social service staff. As only one third of reported cases received referrals to mental health professionals, future training opportunities should emphasize the timely referral of hoarding cases to mental health professionals. Moreover, as multiple agencies were reported to be involved in hoarding cases, the development of empirically informed interagency protocols may help social service staff resolve hoarding cases.

Beyond highlighting the cost, prevalence, and need for interagency collaborations, these findings offered two unique perspectives on cases of hoarding outside of clinical settings. First, respondents reported that individuals who hoarded frequently acquired inanimate and animate items, but rarely acquired animate items only. As some diagnostic questions remain about the potential symptom subtype of animal hoarding (Frost, Patronek, & Rosenfield, 2011), these findings suggest that animal hoarding rarely occurs by itself and is likely included in the natural phenomenology of hoarding behaviors. Further examination of animate hoarding by itself is needed to identify any distinct clinical features that may accompany this infrequent form of hoarding behavior. Second, hoarding situations were reported to pose considerable health

and fire risks to both individuals and their greater communities. If community awareness is raised about the health and environmental risks associated with hoarding, community members may become more invested in bringing those individuals who hoard to the attention of appropriate officials in a timely fashion. Along with the development of interagency hoarding protocols, timely case identification from community members may lead to more timely referrals to mental health professionals.

Although these findings are informative, the present study has several limitations. First, the sample was derived from code enforcement officials and DCF staff from the state of Florida and may not be representative of the U.S. population. This limitation is balanced by the fact that this study is one of the first to provide statewide-level information on hoarding behaviors from a large sample of respondents. Second, the survey nature of this study was susceptible to certain biases (e.g., nonresponse bias, voluntary response bias). Third, we were unable to objectively evaluate the severity of hoarding cases with a psychometrically validated instrument (e.g., Clutter Image Rating Scale; Frost, Steketee, Tolin, & Renaud, 2008). Beyond descriptive comparisons, the incorporation of standardized ratings would prove useful when comparing severity of clinical and community hoarding cases. Future research studies should attempt to rectify these shortcomings when sampling social service professionals. Finally, this report focused on individuals who hoarded possessions within the community. Although these individuals exhibited hoarding behaviors, it is important to note that these cases may not have all met the purposed diagnostic criteria for hoarding disorder. Indeed, there may be several other reasons that account for the accumulation of these hoarded items such as general medical conditions or other mental disorders (e.g., brain injury, psychosis, chronic alcoholism). However, because the third-party informants had no medical, psychiatric, or psychological training, it would be exceptionally difficult to rule out these alternative explanations for hoarding behaviors. Counterbalancing these limitations, this study had several strengths. First, this study provided the perspective of many professionals who regularly encounter hoarding cases in community environments. This firsthand perspective is particularly notable as most previous hoarding research has occurred within the context of clinical patients and elderly individuals. Second, the sample of respondents was considerably larger than previous research reports using social service professionals (88 health officers; Frost et al., 2000). Finally, the survey items provided detailed information about agencies involved in hoarding cases and about the resolution of hoarding cases. This information is important because it highlights that current training and approaches to managing hoarding cases are not yielding desired outcomes.

Hoarding is likely a chronic disorder, which if left untreated, may result in repeated offenses or more serious consequences (e.g., condemned home, eviction, health outcomes). Overall, this study provides important information on hoarding behaviors beyond clinical settings. In addition to providing prevalence, severity, and costs associated with community hoarding cases, this study highlights the minimal training and nonexistent agency protocols available to professionals who regularly encounter this problem. As multiple agencies were reported to be involved in hoarding cases, future research is needed to develop and evaluate collaborative interagency protocols to manage hoarding cases. The development and evaluation of interagency protocols can provide a systematic and empirically informed approach to addressing challenging hoarding situations encountered in the community. Furthermore, as there was limited involvement and referral to mental health professionals reported in the current study, the development of interagency protocols may facilitate timely referrals of hoarding cases to mental health professionals. Timely mental health intervention may reduce the current discrepancy between symptomatic onset and treatment and could result in improved outcomes for hoarding cases. Moreover, such therapeutic intervention may serve as an important step in reducing the reoffense rate of hoarding in community cases. Indeed, improved mental health outcomes of hoarders present an added benefit as they may reduce costs associated with hoarding behaviors (e.g., fewer repeat offenses) and may decrease the likelihood

of health and fire risks to individuals and communities alike.

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REFERENCES

Ayers, C. R., Wetherell, J. L., Golshan, S., & Saxena, S. (2011). Cognitive-behavioral therapy for geriatric compulsive hoarding. *Behaviour Research and Therapy*, *49*(10), 689–694.

Coles, M. E., Frost, R. O., Heimberg, R. G., & Steketee, G. (2003). Hoarding behaviors in a large college sample. *Behaviour Research and Therapy*, *41*(2), 179–194.

Frost, R. O., & Gross, R. C. (1993). The hoarding of possessions. *Behaviour Research and Therapy*, *31*(4), 367–381.

Frost, R. O., & Hartl, T. L. (1996). A cognitive-behavioral model of compulsive hoarding. *Behaviour Research and Therapy*, *34*(4), 341–350.

Frost, R. O., Patronek, G., & Rosenfield, E. (2011). Comparison of object and animal hoarding. *Depression and Anxiety*, *28*(10), 885–891.

Frost, R. O., Steketee, G., Tolin, D. F., & Renaud, S. (2008). Development and validation of the Clutter Image Rating. *Journal of Psychopathology and Behavioral Assessment*, *30*(3), 193–203.

Frost, R. O., Steketee, G., & Williams, L. (2000). Hoarding: A community health problem. *Health and Social Care in the Community*, *8*(4), 229–234.

Grisham, J. R., Frost, R. O., Steketee, G., Kim, H.-J., & Hood, S. (2006). Age of onset of compulsive hoarding. *Journal of Anxiety Disorders*, *20*(5), 675–686.

Grisham, J. R., & Norberg, M. M. (2010). Compulsive hoarding: Current controversies and new directions. *Dialogues in Clinical Neuroscience*, *12*(2), 233–240.

Marx, M. S., & Cohen-Mansfield, J. (2003). Hoarding behavior in the elderly: A comparison between community-dwelling persons and nursing home residents. *International Psychogeriatrics*, *15*(3), 289–306.

Pertusa, A., Frost, R. O., Fullana, M. A., Samuels, J., Steketee, G., Tolin, D., ... Mataix-Cols, D. (2010). Refining the diagnostic boundaries of compulsive hoarding: A critical review. *Clinical Psychology Review*, *30*(4), 371–386.

San Francisco Task Force on Compulsive Hoarding. (2009). *Beyond overwhelmed: The impact of compulsive hoarding and cluttering in San Francisco and recommendatiosn to reduce negative impacts and improve care*. Retrieved from http://www.sfaa.org/pdf/hoarding-report-2009.pdf

Saxena, S., Ayers, C. R., Maidment, K. M., Vapnik, T., Wetherell, J. L., & Bystritsky, A. (2011). Quality of life and functional impairment in compulsive hoarding. *Journal of Psychiatric Research*, *45*(4), 475–480.

Saxena, S., Brody, A. L., Maidment, K. M., & Baxter, L. R., Jr. (2007). Paroxetine treatment of compulsive hoarding. *Journal of Psychiatric Research*, *41*(6), 481–487.

Steketee, G., Frost, R. O., & Kim, H.-J. (2001). Hoarding by elderly prople. *Health and Social Work*, *26*(3), 176–184.

Steketee, G., Frost, R. O., Tolin, D. F., Rasmussen, J., & Brown, T. A. (2010). Waitlist-controlled trial of cognitive behavior therapy for hoarding disorder. *Depression and Anxiety*, *27*(5), 476–484.

Storch, E. A., Lack, C. W., Merlo, L. J., Geffken, G. R., Jacob, M. L., Murphy, T. K., ... Goodman, W. K. (2007). Clinical features of children and adolescents with obsessive-compulsive disorder and hoarding symptoms. *Comprehensive Psychiatry*, *48*(4), 313–318.

Storch, E. A., Rahman, O., Park, J. M., Reid, J., Murphy, T. K., & Lewin, A. B. (2011). Compulsive hoarding in children. *Journal of Clinical Psychology*, *67*(5), 507–516.

Tolin, D. F. (2011). Challenges and advances in treating hoarding. *Journal of Clinical Psychology*, *67*(5), 451–455.

Tolin, D. F., Fitch, K. E., Frost, R. O., & Steketee, G. (2010). Family informants' perceptions of insight in compulsive hoarding. *Cognitive Therapy and Research*, *34*(1), 69–81.

Tolin, D. F., Frost, R. O., & Steketee, G. (2007). An open trial of cognitive-behavioral therapy for compulsive hoarding. *Behaviour Research and Therapy*, *45*(7), 1461–1470.

Tolin, D. F., Frost, R. O., Steketee, G., Gray, K. D., & Fitch, K. E. (2008). The economic and social burden of compulsive hoarding. *Psychiatry Research*, *160*(2), 200–211.

Tolin, D. F., Meunier, S. A., Frost, R. O., & Steketee, G. (2010). Course of compulsive hoarding and its relationship to life events. *Depression and Anxiety*, *27*(9), 829–838.

U.S. Census Bureau. (2010). *U.S. Census of population*. Retrieved from http://www.census.gov/2010census/popmap/ipmtext.php?fl=12

Warren, L. W., & Ostrom, J. C. (1988). Pack rats: World class savers. *Psychology Today*, *22*, 58–62.

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