Historically, the compulsive hoarding of possessions has been examined in the context of other obsessive-compulsive disorders. More recently, researchers have begun to explore compulsive hoarding as a separate and distinct syndrome. The cognitive behavioral model proposed by Frost and Hartl suggests that deficits in information processing, emotional attachment problems, behavioral avoidance, and beliefs about the nature of possessions are important components in understanding compulsive hoarding. This article presents a case study of a successful intervention with a compulsive hoarder that addresses each of the components proposed in the model. Implications for future interventions are discussed.

# Intervention in Compulsive Hoarding

## A Case Study

JILL A. CERMELE
*Drew University*
LAURA MELENDEZ-PALLITTO
*Collier Services*
GAHAN J. PANDINA
*University of Medicine and Dentistry of New Jersey*

**Historically, psychology and psychiatry** have considered hoarding, or the acquisition and retention of seemingly useless objects, a compulsive personality trait (Greenberg, 1987). Within the current clinical and empirical literature, there is debate as to whether hoarding is a symptom of another psychological disorder or disorders or whether it should be considered a disorder in its own right. The *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition (*DSM-IV*) (American Psychiatric Association, 1994) lists hoarding of "worn out or worthless objects even when they have no sentimental value" as a symptom of obsessive- compulsive personality disorder (OCPD) (p. 673). Empirical research has demonstrated that hoarding behavior is related to specific symptoms of OCPD, such as indecisiveness and perfectionism (Frost & Gross, 1993). Although the *DSM-IV* does not list hoarding as a specific criteria for any other disorder, it has been linked in case studies to a wide range of psychopathology, including anorexia (Frankenburg, 1984), attachment disorders in children (Parker & Forrest, 1993), cognitive impairment (Goddaer & Abraham, 1994; Lane, Wesolowski, & Burke, 1989), and schizophrenia and psychotic disorders (Chong, Tan, & Lee, 1996; Luchins, 1990; Luchins, Goldman, Lieb, & Hanrahan, 1992). Greenberg, Witztum, and Levy (1990) conceptualized hoarding as a symptom that may represent a common thread between obsessive-compulsive, psychotic, and organic mental disorders. Hoarding has also been linked more broadly to dysfunctional behavior, such as problematic behavior in senior citizen centers (Salamon & Trubin, 1983) and self-neglect in adults (Vostanis & Dean, 1992).

However, references to hoarding appear most frequently in the literature and research on obsessive-compulsive disorder (OCD) (Baer, 1994; Ball, Baer, & Otto, 1996; Dykens, Leckman, & Cassidy, 1996; Frost, Krause, & Steketee, 1996; Greist & Jefferson, 1995; Leckman et al., 1997; Leonard, Swedo, & Rapoport, 1991; Rasmussen & Eisen, 1992), and case studies have cited hoarding as a key symptom in the diagnosis of OCD, although it is not a symptom in the diagnostic criteria for OCD (Greist & Jefferson, 1995; Leonard et al., 1991). Factor analyses of OCD assessment measures have found that hoarding obsessions and compulsions emerge as a distinct factor (Baer, 1994; Leckman et al., 1997). The frequency of hoarding in individuals diagnosed with OCD has been reported as ranging from one fifth (Rasmussen & Eisen, 1992) to almost one third (Frost et al., 1996) of OCD patients in clinic samples, although other researchers have disputed these prevalence estimates (see Ball et al., 1996).

More recently, researchers have begun to tease apart the relationship between hoarding, OCPD, and OCD by examining hoarding not

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only in the context of these disorders but as a distinct and unique syndrome. In 1987, Greenberg reviewed theoretical perspectives on the hoarding of objects and described four case studies of what he labeled *compulsive hoarding*. Warren and Ostrom (1988) presented anecdotal reports of "pack rats" and described reasons individuals gave for seemingly irrational collections, including future need of a possession, attachment to a possession, value of a possession, and distress at parting with a possession. This challenged the claim that hoarders collect supposedly useless items by articulating the value that hoarders attach to their possessions. In a qualitative study of hoarding behavior, Frost and Gross (1993) found support for these reasons, with future need of a possession the most frequent reason given for hoarding, followed by object worth (current or projected future worth) and sentimental value. In addition, their research indicated that some hoarders experience anxiety when confronted with discarding objects from their collections.

Frost and colleagues (Frost & Gross, 1993; Frost & Hartl, 1996; Frost, Hartl, Christian, & Williams, 1995; Frost et al., 1998; Frost et al., 1996; Frost & Shows, 1993) gathered the most extensive and detailed information about hoarders to date and empirically tested a number of hypotheses regarding why and how individuals hoard. Frost and Gross (1993) reported the development and validation of a Hoarding Scale that clearly discriminated between hoarders and nonhoarders. In testing some clinical hypotheses regarding the development and etiology of hoarding behavior, they found that hoarders save the same types of objects as nonhoarders, hoarders report more hoarding relatives than nonhoarders, hoarders are very worried about not having an object when it is needed, and there is no evidence that hoarders experienced higher levels of early deprivation than nonhoarders. Hoarding was associated with indecisiveness and perfectionism (Frost & Gross, 1993; Frost & Shows, 1993), suggesting that key issues in compulsive hoarding may be the inability to decide whether to discard an item or fear of making a poor decision regarding an item.

In a study investigating hoarders' use of and attachment to possessions, Frost et al. (1995) found that hoarding was associated with low frequency of use of possessions and concern with having control over



possessions. Hoarders reported distress when others would touch, move, or use possessions in their collections. In addition, hoarding was related to attachment to and seeking comfort from possessions. Finally, higher levels of hoarding were associated with heightened feelings of responsibility for and protection of possessions. This level of emotional attachment to hoarded items suggests another issue in the difficulty hoarders experience when confronted with discarding an item from their collections.

Frost et al. (1996) further investigated the relationship between hoarding behaviors and obsessive compulsive symptoms. They found that although there were no significant differences between hoarders and nonhoarders on measures of OCPD, hoarders were more likely to report a range of OCD symptoms and general psychological distress than nonhoarders, suggesting that hoarding may be reflective of more disorders than just OCD. However, they cautioned that the existence of hoarding behavior is not necessarily indicative of problems in functioning and that not all cases of hoarding necessitate intervention.

In their development of a cognitive-behavior model of compulsive hoarding, Frost and Hartl (1996) proposed the following definition of clinical compulsive hoarding:

> (1) the acquisition of, and failure to discard a large number of possessions that appear to be useless or of limited value; (2) living spaces sufficiently cluttered so as to preclude activities for which those spaces were designed; and (3) significant distress or impairment in functioning caused by hoarding. (p. 341)

This definition is important in that the mere acquisition of objects is not sufficient to fulfill the criteria; similar to the criteria for most mental disorders, to meet the requirements for clinical compulsive hoarding, an individual must experience both functional impairment and psychological distress in addition to engaging in hoarding behaviors.

This theoretical model proposes that compulsive hoarding is associated with deficits in information processing, emotional attachment problems, behavioral avoidance, and beliefs about the nature of possessions. Deficits in information processing include difficulties in making decisions about possessions, complexity of systems of categorization, low confidence in memory, and inaccurate judgments

about the importance of remembering certain things. These deficits would be related to the acquisition and saving of items, including the acquisition of items through compulsive buying (Frost et al., 1998), the clutter these items create, and the need to hold possessions for future use (Frost & Hartl, 1996).

Emotional attachment problems include hypersentimentality regarding items in a collection. This hypersentimentality encompasses both sentimental attachment to the physical possession and the reminder that possessions serve of meaningful past events. Behavioral avoidance describes the difficulty hoarders experience in discarding items in an effort to avoid feelings of anxiety about decision making, feelings of loss, and the overwhelming task of actually removing months or years of clutter. Finally, belief systems include beliefs about the importance of maintaining control over collections, which Frost and Hartl (1996) hypothesized may be related to emotional attachment and need for safety, beliefs about their responsibility to both protect items and have them available for future need, and beliefs related to perfectionism and fear of failure related to mistakenly discarding an important item.

This model offers a theoretical framework for compulsive hoarding and provides insight based on both qualitative and quantitative research into the nature of hoarding behaviors. This is especially useful in the area of intervention. Case studies on hoarding suggest that compulsive hoarding is resistant to treatment, especially for individuals with schizophrenia or schizophrenic traits (Chong et al., 1996; Vostanis & Dean, 1992) or cognitive impairment (Goddaer & Abraham, 1994), whether the treatment regime is pharmacological or behavioral. Lane et al. (1989) reported success in using behavioral treatment to reduce hoarding behavior in a brain-injured adult. Results of using pharmacological treatment to reduce hoarding behaviors in children have been mixed (Greist & Jefferson, 1995; Leonard et al., 1991). Ball et al. (1996) suggested that one problem with the lack of success in treating hoarding is the link researchers and clinicians make between hoarding and OCD, and that using treatments for other obsessive-compulsive symptoms may not be appropriate for hoarding.

A critical factor regarding intervention for compulsive hoarding is the motivation to discard possessions. Hoarders appear to vary in the level of insight they bring to their understanding of their hoarding behavior (Frost et al., 1996; Greenberg, 1987; Greist & Jefferson, 1995). Case studies presented in the literature indicate that some hoarders are not as bothered by their collections as are other people and do not report distress or interference with functioning as a result of their hoarding (Greenberg, 1987; Stein, 1993). Yet even when the accumulation of possessions presents functional or emotional problems for hoarders, discarding of items is extremely difficult (Frost & Gross, 1993; Greenberg, 1987; Greist & Jefferson, 1995). However, moving to a new residence has been cited as motivation for a reduction in hoarding in both case studies (Greist & Jefferson, 1995) and empirical research (Frost & Gross, 1993).



The level of emotional attachment that hoarders have for their possessions has received little attention in the hoarding intervention literature and, furthermore, is likely to make reduction in hoarding difficult. According to the theoretical model proposed by Frost and Hartl (1996), a successful hoarding intervention must address not only the cognitive and behavioral components of hoarding but the emotional attachment component as well. We present the following case study of a successful dehoarding intervention that relied heavily on client empowerment and the therapeutic relationship in its implementation of strategies that addressed the cognitive, emotional, and behavioral aspects of this client's hoarding behavior.

## CASE HISTORY

The client, "Mary," was a 72-year-old divorced Caucasian woman whom we encountered when she was referred to an outpatient therapy group for women. Mary presented in the intake with symptoms of depression and reports (from self and family members) of memory problems, difficulty concentrating, and word-finding difficulties. Subsequent neuropsychological assessment indicated that Mary showed no evidence of dementia or degenerative neurological problems, and her cognitive symptoms were attributed to anxiety and depression. In the intake, she described herself as a pack rat but did not articulate the extent of her hoarding or present hoarding as an issue for treatment. At

the time of the intake, Mary lived independently in her own home, worked part-time as a sales clerk in retail, and used public buses and trains for transportation.

Mary had two daughters from her marriage, which lasted 15 years. She reported that her husband was emotionally and physically abusive throughout the marriage and that she began drinking when her children were very young. She joined Alcoholics Anonymous several years after her divorce and has maintained her sobriety for more than two decades. She reported that her alcohol use damaged her relationship with her children and with her younger daughter in particular. She now reports a positive relationship with both children but said that she is much closer to her eldest daughter.

At the time of referral, Mary presented with two significant stressors. One stressor was her younger daughter's upcoming marriage. Mary reported that anxiety and intrusive thoughts related to the abuse she had suffered during her marriage had resurfaced as she contemplated seeing her ex-husband at the wedding. She used both the women's therapy group and individual therapy with one of the therapy group leaders to gain support and to manage these thoughts and feelings. After the event, she reported that she was able to attend and even enjoy the wedding ceremony and reception with minimal discomfort.

The second stressor was the loss Mary experienced when her eldest daughter, son-in-law, and grandchildren moved to another state. This daughter had been a great source of company and emotional support for Mary, who now felt unable to fill the void that this move had left in her life. She had been invited and encouraged by her daughter to sell her home and move out to a nearby senior living community. Mary reported that she wanted to make this move but was unable to do so because she was "trapped in [her] home" by all of her possessions.

It was in this context, after approximately 12 weeks in the women's therapy group and 6 weeks in individual therapy, that Mary brought up the issue of her compulsive hoarding. Mary first presented this issue with great shame and said she felt embarrassed and humiliated that she had "let [her] home get into such a state." She described her house as "packed" and said she was only able to move from room to room by pathways.



Mary reported that her hoarding had begun approximately 10 years ago and had escalated in the last 5 years. Mary hoarded many different items, including clothing, books, figurines, furniture, kitchenware, and paperwork. In describing her collection, she recounted personal and emotional memories of people or events that different items would bring up for her. She said that her collection had grown in part because she was unable to pass up a bargain and would buy large amounts of items if they were on sale, even if she did not need these items. It appeared that Mary often shopped at times when she felt lonely, hurt, or empty and that her work in retail allowed her to do this with some frequency. Mary reported that she wanted to clean out her home and put it up for sale so she could move nearer her eldest daughter but that her attempts to do so had been frustrating, overwhelming, and unsuccessful.

## INTERVENTION

Having established a positive, supportive, and trusting relationship with Mary through individual and group therapy and given her own desire to rid herself of her clutter, we began the intervention process. Fundamental to this process was the nature of the existing therapeutic relationship, in which we consistently and repeatedly articulated that (a) she was in charge of whether and how the dehoarding took place, (b) we would provide feedback and support during the process of dehoarding, and (c) we would be active participants in the actual physical work of sorting through and removing items from her home. This approach is rooted in both community psychology and feminist psychology, which stress the importance of personal empowerment, direct involvement on the part of treatment providers, and collaborative efforts in the therapeutic process to facilitate and maintain desired changes by the client (Mirkin, 1994; Rappaport, 1981, 1987; Rave & Larsen, 1995; Worell & Etaugh, 1994). Similarly, Thomas (1997) emphasized the importance of trust between hoarding clients and the intervention staff as well as the need for clients to play active roles in decisions about discarding possessions. By allowing us into her home, Mary demonstrated her faith in the strength of the therapeutic relation-

ship; by coming to her home, we demonstrated our commitment to these perspectives and to her treatment.

These perspectives likewise reflect aspects of the cognitive-behavioral treatment model of compulsive hoarding. First, by emphasizing to Mary that she was in control of the dehoarding process, we encouraged her right to have control over her possessions while simultaneously offering alternative means by which to exercise her control over them. Second, by actively participating in the physical process, we would be able to directly address Mary's difficulty with decision making about her possessions and prevent avoidance responding. Third, by providing support during the process, we would be able to acknowledge and seek ways to preserve her sentimental attachment to her possessions without necessarily preserving the actual items.

*Assessment of clutter.* The first stage in the process was a series of sessions with Mary and her younger daughter to assess the extent of the hoarding and to review strategies that had been unsuccessful. We learned that Mary had hoarded items in virtually every room in her home, with two small bedrooms serving only to store items and with pathways through the clutter to allow for travel from one room to another. She reported that family efforts to remove items had resulted in anxiety and frustration for everyone involved, with very little actually discarded in the end.

A series of photographs were taken at the onset of the intervention that documented the amount of clutter that Mary had accumulated. Approximately 75% of the space in the house was occupied by clutter. The bedrooms, kitchen, living room, and bathroom were all set off of a long hallway, and a dining area connected the living room and the kitchen. Clutter lined both sides of the hallway, leaving only a narrow pathway by which to travel. All of the rooms were virtually unusable for their designated functions. There was a small space cleared on the kitchen table that would permit a single place setting, whereas the rest of the table was piled with newspapers, magazines, and knickknacks; the counters were covered with glasses, plates, and other kitchen items. The living room and dining area were piled with boxes, books, papers, old toys, and furniture, some of which was broken or damaged. A space was left open on the sofa that was only large enough for one person.



The clutter in Mary's bedroom was similar to the living room; the bed was free of clutter, as was the area directly in front of an air conditioner, but the rest was stacked with books, boxes, papers, and clothing. Shelves were covered with knickknacks. Her closets were filled with clothing, bedding, linens, and items she had purchased "on sale," including children's toys and 5-year-old Easter baskets that still contained wrapped candy. Her spare bedroom was completely filled, with some piles reaching the ceiling of the room; the walls in this room showed damage from small rodents or squirrels. Most of the windows were either partially or fully obstructed by the clutter.

*Intervention planning.* In the preintervention sessions, Mary articulated her difficulties with decision making regarding her possessions. She reported that when pressed by her daughters to remove the clutter from her home, she could not decide where to begin or what to discard. In addition, her need to maintain control over her possessions became apparent. It was evident that previous attempts by her family to help her discard possessions had increased rather than decreased her need for control as family members sought to override her decisions to keep items and to take control over the removal process.

Therefore, it was important in these sessions to reassure Mary that the final decision to discard any item was hers. At the same time, we explored her difficulties in making decisions about discarding items and how we could challenge her during the dehoarding process. We used role-playing to explore how this might work, reminding her of her right and responsibility to disagree with us when she felt strongly about keeping an item. This served as a way to challenge Mary's decision making without undermining her control over the process. We also reviewed the options of not just discarding but of donating and recycling different items, which supported her belief that her possessions had value while challenging her belief that she needed to keep all of her possessions. Throughout this initial stage, Mary reported that she felt comfortable with the planned intervention.

*Dehoarding*. The next stage of the process was the actual dehoarding intervention. The intervention team consisted of her two therapists from individual and group therapy, another therapist from the mental health center, and her case manager. On our arrival at her home, Mary greeted us at the door by informing us that she had already begun the process and had marked a closet full of clothes (never worn, original tags still attached) for donation. These were removed immediately, with Mary supervising their removal and placement in one of the trucks outside. In addition, there were other items she had decided to discard and similarly instructed and directed their removal and placement (e.g., books for donation, newspapers for recycling, and some broken furniture for disposal). During this phase, she voiced her relief that certain items had a "place to go" and would have some value or use for others. This suggested that our preintervention work on increasing Mary's confidence and skill in decision making and her belief that she needed to maintain control over her possessions through hoarding had been productive; furthermore, in starting the process before our arrival, Mary clearly took control over the process.

Other items evoked more anxiety and indecisiveness, and these feelings seemed related to her strong emotional attachment to certain possessions that served as reminders of important times in her life. These included boxes of self-help literature, stacks of paperwork from her job as an accountant, and bits and pieces of paper that had handwriting and notes from deceased family members. As part of the decision-making process, we listened to Mary's stories of the importance and meaning of these items and explored with her how she could maintain those attachments without necessarily keeping all of the physical reminders. We used a Polaroid camera to take pictures of different possessions and created a scrapbook and photo album with her that included the photos, selected pages of the paperwork and literature, and the family mementos. Before and after pictures were also included in the album. The pictures were tangible reminders of the progress she was making toward her goal of selling her home and moving closer to her daughter. These strategies acknowledged the importance of her possessions and provided a way to preserve her



emotional attachment while simultaneously disposing of a significant amount of clutter.

Different strategies were necessary for decision making about other possessions. At times, we challenged her to reconsider her logic about keeping certain items. For example, Mary had decided to keep a significant amount of winter clothing, and we reminded her that she was moving to a warm and humid part of the country—would she really need all three winter coats? And if she found that she did, how could she solve that problem once she was there? Mary was able to engage in this type of problem solving that allowed her to restructure her beliefs about the necessity of keeping all of her possessions and that challenged her perfectionistic thinking about decision making. Realizing and accepting that she could rectify "mistakes" in discarding possessions served to reduce her anxiety that she might "fail" in the decision-making process.

At other times, we used humor as a method to encourage her to explore other options. We had uncovered some dolls that were damaged and missing limbs, which Mary said she would like to donate to a children's organization, at which point we asked her whether she really wanted to scare small children in that fashion. She laughed and agreed that the dolls were items more appropriate for disposal. Comments such as these provided her an opportunity to reconsider her decisions about certain objects and often to change her mind and discard something she had intended to keep.

The intervention addressed each component of the treatment model. Mary was able to reduce the amount of clutter in her home by using the preintervention process to improve her confidence and skill in decision making and by using those skills during the dehoarding process itself. In addition, we encouraged Mary to restructure her maladaptive beliefs about the methods she was using to maintain her emotional attachments and to retain her control over her possessions while still fostering and encouraging her need for attachment and a sense of control in a more adaptive way. These strategies, combined with our physical presence and labor during the intervention, reduced her impulse and opportunity to engage in behavioral avoidance.

The success of these different strategies was anchored in the treatment relationship. That Mary felt comfortable to disagree with us and

keep certain items and that we honored her decisions when she did so allowed her to retain control over the dehoarding process. By the end of the day, we had recycled, donated, or disposed of eight truckloads of Mary's collection. This included 25 bags of clothing (donated to the Salvation Army), five bags of bedding, 85 boxes of books, 500 record albums (donated to the local library), 10 boxes of toys, 10 bags of "collectibles" and other knickknacks, two small televisions, five lamps, a recliner, a hide-a-bed, a table and chairs, five shelving units, two fans, 10 large pieces of paneling, and more than 20 bags full of garbage and recycling. In addition, we had uncovered a musical instrument and were able to relax to music played by a member of the intervention team. Most importantly, this removal took place with minimal anxiety on Mary's part, and when she did report anxiety or discomfort, we supported and worked with her to address and manage those feelings.

Although one day was not enough time to work through all of Mary's possessions and collections, a significant amount of clutter had been removed. Ratings of the photos by a coder blind to the nature and outcome of the intervention, which were consistent with the ratings of photos by members of the intervention team, indicated on average a 52% reduction in clutter. The dining area and the spare room showed the greatest reduction, from 75% to 10% and 15%, respectively. The percentage ratings of clutter in certain spaces (e.g., the hallway and closets) dropped to less than 5%. The smallest reduction of clutter was in Mary's bedroom, with postintervention clutter rated between 35% and 40%.

At the end of the day, Mary called both of her daughters to report on her success and requested that we speak with each of them to share in the moment. When we checked in with her by telephone the next day, she reported that she had experienced no anxiety from the dehoarding process or outcome and was enjoying the space she had gained in her home. The following week, she reported on the success of the experience to the women's group and indicated her intent on following through with the process.



## OUTCOME

In evaluating the outcome of the intervention, it is important to consider its different phases. The first phase of the intervention was the preintervention planning. During these meetings, Mary disclosed the extent of her hoarding and her cognitions that were maintaining and reinforcing the behavior. Having identified her difficulties in deciding what to discard and how to begin the process, she restructured her thoughts and beliefs to a degree that allowed the actual dehoarding to take place. These changes in behavior—articulating her thoughts, making the decision to allow the intervention team into her home with the purpose of removing the clutter, and tolerating the anxiety without avoiding the thoughts—indicate that the first phase of the intervention was a success.

The second phase involved the actual dehoarding of Mary's house. Mary was an active and authoritative participant in the process; she physically sorted and removed items to the truck outside, she supervised the sorting and removal of items by the intervention team, and she used the skills she had learned in cognitive restructuring and problem solving to manage her anxiety during and after the process. The success of this phase can be gauged by her functioning and behavior during the dehoarding in addition to the quantity and nature of items that were removed from her home.

However, treatment success is also defined by an individual's success in maintaining treatment gains at follow-up. Mary's contact with us through individual and group therapy was terminated at this time due to structural changes in the mental health center, and therefore the intervention team's involvement was likewise terminated. Yet Mary was able to continue with the process. Her ability to continue the process of dehoarding on her own demonstrates the success of the intervention and the sense of empowerment and personal control that Mary gained with respect to her hoarding behavior. Follow-up by her new case manager indicated that within 3 months, Mary had sorted and removed the rest of her possessions that she had targeted for disposal and had hired people to make necessary repairs to her house. Within 5

months of the intervention, Mary had put her house on the market and visited her daughter to finalize plans for the move. By 6 months, Mary had sold her house and purchased and moved to a condominium near her daughter. During these 6 months, Mary continued to work part-time; her new caseworker reported that her symptoms of depression and anxiety had remitted and that her cognitive and emotional functioning were within normal limits.

Mary's move out of state terminated her contact with the mental health center, and so we cannot assert whether her treatment gains were maintained beyond 6 months or whether her hoarding behavior has resumed in her new home. However, the success of the intervention can be measured in Mary's ability to complete the preintervention work that was necessary for the intervention to take place, in her participation during the intervention, and most importantly, by her ability to carry on with the removal of possessions from her home in the absence of the intervention team. This is the strongest indicator of the success of the treatment—that Mary's cognitions and behaviors had changed to the extent that she completed the process herself.

## CONCLUSION

Mary presented with symptoms of depression and anxiety in addition to her compulsive hoarding. At the time of the intervention, she did not meet the criteria for either OCD or OCPD. However, she did fit the definition of clinical compulsive hoarding (Frost & Hartl, 1996) in that she experienced both functional impairment and psychological distress as a result of her hoarding behaviors. This suggests that for some individuals, compulsive hoarding may occur in the absence of other symptoms that are required for a diagnosis of OCD or OCPD.

The success of this dehoarding intervention depended on several factors. First, the level of trust in the therapeutic relationship was critical as a gateway for the intervention to take place. Second, the client was able and motivated to engage in cognitive restructuring, making changes in her decision-making process and in her beliefs about the necessity of keeping all of her possessions while simultaneously maintaining her sense of control over them. Third, acknowledgment



of and respect for the client's emotional attachment to her possessions was necessary to work with the cognitive and behavioral factors that also affected and maintained her hoarding. Finally, the intervention was a mutual and collaborative process with the client, which supported her right to control the removal of her possessions and empowered her to complete the dehoarding process. Most importantly, these factors led to an intervention that was ultimately successful in addressing the client's compulsive hoarding.

How would this intervention work for hoarders who are less motivated, or unmotivated, to remove the clutter from their homes? For clients who are truly unfazed by the clutter, this intervention would be difficult. Yet if we return to the definition of clinical compulsive hoarding that Frost and Hartl (1996) proposed, either distress or functional impairment must be present for a client to meet the criteria. It would not be appropriate to apply this intervention model to clients who are not disturbed or inhibited by their hoarding or to clients who are unable to identify and modify difficulties in decision making and beliefs about their possessions and their hoarding behavior. For clients who are distressed or impaired by their hoarding, framing this distress or dysfunction as a source of motivation would be a first step toward engaging them in treatment. In addition, exploring alternatives to hoarding that would be positively reinforcing for clients may increase their motivation to consider the prospect of dehoarding.

Changing any long-standing pattern of behavior is difficult; the low success rates with hoarders are therefore not surprising. With Mary, cognitive-behavioral strategies that targeted her indecisiveness and maladaptive beliefs about her possessions and her behavior were effective. Yet without genuine empathy for Mary's attachment to her possessions, we believe that the intervention would have failed. Had we failed to acknowledge, respect, and maintain the emotional attachment, it is likely that the cognitive-behavioral strategies would have been insufficient to change the behavior. Therefore, in intervening with other hoarders and increasing their motivation for treatment, this component of Frost and Hartl's (1996) model seems crucial.

For future research or clinical interventions, quantifying the change in hoarding behavior and the reduction of clutter is critical. For research, such data would provide support for the efficacy of the inter-

vention. In clinical interventions, treatment providers could use the data to chart and reinforce changes in clients' behavior. This data would also allow for long-term follow-up to evaluate maintenance of treatment gains. One method of quantifying clutter is a clutter ratio. In a recent experimental case study, Hartl and Frost (1999) calculated the square footage of clutter in relation to the square footage of the living space, which allowed them to demonstrate significant decreases in clutter and to compare clutter ratios for hoarders with normal clutter. Self-report measures such as the Hoarding Scale (Frost & Gross, 1993) would provide additional means of measuring significant changes in hoarding behavior.

Future research may also be useful in predicting who will be able to successfully engage in this model of treatment. Level of functioning may be one such predictor. Although Mary presented with depression and anxiety, she showed no evidence of psychosis or cognitive impairment that is often associated with hoarding (Chong et al., 1996; Goddaer & Abraham, 1994; Lane et al., 1989; Luchins, 1990; Luchins et al., 1992). It is likely that individuals who present with hoarding in the context of such dysfunction would have difficulty responding to this model of treatment.

The model proposed by Frost and Hartl (1996) includes cognitive, behavioral, and emotional components related to the development and maintenance of compulsive hoarding. Addressing each of these components—and particularly the emotional attachment to possessions, which has been neglected in other reports of hoarding interventions—seems crucial in successful interventions with hoarders. Furthermore, the use of treatment perspectives that respect and acknowledge the client's strengths, abilities, and control should empower clients who are capable of doing so to direct, participate in, and ultimately complete the intervention process.

## REFERENCES

American Psychiatric Association. (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington, DC: Author.

Baer, L. (1994). Factor analysis of symptom subtypes of obsessive-compulsive personality disorder and their relation to personality and tic disorders. *Journal of Clinical Psychiatry, 55*, 18-23.



Ball, S. G., Baer, L., & Otto, M. W. (1996). Symptom subtypes of obsessive-compulsive disorder in behavioral treatment studies: A quantitative review. *Behavior Research and Therapy, 34*, 47-51.

Chong, S. A., Tan, C. H., & Lee, H. S. (1996). Hoarding and clozapine-risperidone combination [Letter to the editor]. *Canadian Journal of Psychiatry, 41*, 315-316.

Dykens, E. M., Leckman, J. F., & Cassidy, S. B. (1996). Obsessions and compulsions in Prader-Will Syndrome. *Journal of Child Psychology and Psychiatry and Allied Disciplines, 37*, 995-1002.

Frankenburg, F. R. (1984). Hoarding in anorexia nervosa. *British Journal of Medical Psychology, 57*, 57-60.

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

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

Frost, R. O., Hartl, T. L., Christian, R., & Williams, N. (1995). The value of possessions in compulsive hoarding: Patterns of use and attachment. *Behavior Research and Therapy, 33*, 897-902.

Frost, R. O., Kim, H. J., Morris, C., Bloss, C., Murray-Close, M., & Steketee, G. (1998). Hoarding, compulsive buying, and reasons for saving. *Behavior Research and Therapy, 36*, 657-664.

Frost, R. O., Krause, M. S., & Steketee, G. (1996). Hoarding and obsessive-compulsive symptoms. *Behavior Modification, 20*, 116-132.

Frost, R. O., & Shows, D. L. (1993). The nature and measurement of compulsive indecisiveness. *Behavior Research and Therapy, 31*, 683-692.

Goddaer, J., & Abraham, I. L. (1994). Effects of relaxing music on agitation during meals among nursing home residents with severe cognitive impairment. *Archives of Psychiatric Nursing, 8*, 150-158.

Greenberg, D. (1987). Compulsive hoarding. *American Journal of Psychotherapy, 41*, 409-416.

Greenberg, D., Witztum, E., & Levy, A. (1990). Hoarding as a psychiatric symptom. *Journal of Clinical Psychiatry, 51*, 417-421.

Greist, J. H., & Jefferson, J. W. (1995). *Obsessive-compulsive disorder casebook* (Rev. ed.). Washington, DC: American Psychiatric Press.

Hartl, T. L., & Frost, R. O. (1999). Cognitive-behavioral treatment of compulsive hoarding: A multiple baseline experimental case study. *Behavior Research and Therapy, 37*, 451-461.

Lane, I. M., Wesolowski, M. D., & Burke, W. H. (1989). Teaching socially appropriate behavior to eliminate hoarding in a brain injured adult. *Journal of Behavior Therapy and Experimental Psychiatry, 20*, 79-82.

Leckman, J. F., Grice, D. E., Boardman, J., Zhang, H., Vitale, A., Bondi, C., Alsobrook, J., Peterson, B. S., Cohen, D. J., Rasmussen, S. A., Goodman, W. K., McDougle, C. J., & Pauls, D. L. (1997). Symptoms of obsessive-compulsive disorder. *American Journal of Psychiatry, 154*, 911-917.

Leonard, H. L., Swedo, S. E., & Rapoport, J. L. (1991). Diagnosis and treatment of obsessive-compulsive disorder in children and adolescents. In M. T. Pato & J. Zohar (Eds.), *Current treatments of obsessive-compulsive disorder* (pp. 98-99). Washington, DC: American Psychiatric Press.

Luchins, D. J. (1990). A possible role of hippocampal dysfunction in schizophrenic symptomatology. *Society of Biological Psychiatry, 28*, 87-91.

Luchins, D. J., Goldman, M. B., Lieb, M., & Hanrahan, P. (1992). Repetitive behaviors in chronically institutionalized schizophrenic patients. *Schizophrenia Research, 8*, 119-123.

Mirkin, M. P. (1994). *Women in context*. New York: Guilford.

Parker, K. C., & Forrest, D. (1993). Attachment disorder: An emerging concern for school counselors. *Elementary School Guidance and Counseling, 27*, 209-215.

Rappaport, J. (1981). In praise of paradox: A social policy of empowerment over prevention. *American Journal of Community Psychology, 9*, 1-26.

Rappaport, J. (1987). Terms of empowerment/exemplars of prevention: Toward a theory for community psychology. *American Journal of Community Psychology, 15*, 121-148.

Rasmussen, S. A., & Eisen, J. L. (1992). The epidemiology and clinical features of obsessive compulsive disorder. *Psychiatric Clinics of North America, 15*, 743-758.

Rave, E. J., & Larsen, C. C. (1995). *Ethical decision making in therapy: Feminist perspectives*. New York: Guilford.

Salamon, M. J., & Trubin, P. (1983). Difficulties in senior center life: Group behaviors. *Clinical Gerontologist, 2*, 23-37.

Stein, W. W. (1993). The hoarding habit, countertransference, and consultation anthropology in a Peruvian psychiatric hospital. *Social Science Medicine, 37*, 1045-1054.

Thomas, N. D. (1997). Hoarding: Eccentricity or pathology: When to intervene? *Journal of Gerontological Social Work, 29*, 45-55.

Vostanis, P., & Dean, C. (1992). Self-neglect in adult life. *British Journal of Psychiatry, 161*, 265-267.

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

Worell, J., & Etaugh, C. (1994). Transforming theory and research with women: Themes and variations. *Psychology of Women Quarterly, 18*, 443-450.

*Jill A. Cermele, Ph.D., is an assistant professor at Drew University. She received her doctorate in clinical psychology from the University of Delaware and specializes in feminist therapy and relationship violence. Her primary research interests focus on women's mental health, models of mental illness, and gender violence and self-defense.*

*Laura Melendez-Pallitto, Psy.D., is a psychologist at Collier Services in Wickatunk, New Jersey. She specializes in the treatment of adolescents and survivors of trauma. Her research is currently focused on hoarding behaviors, outcome research on adolescents in special education, and violence prevention in schools.*

*Gahan J. Pandina, Ph.D., is in child neuropsychology at the University of Medicine and Dentistry of New Jersey-Robert Wood Johnson Medical School in New Jersey. His current areas of research are neuroimaging and treatment outcome research in childhood psychiatric disorders. He was recently awarded a position at the Institute for Quality Research and Training at the University of Medicine and Dentistry of New Jersey-University Behavioral Health Care. He is completing his dissertation in neuropsychological assessment of bipolar disorder in children.*