Compulsive Buying

Demography, Phenomenology, and Comorbidity in 46 Subjects

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Abstract: Compulsive buying has been generally ignored in the psychiatric literature, although it is apparently frequent, underrecognized, and can lead to severe financial and legal consequences for its sufferers. The current investigation was designed to assess the overall life-style and problems of subjects identified as compulsive shoppers. Forty-six compulsive buyers were assessed for comorbid psychiatric disorders with the Diagnostic Interview Schedule, the Structured Interview for DSM-III-R Personality Disorders, and a semistructured interview to assess buying behavior. The typical shopper was a 31-year-old female who had developed compulsive buying at age 18 years. Subjects spent their money on clothing, shoes, and records/compact discs. The average debt load accrued was \$5,422 out of an average yearly income of \$23,443. More than two-thirds met lifetime criteria for a major (Axis I) mental disorder, most commonly anxiety, substance abuse, and mood disorders. Nearly 60% were found to meet criteria for a DSM-III-R personality disorder, most commonly the obsessivecompulsive, borderline, and avoidant types. The authors conclude that compulsive buying is a definable clinical syndrome which can cause its sufferers significant distress and is associated with significant psychiatric comorbidity.

Introduction

Compulsive buying has attracted little attention in the psychiatric literature [1–4] although there is a growing interest in it among the lay public and consumer behavior literature [5–9]. Although it clearly has the earmarks of a disorder, it is not formally recognized in DSM-III-R.

Compulsive buying can lead to significant inter-

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personal problems, financial difficulties, such as bankruptcy, marital and family stress [3,4]. It is also associated with significant psychiatric comorbidity, including drug and alcohol abuse, depression, and personality disorder [3,4]. It appears to be more common in women, but additional work is needed to clarify this finding. Several authors have described it as involving an irresistible urge to buy followed by temporary tension relief [3,4]. Others have proposed a link to obsessive-compulsive disorder, mood disorders, and impulse control disorders [3]. These studies have begun to define the problem, but additional work is necessary to get a clearer picture of compulsive buying and its boundaries.

The present study was designed to provide a general description of the compulsive buyer by examining demographic variables, buying patterns, debt levels, and comorbid psychiatric disturbance.

Subjects and Methods

Subjects

Compulsive buyers (CB) were recruited through advertisements in a hospital newsletter and local newspapers. We invited persons 18 years and older who had a "compulsive buying problem" that "creates a strong urge to buy which cannot be controlled" to participate in our research; 95 persons responded to the ads and 53 were interviewed. Subjects were screened with the Compulsive Buying Scale (CBS) which has been shown to differentiate between compulsive and noncompulsive shoppers [9]. The CBS contains nine questions

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that focus on the behaviors, motivations, and feelings associated with buying. A cutoff score 2 standard deviations (SD) beyond the mean for the general population is required to be classified as a compulsive buyer. Of the 53 interviewed subjects, 46 (86.8%) met criteria for compulsive shopping according to the CBS, and are the subject of this paper. All subjects gave informed consent before participating. All subjects completed the assessment protocol.

Assessments

All subjects were interviewed in person at the Department of Psychiatry. The Structured Interview for DSM-III-R Personality Disorders [10] was administered by a trained interviewer (DF or SR). A computer interactive version of the Diagnostic Interview Schedule revised for compatability with DSM-III-R [14] was administered to assess major (Axis I) mental disorders [11]. Subjects answered questions at a cathode ray tube (CRT) terminal located within the Department of Psychiatry. The interviewers were present to answer questions that the subjects had about the program. The interviewers also administered the Minnesota Impulsive Disorders Interview (MIDI), an instrument designed for use in a study of compulsive shopping [4]. The interview includes separate screening modules for several impulse control disorders including trichotillomania, pyromania, intermittent explosive disorder, kleptomania, compulsive sexual behavior, pathologic gambling, and compulsive buying. The section on compulsive exercise was not done. An in-depth questionnaire on compulsive buying [4] was also administered, the purpose and results of which will be discussed shortly. Finally, the subjects were given a packet of self-report forms to take home, complete, and return in a stamped addressed envelope. These questionnaires included the Beck Depression Inventory [12], the Maudsley Obsessive-Compulsive-Inventory [13], and the Personality Disorder Questionnaire-Revised [14]. These questionnaires were given to assess depressive personality, and obsessive-compulsive symptoms. These data will be reported elsewhere.

Results

The sociodemographic profile of the 46 compulsive shoppers is presented in Table 1. The typical sub-

Table 1. Sociodemographic description of 46 compulsive shoppers

Item	N	(%)
Age distribution (yrs)		
18–24	19	(41)
25–29	5	(11)
30–34	5	(11)
35–39	8	(17)
40–44	6	(13)
45 -4 9	2	(4)
50–54	1	(2)
Education		
High school degree	4	(9)
Some college	25	(54)
Bachelor's degree	16	(35)
Graduate work	1	(2)
Marital status		• •
Single	26	(57)
Married	15	(33)
Divorced	4	`(9)
Widowed	1	(2)
Occupation		` ,
Student	16	(35)
Clerk	2	(4)
Maintenance	1	(2)
Nurse	7	(15)
Secretary	4	(9)
Cook/chef	1	(2)
Research assistant	4	(9)
Therapist	3	(7)
Bartender	2	(4)
Teacher	1	(2)
Clerk	5	(11)
Income ^a		` ,
Less than \$3,000	2	(4)
\$3,001-\$6,000	8	(17)
\$6,001-\$10,000	1	(2)
\$10,001-\$15,000	5	(11)
\$15,001-\$20,000	7	(15)
\$20,001-\$30,000	5	(11)
\$30,001-\$40,000	6	(13)
\$40,001-\$50,000	9	(20)
Over \$50,000	1	(2)

[&]quot;Two subjects skipped this question on the self-report form.

ject had a mean (SD) age of 30.7 (9.2) years; 37 (80.4%) were female. Compulsive buyers had a mean (SD) age of onset of 18.7 (7.2) years. Most had attended or completed college, and a high percentage were students, a finding perhaps due to the midsized college town setting in which the study was conducted. The mean (SD) reported in-

Table 2. Current and lifetime DSM-III-R diagnoses in 46 subjects with compulsive buying

	N (%) of subjects		
Diagnosis	Current N (%)	Lifetime N (%)	
Mood disorders			
Bipolar	0	0	
Major depression	5 (11%)	13 (28%)	
Any mood disorder	5 (11%)	13 (28%)	
Psychoactive substance use disorders			
Alcohol abuse or dependence	9 (20%)	13 (28%)	
Other substance use or dependence	5 (11%)	6 (13%)	
Any substance abuse	12 (26%)	14 (30%)	
Anxiety disorders			
Panic disorder	2 (4%)	8 (17%)	
Phobic disorder	9 (20%)	13 (28%)	
Generalized anxiety	8 (17%)	14 (30%)	
Obsessive-compulsive disorder	2 (4%)	2 (4%)	
Any anxiety disorder	11 (24%)	19 (41%)	
Somatoform disorders	4 (9%)	5 (11%)	
Eating disorders		, ,	
Anorexia nervosa	0	0	
Bulimia nervosa	6 (13%)	8 (17%)	
Any eating disorder	6 (13%)	8 (17%)	
Psychotic disorders	1 (2%)	1 (2%)	
Psychosexual disorders	3 (7%)	3 (7%)	
Pathological gambling	4 (9%)	5 (11%)	
Antisocial personality disorder	5 (11%)	5 (11%)	
Any disorder	28 (61%)	31 (67%)	

come was \$23,500 (\$16,000), with a range of \$1500 to \$60,000.

The number of buying episodes per month ranged from 1 to 60 with a mean (SD) of 12.9 (10.2). The range of money spent by subjects per buying episode was \$15 to \$500 with a mean (SD) of \$91.5 (\$101.4). The mean (SD) age of realization that shopping was a problem was 24.9 (8.3) years.

Psychiatric comorbidity is shown in Table 2. More than 60% of subjects met criteria for a current major mental disorder, most commonly alcohol abuse/dependence, phobic disorder, generalized anxiety disorder, and bulimia nervosa. The most frequent lifetime disorders were alcohol abuse/dependence, phobic disorder, generalized anxiety disorder, and major depression.

Table 3 shows the impulse control disorders assessed with the MIDI. These disorders were quite common among compulsive buyers, particularly kleptomania, intermittent explosive disorder, and pathologic gambling.

Personality disorder was assessed through an interview (SIDP-R) and a self-report instrument (PDQ-R) and in Table 4, the results of both are given. Additionally, a consensus diagnosis was obtained by combining the results of the two assessments. According to the consensus diagnosis, 27 (58.7%) subjects met criteria for at least one personality disorder, the most frequent being the

Table 3. Impulse control disorders assessed in 46 subjects with compulsive buying^b

Disorder	N	(%)
Intermittent explosive disorder	10	(22%)
Kleptomania	1 <i>7</i>	(37%)
Pyromania	1	(2%)
Trichotillomania	5	(11%)
Compulsive sexual behavior	6	(13%)
Pathological gambling	9	(20%)

Table 4. Personality disorders assessed with two instruments in 46 subjects with compulsive buying

	SIDP-R	PDQ-R	Consensus Dx
Disorder	N (%)	N (%)	N (%)
Paranoid	7 (15)	8 (17)	5 (11)
Schizoid	0	10 (22)	0
Schizotypal	3 (7)	4 (9)	2 (4)
Histrionic	5 (11)	17 (37)	3 (9)
Borderline	7 (15)	17 (37)	7 (15)
Antisocial	1 (2)	6 (13)	0
Narcissistic	4 (9)	6 (13)	1 (2)
Avoidant	8 (17)	8 (17)	7 (15)
Obsessive-compulsive	17 (37)	14 (30)	10 (22)
Passive-aggressive	9 (20)	4 (9)	2 (4)
Dependent	3 (7)	1 (2)	1 (2)
Any disorder	29 (63)	36 (78)	27 (59)

obsessive-compulsive, borderline, and avoidant types.

The in-depth compulsive buying section of the MIDI was used to gain an overall picture of compulsive buying, including feelings before, during, and after buying, specific objects of spending, age of onset of realization of the problem, number of episodes per month, range of money spent during each episode, time of day when buying was most likely to occur, holidays most often associated with buying, items typically purchased in an episode, use of items after purchase, and so on. The results are presented in Table 5.

We also asked subjects about the amount of debt accrued from their buying (Table 6). Only five (11%) subjects had no debts. Among the remainder, the amount of debt ranged from \$100 to \$100,000. The mean (SD) debt was \$5,422 (\$15,078). If the one outlier with a debt of \$100,000 is removed, the mean (SD) debt becomes \$3448 (\$5366). We also asked subjects about the number of credit cards they owned that had an outstanding balance. Eight (17%) subjects had no credit cards with an outstanding debt. On the other hand, the rest of the subjects had at least one card with an outstanding debt, and three (7%) had more than 10 cards with an outstanding balance. Subjective awareness of buying behavior is shown in Table 7, including the number and type of event associated with the onset of problem spending, how subjects developed the realization that they had a spending problem, how subjects felt about their buying behavior, and what they disliked about buying.

Discussion

There are few data available to show the frequency of compulsive buying in the population. Aber and O'Guinn [15] suggest that compulsive buying affects between 1.1% and 5.9% of the general population. Our experience would suggest that it is quite common. We had little difficulty recruiting subjects, and most all interviewed persons met criteria for compulsive buying. This suggests that the extent of compulsive buying is both underrecognized and underappreciated.

According to our results, the typical subject was a 31-year-old woman with at least some college experience and an average income of \$23,500, and had admitted to having had the problem for more than 11 years. Shopping during the afternoon, particularly around special holidays was common. Subjects often told us that they compulsively spent money in order to have something new and to feel better. They typically bought clothing, shoes, records/compact discs, and jewelry. Despite making these purchases, items often went unused or were returned, or were given away. Subjects carried a debt load on average of \$5400 and reported that their debt level was their major concern with the behavior. Subjects were generally unsuccessful in stopping or controlling their behavior, but most had tried.

The subjects suffered substantial psychiatric comorbidity. Although we do not have results from a comparison group, data from the Epidemiologic Catchment Area [16] study as well as data from the Iowa community [17], indicate that the frequency of cormorbidity is excessive. More than two-thirds met lifetime criteria for a major (Axis I) mental disorder, most commonly anxiety, substance abuse, and eating and mood disorders. Nearly 60% were found to meet criteria for a DSM-III-R personality disorder, most commonly the obsessive-compulsive, borderline, and avoidant types. There are no comparison data for the impulse control disorders that were assessed, although their frequency appears substantial. The results obtained by McElroy et al. [4] are consistent with our findings on impulse control disorders.

The findings on prevalence for major mental disorders differs from that reported by both Christenson et al. [4] and McElroy et al. [3]. In general, both teams of investigators report a much higher prev-

Table 5. Buying behavior of 46 compulsive shoppers

Item	N	(%)
Subjects reporting a need to buy when shopping	36	(78)
Subjects reporting serious problems with buying	23	(50)
Subjects reporting not knowing how got to store	5	(11)
Subjects reports feeling it was not own behavior	12	(26)
Interviewers felt a disassociative state present	1	(2)
Subjects not reporting disassociative feelings	36	(78)
Type of problem buying		
Continuous	27	(59)
Episodic	19	(41)
Time of day subjects report they are most likely to buy		
Evening	11	(24)
Afternoon	21	(46)
Morning	1	(2)
Anytime	2	(4)
No significant time	11	(24)
Holidays subjects feel most likely to buy		
Christmas	32	(70)
Other's birthdays	15	(33)
Own birthday	2	(4)
Valentine's	4	(9)
St. Patrick's	2	(4)
Easter	3	(7)
Thanksgiving	3	(7)
No significant holiday	12	(26)
Feelings most commonly associated with a buying episode		
Better/good	20	(44)
Important	8	(17)
Relief	4	(9)
Distracted from other concerns	11	(24)
Power	1	(2)
Likes having something new	24	(52)
Makes others happy	6	(13)
No feelings	2	(4)
Moods that make buying more likely		` '
Sadness	30	(65)
Anger	5	(11)
Irritable	3	(7)
Lonely	13	(28)
Нарру	11	(24)
Elated	6	(13
Frustrated	7	(15
Hurt	2	`(4
Guilty	6	(13
Items most commonly purchased in a buying episode		•
Clothes	33	(72
Shoes	16	(35)
Makeup	10	(22
CDs/records	16	(35
Food	5	(11
Jewelry	12	(26
Electronics	7	(15
Liquor	1	(2
Art	2	(4

Table 5. (Continued)

Item	N	(%)
Collectibles	9	(20)
Antiques	4	(9)
Toys	4	(9)
Books	1	(2)
No specific item	1	(2)
Person subjects report buying for most often		(- /
Self	18	(39)
Others	2	(4)
Both	26	(57)
Subjects' shopping preference		()
Alone	34	(74)
With others	12	(26)
What subjects are most aware of when shopping		(··-)
Colors of products	28	(61)
Sounds in the store	19	(41)
Lighting in the store	15	(33)
Smells	25	(54)
Textures	34	(74)
Tastes	16	(35)
Others in the store	24	(52)
Nothing in particular	4	(9)
Most common outcome of buying		` '
Failure to remove from packaging	25	(54)
Return item	25	(54)
Throw item out	2	(4)
Sell item	18	(39)
Give item away	29	(63)
Put item in storage	25	(54)
Use item	44	(96)

alence of major depression than we do (68% and 95%, respectively, vs. 28%), and anxiety disorder prevalence is much higher in the report by McElroy et al. (80%). The findings may be accounted for in part by the different methods used. We and Christenson et al. recruited subjects through an advertisement, whereas McElroy et al. essentially studied a psychiatric sample, where one would expect a greater prevalence of mental disorder. Both McElroy et al. and Christenson et al. administered the SCID interview, whereas we used a computerized version of the DIS. Ignoring the actual numbers, all three reports agree that among samples of compulsive buyers, the prevalence of mood, anxiety, substance use, and eating disorders is increased. Our report also suggests an increase in the personality disorders; both our report and McElroy et al. suggest an increased prevalence of impulse control disorders.

The relationship between compulsive buying and OCD, and disorders of impulse control remains unclear. Our results indicate that compulsive buying shares many superficial similarities with OCD, including repetitive and problematic spending, intrusive thoughts about spending, and resistance to such thoughts and behavior. Interestingly, the lifetime prevalence of OCD was 35% in the report of McElroy et al. [3] and 12.5% in the report of Christenson et al. [4]. However, in our study, only two (4.9%) subjects met criteria for OCD. On the other hand, compulsive buying seems to have more in common with disorders of impulse control, such as pathologic gambling. With those disorders, at least initially the behavior is perceived as pleasurable, and it is only through time and experience that subjects learn the destructive potential of the behaviors. The fact that so many of our compulsive buyers met criteria for

Table 6. Financial information on 46 subjects with compulsive buying

Item	N	(%)
Accrued debt from buying		
\$0	5	(11)
\$100-\$500	10	(22)
\$501-\$1,000	5	(11)
\$1,001-\$2,000	9	(20)
\$2,001-\$4,000	6	(13)
\$5,000	2	(4)
\$6,000	3	(7)
\$10,000	2	(4)
\$15,000	2	(4)
\$30,000	1	(2)
\$100,000	1	(2)
Mean (SD) = \$5,422 (\$15,078)		
Credit cards with outstanding balances		
0	8	(17)
1	5	(11)
2	4	(9)
2 3	4	(9)
4	5	(11)
5	7	(15)
6	5	(9)
7	3	(7)
8	2	(4)
>10	3	(7)

one or more impulse control disorders suggests an overlap of the syndromes.

The current study was designed to assess persons who reported having problems with compulsive buying. As the subjects all responded to an advertisement, the results need to be interpreted with caution, because the selection process may have led to an ascertainment bias. Further, the use of a computer interactive version of the DIS may have led to the underecognition of Axis I disorders, which a personal interview may have uncovered. The data do suggest that a significant number of persons have similar problems with spending, and that compulsive buying is a definable syndrome that can cause enormous personal, social, and economic disability. The results also show significant psychiatric comorbidity. Additional work needs to be done to better characterize the disorder, define its boundaries, and explore its treatment. We currently have in progress an open label treatment study using fluvoxamine, a serotonin selective reuptake inhibitor, in the treatment of

Table 7. Subjects' awareness of buying behavior

Number and type of event associated with onset of problem buying Number reporting a significant event 34 Own money 14 Own car 1 Moved out 7 Boredom/loneliness 1 Own credit card 6 Unspecified/didn't know 5	(%) (30) (2) (15) (2) (13) (11)
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Moved out 7 Boredom/loneliness 1 Own credit card 6 Unspecified/didn't know 5	(15) (2) (13) (11)
Boredom/loneliness 1 Own credit card 6 Unspecified/didn't know 5	(2) (13) (11)
Own credit card 6 Unspecified/didn't know 5	(13) (11)
Unspecified/didn't know 5	(11)
How subjects realized they had buying	
problem	
	(70)
	(33)
	(13)
	(43)
	(30)
Seeing ad for study 1	(2)
Ran out of room for belongings 1	(2)
Subjects' concerns about buying behavior	
	(85)
	(80)
Frequency of buying 33	(72)
	(76)
	(74)
Number of items purchased each	
	(54)
Time spent shopping 16	(35)
What others think 26	(57)
What subjects dislike most about buying	
	(11)
Debt 36	(78)
Overwhelmed confused 4	(9)
Hassles with salespeople 4	(9)
	(11)
Subjects say	
They make a deal to control buying 39 ((85)
	(85)
They stop under influence of	
drugs/alcohol 13	(28)
Shopping is sexually stimulating 5	(11)

compulsive buying and will report these results later.

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