Shopping addiction†
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SUMMARY
Shopping addiction (compulsive buying disorder) has been an area of increased interest in recent years. Shopping addiction can adversely affect the individual and their family, social and occupational life. The addiction is associated with high rates of psychiatric comorbidity. Early identification and appropriate management can limit the long-term adverse consequences and improve outcome. This article reviews the aetiology, epidemiology, clinical features, psychiatric comorbidity and management of the disorder.

DECLARATION OF INTEREST
None.

Shopping addiction, often referred to as compulsive buying disorder, was first described by the German psychiatrist Emil Kraepelin almost a century ago (Kraepelin 1915: p. 409). He called the disorder ‘oniomania’ (from Greek onios, meaning ‘for sale’, and mania, meaning ‘insanity’) and those affected, ‘buying maniacs’. Eugene Bleuler (1924) concluded that compulsive buying disorder is a form of a reactive impulse or impulsive insanity and he grouped it with kleptomania and pyromania. The behaviour has since been referred to variously as compulsive shopping, compulsive consumption, compulsive buying, addictive buying, uncontrolled buying and ‘spenderholism’.

There has been much debate on whether ‘shopping addiction’ is a valid mental illness or a leisure activity that individuals use to manage their emotions or express their self-identity. The creation of a psychiatric condition such as compulsive buying has been controversial, as it could be seen as the ‘medicalising’ of a ‘moral’ problem and might bring into question the moral and legal consequences of the behaviour (Hollander 2006). Healy (2002) suggests that powerful drug corporations may be able to market disorders by shaping how we perceive and classify emotional distress, thereby influencing our diagnostic concepts to develop new markets. Other non-chemical dependencies, such as sex addiction, internet addiction, gambling and work addiction, are being similarly disputed. In the ongoing research planning for DSM-5, some of the changes being considered include creation of two broad new categories to conceptualise these disorders. The obsessive–compulsive-related disorders may include pathological grooming disorders such as trichotillomania, whereas a parallel category under consideration contains behavioural and substance additions, including the impulse-control disorders such as compulsive buying and internet addiction. In this article, we accept that, whatever its diagnostic classification, shopping addiction is a behaviour that can bring an individual to a psychiatrist, and consider it from a clinical perspective.

Clinical features
People affected by shopping addiction are preoccupied with shopping and spending, and experience various moods of satisfaction in the process. They develop thoughts, urges and preoccupations that prepare them for shopping and spending. This happens even when they recognise that the behaviour is clearly having a negative impact on their life.

Most researchers (e.g. Lejoyeux 1999; Mueller 2007) use McElroy et al’s (1994) preliminary operational diagnostic criteria for compulsive buying in their studies (Box 1). These describe compulsive buying as problematic buying behaviour that is: (1) uncontrollable; (2) markedly distressing, time-consuming, and/or resulting in family, social, financial, occupational or other significant problems.

BOX 1 Preliminary operational criteria for the diagnosis of compulsive buying

1. Maladaptive preoccupation with buying or shopping, or maladaptive buying or shopping impulses or behaviour, as indicated by at least one of the following:
   (a) frequent preoccupation with buying or impulses to buy that is/are experienced as irresistible, intrusive and/or senseless
   (b) frequent buying of more than what can be afforded, frequent buying of items that are not needed, or shopping for longer periods of time than needed

2. The buying preoccupations, impulses or behaviours cause marked distress, are time-consuming, significantly interfere with social or occupational functioning, or result in financial problems (e.g. indebtedness or bankruptcy)

3. The excessive buying or shopping behaviour does not occur exclusively during periods of hypomania or mania

(After McElroy 1994, with permission)
Compulsive buying disorder is found throughout the world, although it appears to be confined to the high-income countries: Black (2001) notes reports from Brazil, England, France, Germany and the USA. Despite being described in the early 1900s, the first epidemiological studies on the disorder date from the late 1980s (Dell’Osso 2008). In 1989, Faber & O’Guinn estimated the prevalence to fall between 2 and 8% of the general population, based on results of a survey in Illinois, USA (Black 2007a). They used the Compulsive Buying Scale (Faber 1992) in 292 individuals and the two figures correspond to different thresholds set for the definition of the disorder based on the Compulsive Buying Scale score. A more recent study in the USA based on the results of a random-sample telephone survey of more than 2500 adults estimated the point prevalence to be 5.8% (Koran 2006). In both clinical and community samples, there is a high female preponderance, ranging from 80 to 92% (McElroy 1994; Schlosser 1994), although Koran et al (2006) have reported the prevalence to be near equal in men and women. Hence, the reported gender difference may be artefactual, as women with significant compulsive buying are more willing to seek treatment (Möller-Leimkühler 2002). However, a general population survey in the UK in 1992 shows that the gender difference is real and that shopping plays a stronger emotional, psychological and symbolic role for women than for men (Dittmar 2005).

The age at which compulsive buying starts has been reported to range from 18 to 30 years, the differences probably stemming from the investigators’ methods of sampling. In a review of the literature, Black (2007b) has suggested onset corresponds with emancipation from the nuclear family and the age at which people first establish their credit accounts. Materialistic adolescents nowadays have more money to spend on themselves each month, and they make active efforts to obtain greater sums, either by persuading or pressurising parents, or finding ways of earning money themselves. Some longitudinal studies noted by Black suggest the course of compulsive buying disorder to be continuous, with buyers reporting decades of compulsive shopping behaviour. Preliminary evidence suggests the disorder to run in families, along with a higher incidence of mood, anxiety and substance use disorders.

Aetiology

The earliest writings about the disorder by Kraepelin focused on a psychodynamic interpretation, but more recent investigations have looked into developmental, neurobiological and cultural influences. Compulsive buying disorder, along with other impulse-control disorders, is described as a ‘behavioural addiction’ (Hollander 2006), and growing evidence is supporting phenomenological, genetic and neurobiological

**BOX 2 The four stages of compulsive buying**

1. Anticipation: individuals feel an urge to shop
2. Preparation: they start to prepare for shopping and spending, e.g. deciding where to go, what to wear and which credit cards to use
3. Shopping: the most important phase – individuals experience either a temporary relief or a great sense of excitement or even sexual feeling
4. Spending: soon after buying the item, they start to feel frustrated with their actions

(Black 2007a)
links between behavioural and substance addictions. They show common clinical features, such as repetitive or compulsive engagement in a behaviour despite adverse consequences, diminished control over the behaviour, a state of craving before engaging in the behaviour, and sometimes aspects of tolerance, withdrawal and impairment in major areas of functioning (Grant 2006).

**Neurobiology of addictions**

Initial research into the biology of addictive behaviours such as shopping addiction has provided insight into their possible pathophysiology. A range of biochemical, functional neuroimaging and genetic studies have helped to promote our understanding of the aetiological theories. Along with identified changes in levels of serotonin, dopamine, endogenous opioids and cortisol, there exists an imbalance between an overstimulated drive state and impairment in inhibition or reward processing. There is probably impairment in frontal inhibition due to dysfunction in the serotonin system, with lowered levels of peripheral serotonin markers (Grant 2006). There is an exaggerated craving and urge state, owing to alterations in dopaminergic systems which influence rewarding and reinforcing behaviour.

Endogenous opioids are also suggested to cause changes in urge regulation through processing of reward, pleasure and pain (Grant 2006).

Although most studies have been conducted in individuals with a genetic predisposition to alcohol use disorders, correlations have also been established in impulse-control disorders (Black 2007a). Neuroimaging studies involving people with pathological gambling suggest similarities between behavioural and substance addictions, with decreased activation in the ventromedial prefrontal cortex and mesocorticolimbic dopamine system. In the absence of specific studies on shopping addiction, it can be postulated that a similar complex network of brain regions is activated in this and other impulse-control disorders.

**Sociocultural factors**

Several authors have argued that social, economic and family factors play an important role in the aetiology of compulsive buying disorder (Dell’Osso 2008). Factors identified include the easy availability of credit cards, increased media advertising and opportunities for home shopping through television shows and the internet. This also corroborates the fact that buying disorders occur mainly in high-income countries where these factors either cause or promote the disorder. With the breakdown of family structures and lack of a sense of community cohesion, compulsive buyers have resorted to uncontrolled buying as a compensatory behaviour that temporarily alleviates negative feelings of isolation and loneliness.

**Psychoanalytical theories**

Deep-rooted conflicts, early-life events, the absence of a stable internal self-image and castration anxiety (in women) have all been posited as contributory factors in compulsive buying (Black 1996). However, no pattern of shared early events has yet been established in people with the disorder. It is thought that the negative emotions associated with early events are either dissipated or supplanted by euphoria while buying. Dittmar (2005) has commented that a materialistic value system guides people towards psychologically motivated buying behaviour as a strategy to achieve major life goals. However, this can have a negative effect on their well-being, as the mood-repair and sense of identity that they seek in buying consumer goods are short-lived, and in the long term buying does not make them happier.

**Cognitive–behavioural theories**

Kellett & Bolton’s (2009) cognitive–behavioural model of compulsive buying organises key aspects of the behaviour into four phases:

1. antecedent factors, including early developmental experiences and family environment
2. internal emotional and external triggers
3. the act of buying
4. post-purchase emotional, behavioural and financial factors.

Internal trigger states such as depression and anxiety associated with external cues of advertising, available credit and promotional events lead to poor self-regulation, heightened emotions and narrowing of emotional processes (Kellett 2009).

Among compulsive buyers, there is evidence that their mood changes towards positive affect in the lead-up to buying, with relief and gratification during the act of purchasing. However, when they get their purchases home, they are flooded with emotions of guilt, shame, regret and despair. To cope with these feelings they hide the purchases or ignore them. Of the range of emotions described by compulsive buyers, the predominant emotional changes are sadness and euphoria (Miltenberger 2003).

**Comorbid psychiatric disorders**

Both controlled and uncontrolled studies have reported high rates of psychiatric disorders in
compulsive buyers. Psychiatric illnesses are more common in people with shopping addiction than in the general population.

**Affective disorders**

Affective disorders are the most commonly recorded psychiatric illnesses in compulsive buyers. Mueller et al (2007) reported a lifetime prevalence of any affective disorder of 68% in people with compulsive buying disorder. Black et al (1998) found that compulsive buyers were more likely than controls to have lifetime affective disorders. However, Christenson et al (1994) reported that affective disorders were present in both normal buyers and compulsive buyers, and found no significant association between compulsive buying and affective disorders.

Of the affective disorders, depression is the most frequent diagnosis in this population (Black 1998). McElroy et al (1994) found that 70% of their study sample had reported depression before the onset of compulsive buying. In a study by Schlosser et al (1994), the lifetime prevalence of depression was 28% and recurrent depression was common. Valence et al (1988) also found a positive correlation between compulsive buying and depression.

In a study of the buying behaviour of depressed people with and without compulsive buying, bipolar disorder was less common in the compulsive buyers than in the non-compulsive group (Lejoyeux 1999). Christenson et al (1994) and Schlosser et al (1994) found no cases of bipolar disorder in their groups of compulsive buyers. Compulsive buying did not seem to have accompanying periods of elevated mood and excessive spending similar to a manic phase of bipolar illness; rather, it had continual fixation on shopping.

**Anxiety disorder**

Rates of anxiety disorders were quite high in the Mueller et al (2007) study, which compared the compulsive buyers in Germany and the USA. Up to 41% of individuals had a lifetime prevalence of anxiety disorder, mainly generalised anxiety, phobic disorder, panic disorder and OCD.

Some researchers debate whether compulsive buying belongs to the obsessive–compulsive spectrum or the impulse-control disorders. As mentioned earlier, McElroy et al (1984) described compulsive buying using criteria similar to the more severe symptoms of OCD (Box 1). A study conducted by Lejoyeux et al (1999) reported that 23% of people with OCD were compulsive buyers v. 6% of controls. Likewise, Christenson et al (1994) found that OCD was more common in compulsive buyers than in normal buyers.

**Personality disorder**

Schlosser et al (1994) reported that around 60% of the compulsive buyers in their study met criteria for a personality disorder; obsessive–compulsive, borderline and avoidant types were most common. There seems to be a link between narcissistic personality disorder and compulsive buying arising from difficulties in impulse control (Rose 2007).

**Impulse-control disorders**

The key characteristics of impulse-control disorders (Box 3) are similar to feelings expressed by compulsive buyers, and such disorders are quite common among compulsive buyers. A study among psychiatric in-patients (Grant 2005) reported that almost 40% had at least one current impulse-control disorder, the most common being compulsive buying (9.3%), kleptomania (7.8%) and pathological gambling (6.9%). The study by Schlosser et al (1994) confirmed the presence of impulse-control disorders among compulsive buyers. The most common was kleptomania, followed by intermittent explosive disorder, pathological gambling, addictive sexual behaviour, trichotillomania and pyromania.

Kleptomania is characterised by irresistible and repetitive urges to steal goods that are of little use to the individual or could be easily afforded. There seems to be an interesting relationship between kleptomania and compulsive buying. Grant & Potenza (2008), in their study of 95 adults with kleptomania, found that 14.7% of the women and 11% of the men were also compulsive buyers. As already mentioned, Schlosser et al (1994) also found that kleptomania was the most common impulse-control disorder in compulsive buyers. Lejoyeux et al (1997) reported that kleptomania was more frequent in depressed compulsive buyers than in depressed non-compulsive buyers, suggesting that depression is associated with marked impulsivity.

**BOX 3 Characteristics of impulse-control disorders**

- Failure to resist an impulse, drive or temptation to perform some action that is harmful to the self or others; conscious resistance of the impulse and planning of the act may or may not occur
- An increasing sense of inner tension or arousal before committing the act
- Feelings of pleasure, gratification or release while carrying out the act

(American Psychiatric Association 1994)
**Substance use disorders**

Research has suggested a strong neurobiological link between substance misuse and compulsive buying (Grant 2006). Reported rates of substance use disorders in compulsive buyers range from 21% (Black 1998) to 26% (current) and 30% (lifetime) (Schlosser 1994) to 46% (Christenson 1994). High rates of substance dependence were also found, with alcohol dependence the most common, followed by cannabis dependence (Schlosser 1994). Lejoyeux et al (1999) reported alcohol, benzodiazepine and nicotine dependence to be very common in compulsive buyers. Substance misuse and dependence in compulsive buyers are likely to be related to other risky behaviours that they engage in, increased impulsivity and coexisting psychiatric illness.

**Eating disorders**

The association of compulsive buying with eating disorders is uncertain. Black et al (1998) reported an increase in lifetime prevalence of eating disorders in compulsive buyers (15%) compared with controls (5%). Similarly, Mueller et al (2007) reported a lifetime prevalence for eating disorder of around 17%, with binge eating disorder being common. However, Mitchell et al (2002) failed to find any significant link between compulsive buying and eating disorder.

**Management**

As with diagnosis, appropriate management of shopping addiction has been difficult to establish, because there is limited evidence of what works. There is scope for both pharmacological and psychological treatment. Although there is no evidence-based treatment, there are case studies reporting response to antidepressants, especially selective serotonin reuptake inhibitors.

**Pharmacotherapy**

The similarities between compulsive shopping and obsessive–compulsive disorder suggest that medication used to treat OCD would be useful. However, studies conducted thus far have shown mixed results. In a 12-week open-label trial of citalopram (up to 60 mg a day) for compulsive shopping disorder (Koran 2003), 15 out of the 24 participants responded positively. However, people with comorbid depressive disorder were not excluded from the trial and it could be that the decrease in compulsive shopping was related to the improvement of depressive symptoms. A more recent study by Koran and colleagues (2007) found that escitalopram was no more effective than placebo. Fluvoxamine showed improvement in early open-label studies (Black 1997), but two subsequent randomised controlled trials (Black 2000; Ninan 2000) failed to prove the drug to be better than placebo. Naltrexone, an opiate antagonist, is reported to reduce urges to shop and compulsive shopping behaviour (Kim 1998; Grant 2003).

**Psychotherapy and self-help**

The psychological interventions studied include cognitive–behavioural therapy, cue exposure and a self-help programme combining cognitive–behavioural strategies with self-monitoring. Bernik et al (1996) believe that exposure to environmental cues associated with dysfunctional shopping behaviour contributes to relapses. In two case studies, they reported a marked reduction of distress on exposure to shopping-related cues after a few weeks of cue exposure therapy. Neither patient relapsed into compulsive shopping behaviour during the 2-year follow-up. Both patients were on clomipramine and it must be noted that, although clomipramine on its own had not controlled the compulsive buying, it may have had a role in facilitating the behavioural interventions and in preventing relapse.

A randomised controlled trial of group cognitive–behavioural therapy for compulsive buying disorder concluded that disorder-specific group therapy can significantly improve the disorder (Mueller 2008). Poorer attendance at the group sessions and higher pretreatment hoarding traits were significant predictors for non-response. Factors such as psychiatric comorbidity, age, duration of compulsive buying and medication did not differ between participants who improved with treatment and those who did not.

Several self-help books (e.g. Catalano 1993) focus on helping and supporting people with compulsive buying disorder. Debtors Anonymous, a voluntary self-help group similar to Alcoholics Anonymous, provides an environment of mutual support and encouragement to people with compulsive buying disorder (Levine 2000). As compulsive buying can lead to strained and difficult relationships, marriage or couples counselling may be useful (Mellan 2000).

In their useful article on the management of compulsive buying, Kuzma & Black (2006) take a strong position regarding self-help. They advise that individuals should be informed that they cannot rely on medication to control their behaviour. Instead, they are encouraged to follow a four-step approach (Box 4) to break the habit themselves.
BOX 4 Four steps to control compulsive spending

1. Admit you are a compulsive shopper
2. Cut up the credit cards, and get rid of the checkbook – sources of easy credit fuel the problem
3. Shop only with a friend or relative; embarrassment will curb the tendency to overspend
4. Find meaningful ways to spend your time, other than shopping

(Kuzma 2006)

Conclusions

Whether compulsive buying disorder is a valid psychiatric diagnosis is still under debate. Nevertheless, it cannot be denied that some people are ‘addicted to shopping’ and need help for their addiction. Further research is needed to understand the behaviour better in terms of aetiology, prevalence, clinical features, the course of the illness and treatment.

References

MCQs
Select the single best option for each question stem

1 As regards the aetiology of shopping addiction:
   a serotonin system dysfunction leads to frontal lobe excitation, which prevents individuals from controlling their desires
   b buying disorders mainly occur in low- and middle-income countries because of easy availability of credit cards
   c there is probably an imbalance between an overstimulated drive state and an impairment in inhibition or reward processing areas in the brain
   d internal trigger states such as depression and anxiety do not lead to poor self-regulation in the pre-buying stage
   e when considering their purchases at home, individuals experience relief and gratification.

2 As regards psychiatric morbidity:
   a depression is infrequent among compulsive buyers
   b most compulsive buyers have periods of elated mood and excessive spending similar to a manic episode
   c up to 60% of compulsive buyers have at least one personality disorder
   d there is a significant link between compulsive buying and eating disorders
   e kleptomania is the least common coexisting impulse-control disorder.

3 As regards the clinical symptoms of compulsive buying:
   a most of the time, compulsive buyers shop for goods that are useful to them
   b one of the McElroy criteria of compulsive buying is that it should not occur exclusively during periods of hypomania or mania
   c well in advance of beginning to shop, most compulsive buyers plan to buy specific goods
   d compulsive buying is equally prevalent in both men and women
   e compulsive buyers do not usually get into financial debt.

4 As regards shopping addiction and comorbid substance misuse:
   a there is no neurobiological correlation between substance misuse and shopping addiction
   b cannabis is the most common substance misused by compulsive buyers
   c benzodiazepine misuse is not found in patients with shopping addiction
   d the two are probably related to the individual’s increased impulsivity, other risky behaviours and coexisting psychiatric illness
   e nicotine dependence is very rare in compulsive buyers.

5 As regards the management of shopping addiction:
   a pharmacological intervention is the mainstay of management
   b naltrexone is not useful
   c cue exposure is not useful
   d the self-help group Debtors Anonymous offers support for people with shopping addiction
   e behaviour strategies such as getting rid of credit cards and shopping with friends or relatives are of no use.