Available online at www.sciencedirect.com
ScienceDirect
Behaviour Research and Therapy 44 (2006) 1859–1865
BEHAVIOUR RESEARCH AND THERAPY
www.elsevier.com/locate/brat

Shorter communication

Cognitive behavioral therapy for compulsive buying disorder

James E. Mitchell[a,*], Melissa Burgard[a], Ron Faber[b], Ross D. Crosby[a], Martina de Zwaan[c]

[a]*Department of Clinical Neuroscience University of North Dakota School of Medicine and Health Sciences, Neuropsychiatric Research Institute, 700 1st Avenue South, Fargo, North Dakota 58102, USA*
[b]*Department of Journalism, University of Minnesota, Minneapolis, MN, USA*
[c]*Department of Psychosomatic Medicine and Psychotherapy, University of Erlangen-Nuremberg, Germany*

Received 14 October 2005; received in revised form 8 December 2005; accepted 14 December 2005

Abstract

To our knowledge, no psychotherapy treatment studies for compulsive buying have been published. The authors conducted a pilot trial comparing the efficacy of a group cognitive behavioral intervention designed for the treatment of compulsive buying to a waiting list control. Twenty-eight subjects were assigned to receive active treatment and 11 to the waiting list control group. The results at the end of treatment showed significant advantages for cognitive behavioral therapy (CBT) over the waiting list in reductions in the number of compulsive buying episodes and time spent buying, as well as scores on the Yale–Brown Obsessive Compulsive Scale—Shopping Version and the Compulsive Buying Scale. Improvement was well-maintained at 6-month follow-up. The pilot data suggests that a cognitive behavioral intervention can be quite effective in the treatment of compulsive buying disorder. This model requires further testing.

Keywords: Compulsive buying; Cognitive behavioral therapy

Introduction

Compulsive buying disorder, which was originally described by Kraepelin nearly a century ago (Kraepelin, 1909), remains a relatively understudied disorder. Research has increased substantially over the last 10 years, and the literature on this disorder has been reviewed in several publications (Black, 1996, 2001; Mueller, Reinecker, Jacobi, Reisch, & de Zwaan, 2005). Several case series have been published (Christenson, et al., 1994; McElroy, Keck, Pope, Smith, & Strakowski, 1994; Mitchell et al., 2002; Schlosser, Black, Repertinger, & Freet, 1994). These studies demonstrated that compulsive buying occurs primarily in women, with a usual age of onset between 18 and 30 years. The problem has been described both in North America and Europe (Scherhorn, Reisch, & Raab, 1990), and probably occurs in most industrialized societies.

The disorder is often associated with high rates of comorbid psychopathology. Two controlled studies have examined the rates of comorbidity in these patients compared to normal controls, one finding exaggerated

*Corresponding author. Tel.: +1 701 293 1335; fax: +1 701 293 3226.
E-mail address: mitchell@medicine.nodak.edu (J.E. Mitchell).

0005-7967/$ - see front matter © 2006 Elsevier Ltd. All rights reserved.
doi:10.1016/j.brat.2005.12.009

rates of anxiety disorders, substance abuse and eating disorders (Christenson et al., 1994) and the other finding elevated rates of affective disorders (Black, Repertinger, Gaffney, & Gable, 1998). Uncontrolled studies have also found high rates of comorbid psychopathology (Schlosser et al., 1994; McElroy et al., 1994; Black, Gabel, Hansen, & Schlosser, 2000; Ninan et al., 2000). Compulsive buying has also been linked to eating disorders in other publications, but the data have been inconsistent (McElroy, Keck, & Phillips, 1995; Mitchell et al., 2002; Faber, Christenson, deZwaan, & Mitchell, 1995).

Very little is known about the treatment of this condition, and much of the published literature has focused on the use of medications. Positive results in case series have been reported for fluoxetine, clonazapam, clomipramine, naltrexone, fluvoxamine and citalopram (Black, Monahan, & Gabel, 1997; Bullock & Koran, 2003; Grant, 2003; Koran, Bullock, Hartston, & Smith, 2002; Koran, Chuong, Bullock, & Smith, 2003; Lejoyeux, Hourtané, & Adès, 1995; McElroy, Satlin, & Pope, 1991; McElroy et al., 1994). However, only two randomized placebo-controlled trials have been published, both using fluvoxamine, and both failed to demonstrate significant improvement over placebo (Black et al., 2000; Ninan, et al., 2000).

Only case studies of psychotherapy have been published (Bernik, Akerman, Amaral, & Brayn, 1996; Lawrence, 1990). Researchers have attempted to study cognitions associated with compulsive buying (Kyrios, Frost, & Steketee, 2004; Miltenberger et al., 2003), suggesting the possibility that cognitive behavior approaches might be useful in the treatment of these individuals.

We have been interested in developing a group-based cognitive behavioral treatment for patients with compulsive buying (Burgard & Mitchell, 2000). In this manuscript, we will review the results of a pilot study using this manual.

Method

Recruitment and selection

Subjects were compulsive buyers recruited through newspaper advertisements offering a "free group therapy program for adult females who compulsively shop". The ads were placed in local newspapers.

Inclusion criteria were: female, age 18 and over, current problems with compulsive buying (a score of two standard deviations above the population mean on the Compulsive Buying Scale upon screening (Faber & O'Guinn, 1992)). Exclusion criteria were: current or past evidence of Bipolar I Disorder or psychotic illness as assessed by the SCID I; active suicidal ideation; currently in psychotherapy; meeting criteria for alcohol or drug dependence within the last 6 months, or criteria for alcohol or drug abuse within the last month.

Potential participants who called were informed in detail about the study and screened over the phone using the Compulsive Buying Scale to determine if they may have compulsive buying behaviors. Individuals who were interested in the study and appeared to meet inclusion criteria were mailed a copy of the consent form to review and were invited to come for an informational meeting. At the time of the informational meeting, the study was described in detail and potential participants were able to ask questions about the study. Consent was obtained in writing from the subjects at this time. Once consent was obtained subjects were scheduled for an evaluation interview. The study was approved by the Institutional Review Boards of the University of North Dakota and the Neuropsychiatric Research Institute, Fargo.

Only women were included in this pilot study. Fifty-seven women were screened over the phone. Of these four were not eligible and fourteen decided against treatment. Thus, 28 were entered into the study and were assigned to one of 4 cognitive behavioral therapy (CBT) groups. Another cohort of 11 subjects was recruited and assigned (not by randomization) to a waiting list control (WLC, delayed treatment group). Subjects could be on psychotropic agents if they had been at a stable dose for 6 weeks.

Treatment

The group therapy consisted of 12 sessions over a period of 10 weeks. There were two meetings a week for the first 2 weeks and then one meeting a week for the following 8 weeks. The therapy meetings lasted 11/2 h each. The groups were led by JEM and MZ. Four groups were conducted with 4, 7, 7, and 10 participants. Patients were provided with a workbook which included readings that were to be accomplished before each

session and homework assignments that were to be filled in and brought to the next group. The manual has been described previously (Burgard & Mitchell, 2000). Sessions included the following topics:

1. Treatment overview.
2. Identifying problem buying behaviors and the reasons for and against changing behavior.
3. Cues and consequences.
4. Cash management, and getting rid of credit cards.
5. Responses: thoughts, feelings and behaviors.
6. Restructuring thoughts.
7. Cues and chains.
8. Self-esteem.
9. Exposure, response prevention.
10. Stress management and problem solving.
11. Relapse prevention and relapse plan.
12. Summary and outlook.

Dependent measures

Subjects assigned to CBT were assessed at baseline, at the end of 10 weeks of treatment and at 6-month follow-up. Subjects assigned to the waiting list control group were reassessed 3 months later prior to beginning treatment. Subjects were paid $ 30 if they completed the follow-up assessments.

Compulsive Buying Scale (CBS; Faber & O'Guinn, 1989; Faber & O'Guinn, 1992), a well-validated 7-item screening instrument developed to measure compulsive buying behaviors. Lower scores on this scale indicate greater level of compulsive buying. If the score was less than or equal to −1.34, subjects were classified as compulsive buyers.

Yale–Brown Obsessive Compulsive Scale-Shopping Version (Y-BOCS-SV; Monahan, Black, & Gabel, 1996), was modeled on the Y-BOCS (Goodman et al., 1989a, b) and assesses severity and interference caused by buying thoughts and behaviors rather than of assessing obsessions and compulsions. The instrument is reliable and valid in measuring severity and change in persons with compulsive buying.

Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), comprises 21 items that indicate the extent to which subjects exhibit cognitive, affective, somatic, and vegetative symptoms of depression.

Four-Week Purchasing Recall, an interview designed by the authors to assess the number of compulsive buying episodes, the total amount of money spent, and the total amount of time spent shopping over a four week period. It also allows for the rater to assess the kind of items that were purchased.

Outcomes Study Short-Form 36 Health Status Survey (SF-36; Ware, Snow, & Kosinski, 1993) is a 36-item questionnaire measuring subjective health status. It is comprised of eight domains of functioning: Physical functioning, Role limitations due to physical problems, Vitality, Bodily pain, Social functioning, Role limitations due to emotional problems, Mental health, and General health perception. Transformed scores ranging from 0 (poor health) to 100 (good health) are calculated. Two aggregate summary measures reflect physical (PCS) and mental/emotional well-being (MCS). The summary measures were standardized to a T score with a mean of 50 and a standard deviation of 10. In this study only the MCS was used.

All subjects also were interviewed using the *Structured Clinical Interview for DSM-IV* diagnoses (SCID, American Psychiatric Association (APA), 1994).

Statistics

All analyses were performed with SPSS 12.0. Baseline comparisons were conducted using independent sample *t*-tests. In the CBT group, the last observation was carried forward in the 7 participants who either never started treatment after their baseline assessment ($n = 3$) or dropped out during treatment ($n = 4$) to conduct intention-to-treat analyses (ITT). Paired sample *t*-tests for the WLC and the CBT groups were done separately. With regard to the follow-up evaluation, the results of the 17 completers were compared with their

post-treatment data, again, using paired sample *t*-tests. In addition, effect sizes were calculated to examine the magnitude of significant results: the difference between the pre- and post-treatment means divided by the pooled standard deviations. Effect sizes of 0.2, 0.5, and 0.8 can be considered to reflect effect of small, medium, and large magnitude, respectively.

Despite the small sample sizes we compared the WLC and the CBT group by conducting analyses of covariance using the post-treatment/end of waiting list values as the dependent variable and the baseline/prior to waiting list values as the covariate (ANCOVAs).

Results

The mean age of the 39 participants was 45 years (SD 10.2; range 23–63). They indicated that 88.7% of their compulsive buying episodes occurred in stores, 6% over the internet, 2.3% through TV, and 2.8% through catalogues. Seventy-one percent bought exclusively in stores. Thirty-two (82.1%) had substantial debts other than mortgages on houses and 12 (30.8%) already had received financial counseling because of their financial problems due to compulsive buying. The items purchased during compulsive buying episodes are summarized in Table 1. Psychiatric co-morbidity is summarized in Table 2.

Four patients dropped out of the waiting list control condition and were not available for the second interview. There were no differences in any of the baseline measures between the WLC and the CBT groups (Table 3). Upon examination of the ratings before and after the waiting period, paired sample *t*-tests failed to reveal any significant decrements on any of the rating scales although there was a trend for the CBS scores to improve (Table 4).

Of the 28 subjects assigned to active treatment initially, seven participants dropped out (three before beginning treatment and four during treatment) and 21 completed treatment; of those dropping out during treatment, one completed two sessions, one completed five and two completed six sessions. ITT analyses revealed a significant improvement in all of the measures using paired sample *t*-tests, with large effect sizes for the CBS, Y-BOCS-SV, and the 4-weeks purchasing recall (Table 5). These improvements were maintained during follow-up with even further improvement in some of the measures (CBS, Y-BOCS-SV) (Table 6). At the end of treatment 12 participants reported complete remission during the previous 4 weeks (no compulsive buying episode) (42.9% of 28). At the 6-month follow-up, 10 participants reported complete 4-week abstinence from compulsive buying episodes (58.8% of 17). None of the subjects in the WLC group reported abstinence from compulsive buying episodes after the waiting period.

ANCOVAs revealed significant differences between the WLC and the CBT group on CBS and Y-BOCS-SV scores ($F = 4.409$, df $= 1$, $p = .044$ and $F = 22.417$, df $= 1$, $p < .001$, respectively) as well as the number of compulsive buying episodes ($F = 53.747$, df $= 1$, $p < .001$), total time spent in problem shopping ($F = 22.039$,

Table 1
Items purchased during compulsive buying episodes purchasing recall at baseline, $n = 39$

Items	*n*	%
Clothes	28	73.7
Gifts	20	52.6
Crafts	14	36.8
Shoes	12	31.6
Books or magazines	9	23.7
Jewelry	6	15.8
Appliances	6	15.8
Greeting cards	5	13.2
CDs or tapes	4	10.5
Furniture	4	10.5
Nick knacks	3	7.9
Collectibles	3	7.9
Purses	3	7.9
Other	25	65.8

Table 2
Psychiatric co-morbidity, SCID, $n = 39$

Diagnosis	*n* lifetime	% lifetime	*n* current
Major depressive disorder (MDD)	24	61.5	0
Dysthymia	2	5.1	2
Alcohol abuse/dependence	13	33.3	0
Panic disorder	10	25.6	1
Social phobia	3	7.7	2
Specific phobia	5	12.8	1
OCD	8	20.5	7
PTSD	5	12.5	1
Anxiety disorder NOS	2	5.1	1
Body dysmorphic disorder	1	2.6	1
Bulimia nervosa	1	2.6	0
Binge eating disorder	6	15.4	4

Table 3
Baseline comparison between the participants randomized to CBT group therapy or to the waiting list control condition

Variable	WLC mean (SD) ($n = 11$)	CBT mean (SD) ($n = 28$)
Age	44.6 (11.2)	45.1 (10.2)
BDI	12.6 (8.7)	12.9 (7.9)
CBS	−4.1 (1.8)	−3.4 (1.6)
MCS (SF-36)	47.8 (13)	41.9 (11.9)
Y-BOCS-SV	21.1 (7.2)	22.6 (7.2)
Compulsive buying episodes (4 weeks)	9.4 (5.3)	10.7 (8.3)
Total amount spent (4 weeks)	651 (738.7)	722.5 (778.6)
Total time spent (hours/4 weeks)	7.7 (7.8)	11.3 (11.5)

Table 4
Participants assigned to the waiting list control condition (completer analysis) ($n = 7$)

Variable	Prior to the waiting period mean (SD)	At the end of the waiting period mean (SD)	Paired sample *t*-test
CBS	−4.8417 (1.54)	−3.8017 (1.66)	$t = -2.511$, $p = .054$
BDI	15.4 (10.6)	10.0 (9.2)	ns
MCS (SF-36)	42.8 (13.5)	43.8 (9.1)	ns
Y-BOCS-SV	22.1 (7.9)	21.8 (8.9)	ns
Compulsive buying episodes (4 weeks)	9.7 (5.4)	12.0 (4.3)	ns
Total amount spent (4 weeks)	361.2 (314.2)	753.4 (351.1)	$t = -3.787$, $p = .009$
Total time spent (h/4 weeks)	8.8 (9.0)	11.7 (6.2)	ns

df = 1, $p < .001$), and total amount spent while compulsively buying ($F = 11.081$, df = 1, $p = .002$). No significant differences between groups were found for the BDI and the MCS of the SF-36.

Discussion

The results of this modest pilot study suggests that a group CBT intervention can significantly impact on compulsive buying behavior and associated comorbid psychopathology in outpatients with this disorder. The results must be regarded as preliminary since treatment was by assignment rather than randomization and the sample size was small. Also, since no comparison treatment was used we cannot be sure that simple

Table 5
Pre- and post-treatment comparison in participants randomized to the CBT group treatment, (intention-to-treat analysis) ($n = 28$)

Variable	Pre-treatment mean (SD)	Post-treatment Mean (SD)	Paired sample *t*-test	Effect size
CBS	−3.4421 (1.69)	−1.4095 (2.11)	$t = -4.275$, $p < .001$	1.06
BDI	12.9 (7.9)	9.6 (8.9)	$t = 2.403$, $p = .023$	0.38
MCS (SF-36)	41.9 (11.9)	46.0 (12.2)	$t = -2.427$, $p = .022$	0.34
Y-BOCS-SV[a]	22.6 (7.2)	6.4 (7.5)	$t = 8.057$, $p < .001$	2.19
Compulsive buying episodes (4 weeks)	10.7 (8.3)	1.6 (3.0)	$t = 5.410$, $p < .001$	1.46
Total amount spent (4 weeks)	722.5 (778.6)	133.0 (316.0)	$t = 3.929$, $p < .001$	0.99
Total time spent (h/4 weeks)	11.3 (11.5)	2.8 (7.4)	$t = 3.999$, $p < .001$	0.87

[a] $n = 23$ (was started later).

Table 6
Measures at post-treatment and at follow-up in participants completing the 6-month follow-up evaluation (completer analysis) ($n = 17$)

Variable	Post-treatment mean (SD)	Follow-up mean (SD)	Paired sample *t*-test
CBS	−1.0450 (2.33)	0.0882 (2.08)	$t = -2.252$, $p = .039$
BDI	10.0 (10.1)	7.4 (8.5)	ns
MCS (SF-36)	46.8 (13.7)	47.7 (14.3)	ns
Y-BOCS-SV[a]	3.7 (3.6)	1.2 (1.7)	$t = 2.570$, $p = .021$
Compulsive buying episodes (4 weeks)	0.59 (0.7)	0.59 (0.7)	ns
Total amount spent (4 weeks)	41.3 (59.5)	47.1 (94.9)	ns
Total time spent (h/4 weeks)	0.35 (0.6)	0.18 (0.3)	ns

[a] $n = 16$ (was started later).

involvement in therapy, rather than this specific therapy, resulted in the outcome. The results are none-the-less interesting in indicating marked reductions in compulsive buying episodes pre to post treatment which was maintained to the follow-up at 6 months. Continued improvement to follow-up was seen on the CBS and the Y-BOCS-SV.

Although the treatment was relatively brief ($12 - 1\frac{1}{2}$h sessions held in the evening), the nature of the trial required the subjects to do readings and complete homework assignments prior to each group session, and therefore the actual time involved in therapeutic activities was considerably longer. Since participants had difficulties distinguishing between compulsive buying and "normal" buying episodes, it was important to regularly review the self-monitoring sheets throughout treatment.

One key element in this therapeutic approach appears to be the strong encouragement of the subjects to give up their credit cards and instead use debit cards or cash. Not all did so and while data were not kept on the frequency of actually giving up credit cards many of the patients did accomplish this, and anecdotally this did appear to be an important element of the treatment. Without further research, it is impossible to know which elements contributed significantly to the therapeutic effect.

The lack of significant improvement on the BDI and SF-36 were surprising. The former may be attributable to the fact that the level of depression was low at baseline. The latter may be attributable to the fact that most of the patients still faced enormous debt and financial problems after treatment.

Given the sample size and lack of randomization the results must be regarded as preliminary. However, the magnitude of improvement by the end of treatment, coupled with the finding of continued improvement to follow-up, suggests that this treatment should be explored further.

References

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

Beck, A. T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961). An inventory for measuring depression. *Archives of Genetic Psychiatry*, *4*, 561–571.

Bernik, M. A., Akerman, D., Amaral, J. A., & Brayn, R. C. (1996). Cue exposure in compulsive buying. *Journal of Clinical Psychiatry*, *57*, 90.

Black, D. W. (1996). Compulsive buying: A review. *Journal of Clinical Psychiatry*, *57*, 50–55.

Black, D. W. (2001). Compulsive buying disorder. Definition, assessment, epidemiology and clinical management. *CNS Drugs*, *15*, 17–27.

Black, D. W., Gabel, J., Hansen, J., & Schlosser, . (2000). A double-bind comparison of fluvoxamine versus placebo in the treatment of compulsive buying disorder. *Annals of Clinical Psychiatry*, *12*, 205–211.

Black, D. W., Monahan, P., & Gabel, J. (1997). Fluvoxamine in the treatment of compulsive buying. *Journal of Clinical Psychiatry*, *58*, 159–163.

Black, D. W., Repertinger, S., Gaffney, G. R., & Gable, J. (1998). Family history and psychiatric comorbidity in persons with compulsive buying: Preliminary findings. *American Journal of Psychiatry*, *155*, 960–963.

Bullock, K., & Koran, L. (2003). Psychopharmacology of compulsive buying. *Drugs Today*, *39*, 695–700.

Burgard, M., & Mitchell, J. E. (2000). Group cognitive-behavioral therapy for buying disorder. In Benson, A. (Ed.), *I Shop, Therefore I Am: Compulsive buying and the search for self* (pp. 367–397). New York: Jason Aronson.

Christenson, G. A., Faber, R. J., de Zwaan, M., Raymond, N., Specker, S. M., Ekern, M., et al. (1994). Compulsive buying: Descriptive characteristics and psychiatric comorbidity. *Journal of Clinical Psychiatry*, *55*, 5–11.

Faber, R. J., & O'Guinn, T. C. (1989). Classifying compulsive consumers: Advances in the development of a diagnostic tool. *Advances in Consumer Research*, *16*, 738–744.

Faber, R. J., & O'Guinn, T. C. (1992). A clinical screener for compulsive buying. *Journal of Consumer Research*, *19*, 459–469.

Faber, R. J., Christenson, G. A., deZwaan, M., & Mitchell, J. E. (1995). Two forms of compulsive consumption: Comorbidity of compulsive buying and binge eating. *Journal of Consumer Research*, *22*, 296–304.

Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Delgado, P., Henninger, G. R., et al. (1989). The Yale–Brown Obsessive Compulsive Scale II validity. *Archives of Genetic Psychiatry*, *46*, 1012–1016.

Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill, C. L., et al. (1989). The Yale–Brown Obsessive Compulsive Scale. I. Development, use, and reliability. *Archives of Genetic Psychiatry*, *46*, 1006–1011.

Grant, J. E. (2003). Three cases of compulsive buying treated with naltrexone. *International Journal of Psychiatry in Clinical Practice*, *7*, 223–225.

Koran, L. M., Bullock, K. D., Hartston, H. J., & Smith, S. (2002). Citalopram treatment of compulsive shopping: An open-label study. *Journal of Clinical Psychiatry*, *63*, 704–708.

Koran, L. M., Chuong, H. W., Bullock, K. D., & Smith, S. (2003). Citalopram for compulsive shopping disorder: An open-label study followed by double-blind discontinuation. *Journal of Clinical Psychiatry*, *64*, 793–798.

Kraepelin, E. (1909). *Psychiatrie. Ein Lehrbuch für Studierende und Ärzte I. Band Allg. Psychiatrie*. Leipzig: Johann Ambrosius Barth.

Kyrios, M., Frost, R. O., & Steketee, G. (2004). Cognitions in compulsive buying and acquisition. *Cognitive Therapy and Research*, *28*, 241–258.

Lawrence, L. (1990). The psychodynamics of the compulsive female shopper. *American Journal of Psychoanalysis*, *50*, 67–70.

Lejoyeux, M., Hourtané, M., & Adès, J. (1995). Compulsive buying and depression. *Journal of Clinical Psychiatry*, *56*, 38.

McElroy, S. L., Satlin, A., & Pope, H. G. (1991). Treatment of compulsive shopping with antidepressants. A report of three cases. *Annals of Clinical Psychiatry*, *3*, 199–204.

McElroy, S. L., Keck, P. E., Pope, H. G., Smith, J. M., & Strakowski, S. M. (1994). Compulsive buying: A report of 20 cases. *Journal of Clinical Psychiatry*, *55*, 242–248.

McElroy, S. L., Keck, P. E., & Phillips, K. A. (1995). Kleptomania, compulsive buying, and binge-eating disorder. *Journal of Clinical Psychiatry*, *56*, 14–27.

Miltenberger, R. G., Redlin, J., Crosby, R., Stickney, G., Mitchell, J., Wonderlich, S., et al. (2003). Direct and retrospective assessment of factors contributing to compulsive buying. *Journal of Behavioral Therapy and Experimental Psychiatry*, *34*, 1–9.

Mitchell, J. A., Redlin, J., Wonderlich, S., Crosby, R., Faber, R., Miltenberger, R., et al. (2002). The relationship between compulsive buying and eating disorders. *International Journal of Eating Disorders*, *32*, 107–111.

Monahan, P., Black, D. W., & Gabel, J. (1996). Reliability and validity of a scale to measure change in persons with compulsive buying. *Psychiatry Research*, *64*, 59–67.

Mueller, A., Reinecker, H., Jacobi, C., Reisch, L., & de Zwaan, M. (2005). Pathological buying—A literature review. *Psychiatrishe Praxis*, *32*, 3–12.

Ninan, P. T. N., McElroy, S., Kane, C. P., Knight, B. T., Casuto, L. S., Rose, S. E., et al. (2000). Placebo-controlled study of Fluvoxamine in the treatment of patients with compulsive buying. *Journal of Clinical Psychopharmacology*, *20*, 362–366.

Scherhorn, G., Reisch, L. A., & Raab, G. (1990). Addictive buying in West Germany: An empirical study. *Journal of Consumer Policy*, *13*, 355–387.

Schlosser, S., Black, D. W., Repertinger, S., & Freet, D. (1994). Compulsive buying. Demography, phenomenology, and comorbidity in 46 subjects. *General Hospital Psychiatry*, *16*, 205–212.

Ware, J. E., Snow, K. K., & Kosinski, M. (1993). *SF-36 health survey: Manual and interpretation guide*. Boston, MA: The Health Institute, New England Medical Center.