

# Cognitive-behavioral treatment for impulse control disorders

## Tratamento cognitivo e comportamental para transtornos do controle do impulso

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### Abstract

**Objectives:** This paper reviews the cognitive-behavioral treatment of kleptomania, compulsive buying, and pathological gambling. **Method:** A review of the published literature was conducted. **Results:** Treatment research in all of these areas is limited. The cognitive-behavioral techniques used in the treatment of kleptomania encompass covert sensitization, imaginal desensitization, systematic desensitization, aversion therapy, relaxation training, and alternative sources of satisfaction. Regarding compulsive buying, no empirical support for treatment exists but common techniques examined were covert sensitization, exposure and response prevention, stimulus control, cognitive restructuring, and relapse prevention. Treatment of pathological gambling has been successful in both group and individual format using techniques such as aversive therapy, systematic desensitization, imaginal desensitization and multimodal behavior therapy (which have included in vivo exposure, stimulus control, and covert sensitization) along with cognitive techniques such as psychoeducation, cognitive-restructuring, and relapse prevention. **Conclusions:** There is a general consensus in the literature that cognitive-behavioral therapies offer an effective model for intervention for all these disorders. An individualized case formulation is presented with a case study example. Clinical practice guidelines are suggested for each disorder.

**Descriptors:** Impulse control disorders; Pathological gambling; Kleptomania; Compulsive shopping; Compulsive-behavioral treatment

### Resumo

**Objetivos:** Este artigo revisa o tratamento cognitivo-comportamental da cleptomania, do comprar compulsivo e do jogo patológico. **Método:** Revisão da literatura publicada. **Resultados:** A pesquisa sobre o tratamento em todas essas áreas é limitada. As técnicas cognitivo-comportamentais utilizadas no tratamento da cleptomania compreendem sensibilização encoberta, dessensibilização por imaginação, dessensibilização sistemática, terapia aversiva, treino de relaxamento e fontes alternativas de satisfação. Com relação ao comprar compulsivo, não existe amparo empírico para o tratamento, mas as técnicas avaliadas foram sensibilização encoberta, exposição e prevenção de resposta, controle do estímulo, reestruturação cognitiva e prevenção de recaída. O tratamento do jogo patológico teve êxito tanto na terapia em grupo como individual, utilizando técnicas tais como terapia aversiva, dessensibilização sistemática, dessensibilização por imaginação e terapia comportamental multimodal (incluindo exposição in vivo, controle de estímulos e sensibilização encoberta), juntamente com técnicas cognitivas, tais como psicoeducação, reestruturação cognitiva e prevenção de recaída. **Conclusões:** Há um consenso geral na literatura de que as terapias cognitivo-comportamentais oferecem um modelo eficaz de intervenção em todos esses transtornos. Uma formulação de caso individualizada é apresentada com um exemplo de estudo de caso. Sugerem-se diretrizes para a prática clínica de cada transtorno.

**Descritores:** Transtornos do controle de impulsos; Jogo patológico; Cleptomania; Comprar compulsivo; Tratamento cognitivo-comportamental

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## Introduction

This paper reviews the cognitive-behavioural treatment (CBT) of kleptomania, compulsive buying, and pathological gambling. In drawing from the research literature, clinical practice guidelines are suggested for each disorder. Both pathological gambling and kleptomania are classified as Impulse Control Disorders in the DSM-IV-TR and the behaviors of compulsive buying can be considered an Impulse Control Disorder – Not Otherwise Specified. These disorders share the characteristics of the failure to resist urges to perform a harmful behavior, increasing tension or arousal that precedes the act, and pleasure or relief upon performing the act.<sup>1</sup>

Treatment research in all of these areas is limited. To date, there are no randomized clinical trials that examine the cognitive-behavioural treatment of kleptomania or compulsive buying and few trials have been conducted with pathological gamblers. However, there is a general consensus in the literature that cognitive-behavioural therapies offer an effective model for intervention for all these disorders.<sup>2,3</sup>

## CBT for kleptomania

The research on kleptomania is limited for several reasons. Prevalence rates in the general population are unknown,<sup>1</sup> although among clinical samples, estimates for kleptomania have ranged from 2.1% to 7.8%.<sup>3</sup> Kleptomania is considered rare with fewer than 5% of shoplifters classified as such.<sup>1</sup> Many individuals with kleptomania do not present for treatment unless they have been mandated as a result of getting caught shoplifting.<sup>4</sup> A review of the literature failed to uncover any clinical trials for CBT for kleptomania; however, several case studies have used CBT in the treatment of kleptomania with promising results. The cognitive-behavioural techniques used in the treatment of kleptomania encompass covert sensitization, imaginal desensitization, systematic desensitization, aversion therapy, relaxation training, and alternative sources of satisfaction. CBT has largely replaced psychoanalytic and psychodynamic therapies in the treatment of kleptomania.<sup>3</sup>

In terms of individual CBT, there have been several case studies with clients who have benefited from this approach. In early research, behavioural techniques were favored. Covert sensitization combined with exposure and response prevention was used to treat a man with kleptomania.<sup>5</sup> Over a four-month period, the client attended seven sessions where he was directed to imagine stealing and the consequences of stealing such as being seen by a store manager, approached by security, handcuffed, put in a police car, going before the judge, and the feelings of embarrassment. For his exposure task, he was instructed to go to stores and imagine that the manager and security were watching him. The man reported a reduction in stealing behaviors, but noted no change in his urges to steal. No follow-up was reported.

The use of covert sensitization in the treatment of kleptomania is well documented in other case studies. The effectiveness of covert sensitization in a 30-year-old woman with compulsive shoplifting was examined.<sup>6</sup> The client was directed to practice the covert sensitization technique ten times a day and whenever she felt the urge to steal. The client imagined herself in a situation where she was having an urge to steal and imagined the possible consequences of stealing such as the process of being caught and arrested

(being handcuffed, put in police car, appearing before the judge) and having the family and neighbors find out (possibly losing her family). Following five weekly sessions, the client noted that her urges were nearly diminished and after a 14-month follow-up, she reported having one lapse. Of note, this study employed a thought stopping technique as a control for non-specific effects of the covert sensitization; following a week of thought-stopping, the client reported an increase in the frequency, duration and intensity of shoplifting urges and a decrease in her ability to resist the temptation. The authors, therefore, caution the use of thought stopping for the treatment of kleptomania.<sup>6</sup>

Covert sensitization was also used over four sessions with a 56-year-old woman who had a history of daily kleptomania. She was instructed to imagine that as she approached a tempting item she became increasingly nauseous, and as she picked up the item, vomited, and was witnessed by other shoppers.<sup>7</sup> She was also directed in stimulus control (e.g., bring a shopping list when shopping and leave her "usual" bag for shoplifting at home). Only one lapse was reported over a 19-month follow-up period.

Imaginal desensitization was used with two clients who were hospitalized for depression and whose kleptomania symptoms did not respond to antidepressants or insight-oriented therapy.<sup>8</sup> Clients were taught progressive muscle relaxation and instructed to imagine each step that led to the act of stealing while the therapist provided the suggestions that the client is able to identify the behavior as destructive, that the urge can be controlled, and end the scene without stealing.

Only one study reported on the use of systematic desensitization in the treatment of kleptomania. In that study, a 24-year-old female with kleptomania was successfully treated over 16 sessions with systematic desensitization.<sup>9</sup> Multiple tempting situations were used to construct a hierarchy, with items arranged in order of increasing anxiety and probability of eliciting a stealing response. A ten-month follow-up revealed no incidents of kleptomania.

Other cognitive-behavioral techniques have also been examined in the treatment of kleptomania as well. In one case study, a 25-year-old woman, who was stealing daily, received instruction on the aversive breath holding technique.<sup>10</sup> Over six weekly sessions, the client was directed to hold her breath until she felt mild pain whenever she experienced an urge to steal or an image of herself stealing. Over a 10-week follow-up period, the client reported three lapses, a substantial decrease from her daily stealing episodes.

A different approach provided alternative sources of satisfaction to a client with a 20-year history of shop lifting and comorbid OCD.<sup>11</sup> The client claimed that her kleptomania was in response to feeling depressed, as well as the need for purpose and excitement. Over a five-month period, her weekly sessions consisted of helping the patient identify activities that would increase self-fulfillment and provide excitement and pleasure. She was also instructed to practice relaxation techniques. The client reported that her urges decreased and eventually disappeared, and no incidents of stealing were reported over a 2-year follow-up period. She also noted marked reduction in obsessive-compulsive and depressive symptoms.

One study<sup>12</sup> reported on 12 individuals with kleptomania who received behaviorally oriented interventions. Most patients

received exposure training along with individualized interventions including communication training, social skills training, relaxation training, role plays, body perception training, and confrontation training. Of the 12 patients, four showed improvement in kleptomaniac symptoms, six had no acts of kleptomania, while two patients remained unchanged. At a 2-year follow-up, six of the eight followed had reported no incidents of kleptomania.

In 1991, another research team<sup>13</sup> reported on the use of CBT with a 42-year-old woman with kleptomania. Treatment lasted 39 sessions over 16 months and cognitive restructuring was used to challenge and replace irrational self-statements such as "I must not steal, it is damnable and leads to catastrophe" or "it would be unbearable if others found out." In a 5-year follow-up session, the client reported no lapses. More recently, a case study was presented on a man who was taught CBT techniques including covert sensitization, problem solving cognitive restructuring and behavioral chaining which examines the behavioral antecedents of stealing behaviours.<sup>14</sup> A 4-month follow-up indicated positive findings with no episodes of kleptomania reported by the client.

CBT as an adjunct to pharmacology has also been described.<sup>15</sup> Two cases were presented where kleptomania developed post brain injury. Two men were treated with an antidepressant with either an adjunctive CBT intervention (which included cognitive restructuring, problem solving, and relapse prevention) or an adjunctive treatment with naltrexone (up to 100 mg/day). Patient 1 sustained a blunt trauma to his frontotemporal area yet an MRI and neurologic tests were within normal limits; he received 40 mg/day of citalopram with up to 1 mg/day of clonazepam as needed. Patient 2 suffered a contusion in the left temporal lobe; he received 150 mg/day of venlafaxine. The antidepressant therapy alone was not effective in reducing kleptomaniac symptoms; however, when paired with the adjunctive CBT or naltrexone, the clients were asymptomatic in terms of kleptomaniac symptoms at 14-month follow-up.

In summary, there is evidence from numerous case studies that a variety of CBT techniques are effective in the treatment of kleptomania. CBT is favored over other approaches such as psychodynamic and psychoanalytic therapies and the literature supports this.<sup>3</sup> Studies to date suggest that CBT, when used in combination with medication, is more effective than medication alone. Large randomized controlled trials are lacking.

#### CBT for compulsive buying

Compulsive buying (also referred to as compulsive shopping disorder, oniomania, buying disorder) can be classified as an Impulse Control Disorder – Not Otherwise Specified in the DSM-IV-TR. Although compulsive buying does not have specified criteria in the DSM, the diagnostic criteria described by some researchers<sup>16</sup> has core features of impulse control disorders including preceding tension, repetitive urges that are difficult to resist, and pleasure or relief after the act.

The efficacy of CBT in the treatment of compulsive buying has yet to be established. To date there are no published randomized clinical trials involving the treatment of compulsive buying. The literature contains promising reports of case studies and small uncontrolled trials that have successfully used the cognitive-behavioral approach to treat compulsive buying.

Based on a theoretical conceptualization of compulsive buying, the use of graded exposure to increasingly tempting situations with response prevention and stimulus control has been suggested,

although the application of this approach to individual patients was not described.<sup>17</sup> There were two case studies where cue exposure with response prevention was used.<sup>18</sup> Both subjects presented with comorbid panic disorder and agoraphobia and responded well to treatment with clomipramine, but reported no effect on their compulsive buying. Although no follow-up data were reported, both subjects were described to have "complete control" over their shopping behaviors after three to four weeks of daily exposure to external cues and response prevention techniques. Another case report described a 32-year-old woman with compulsive buying behaviors who was treated with fluvoxamine and individual cognitive-behavioral psychotherapy.<sup>19</sup> No details about the length of treatment or the cognitive-behavioral techniques employed were reported. Over a 12-month follow-up period, the woman did not report any compulsive buying episodes.

Efforts to address the treatment of compulsive buying in a group format first included relaxation training and guided visualization. This was also adapted into a self-help format.<sup>20</sup> Other approaches to group treatment (for example, *Buying Addiction: Analysis, Evaluation, and Treatment*, cited in<sup>21</sup>) include techniques such as *in vivo* desensitization to control buying urges and members learn relaxation, visualization and cognitive restructuring to decrease anxiety. Typical cognitions may include the worry that the salesperson will be upset if nothing is purchased, or that one *must* make a purchase if it is tried on. The group runs 8 weeks and focuses on identifying factors that maintain the compulsive buying behavior and strategies to help control spending. This approach remains to be tested.

One cognitive-behavioral group therapy has preliminary results to support its efficacy.<sup>22</sup> A small study indicated that the women (n = 8) who participated in the group showed improvement, although no follow-up data were presented. More recently, this research team compared the efficacy of the group cognitive-behavioral treatment to a wait-list control group and found that individuals who received the group intervention had significant improvement over the wait-list group in reductions in the number of compulsive buying episodes and time spent buying.<sup>23</sup>

The research on the use of cognitive-behavioral techniques in the treatment of compulsive buying is in its infancy. To date, there is little consensus on the appropriate treatment for compulsive buying; however, research indicates that cognitive-behavioral treatments prove helpful.

#### CBT for pathological gambling

The majority of the published evaluations of psychosocial treatment for gambling disorders have been cognitive or cognitive-behavioral, although early studies focused on behavioral interventions.<sup>24</sup> Several case reports exist in the literature on behavioral treatments including techniques such as aversive therapy, systematic desensitization, imaginal desensitization and multimodal behavior therapy (which have included *in vivo* exposure, stimulus control, and covert sensitization).

The only randomized controlled trials utilizing behavioral treatments compared imaginal desensitization to other techniques. In the first study, pathological gamblers were

randomly assigned to receive imaginal desensitization or electric aversion therapy.<sup>25</sup> Those who received imaginal desensitization were taught gradual relaxation techniques, and asked to imagine responding to high-risk situations while in a relaxed state. At one month after treatment, there were no differences between the groups; at 12 months, 70% of those individuals who received imaginal desensitization had maintained reductions in gambling compared to 30% who received the aversive therapy. In a later study, 20 pathological gamblers received either imaginal desensitization or a relaxation condition.<sup>8</sup> All participants improved, but no difference was found between the groups. The third study compared four conditions: imaginal desensitization, aversion therapy, imaginal relaxation, or *in vivo* exposure to gambling situations.<sup>26</sup> Of those followed, the individuals who received the imaginal desensitization fared the best with 79% reported having cut down or ceased gambling, while only 33-50% of the other groups maintained gambling reductions.

Currently, behavior therapy is utilized in conjunction with cognitive approaches. Cognitive techniques include psychoeducation, cognitive-restructuring, problem solving, social skills training, and relapse prevention.<sup>27</sup> One study examined a cognitive-behavioral approach in the treatment of pathological gambling where individuals were randomly assigned to either a wait-list control condition or a treatment condition.<sup>28</sup> The intervention focused on cognitive correction techniques, problem solving skills, social skills training and relapse prevention techniques. Individuals who received the cognitive-behavioral intervention showed significant improvement at 6- and 12-month follow-up compared to those in the wait-list control condition.

Randomized controlled trials have been conducted to study the efficacy of cognitive therapy in both an individual and group format.<sup>29,30</sup> Individual cognitive treatment included cognitive restructuring techniques to deal with erroneous perceptions about gambling and relapse prevention. Results indicated that those who received the cognitive intervention demonstrated significant improvement on outcome measures of frequency of gambling, self-efficacy to abstain from gambling, perception of control and desire to gamble. Treatment gains were maintained at 6- and 12-month follow-ups.<sup>29</sup>

A more recent study examined the cognitive approach in a group format. Pathological gamblers were randomly assigned to a wait-list control condition or a 10-week treatment group that focused on cognitive correction techniques to combat erroneous beliefs of randomness and relapse prevention techniques.<sup>30</sup> Individuals who received treatment showed significant improvement over the wait-list control condition, which was maintained at 6-, 12-, and 24-month follow-ups.

Groups of briefer duration have also been examined. One team examined the efficacy of a 6-week cognitive-behavioral group treatment for pathological gamblers.<sup>31</sup> Individuals were given the option of participating in the program in a self-help format or group format. The individuals showed significant improvements for amount of money spent, frequency of days gambled, hours spent gambling, and everyday life problems. Gains were maintained at a 1-year follow-up.

There have been few attempts to compare behavioral and cognitive interventions. One research study examined the efficacy of behavioral therapy compared to cognitive therapy

and a combined cognitive-behavioral intervention.<sup>32</sup> Pathological slot-machine gamblers were randomly assigned to one of three types of treatment: 1) individual behavior therapy consisted of stimulus control and gradual *in vivo* exposure with response prevention. Stimulus control entailed avoiding high-risk situations and maintaining control over money, which was gradually faded out as treatment progressed. The *in vivo* exposure forced the individual to experience an urge to gamble while learning to resist that urge in a self-controlled manner. 2) Group cognitive restructuring focused on identifying cognitive distortions related to illusions of control and the memory biases about gains and losses. 3) Both the behavioral and cognitive interventions were delivered simultaneously which resulted in double the treatment hours though duration of treatment was the same. A wait-list control group was also included. All conditions showed improvement, although the individual behavior therapy was superior to the group or combined therapies. This research team later supported the efficacy of stimulus control and exposure with response prevention in an individual format.<sup>33</sup>

Other researchers have also examined the efficacy of combined cognitive-behavioral treatments. In a randomized clinical trial pathological gamblers received one of three conditions: 1) eight sessions of individual cognitive-behavioral therapy plus a Gamblers Anonymous (GA) referral, 2) a self-help cognitive-behavioral workbook plus a GA referral, or 3) a GA referral. GA is a mutual support group that is modeled after Alcoholics Anonymous. The cognitive-behavioral techniques included in the workbook and individual intervention included discovering triggers, functional analysis, increasing pleasant activities, self-management planning, coping with urges to gamble, assertiveness training, changing irrational thinking, and coping with lapses. All groups showed reduction in gambling behavior. Both treatment groups showed more improvement than the GA referral condition with the individual intervention showing the strongest results<sup>34</sup> (described later). A small number of uncontrolled trials have also evaluated cognitive-behavioral treatments with favorable results.<sup>35</sup>

In a series of experiments, a node-link mapping technique was used to enhance the effectiveness of group CBT.<sup>36</sup> Node-link mapping is a visual representation which highlights the relationship between thoughts, emotions, actions and environmental influences. Pathological gamblers were randomly assigned to a CBT mapping group, a CBT non-mapping group, or an 8-week wait-list control condition. Individuals who received the group intervention showed greater improvements compared to the wait-list control condition. The mapping group demonstrated added benefit compared to the non-mapping group with greater reductions in number of DSM criteria, shorter duration of gambling episode, and lower levels of anxiety and depression.

There have been several attempts to increase compliance rates with pathological gamblers. The effect of compliance-improving interventions was examined in a group of pathological gamblers. They were randomly assigned to a cognitive-behavioral treatment or a cognitive-behavioral treatment plus compliance-improving interventions.<sup>37</sup> The cognitive-behavioral treatment protocol included psychoeducation, cognitive restructuring, problem solving skills, and relapse prevention and took place in 8 sessions



over the course of 14 weeks. The compliance-improving interventions included such techniques as positive reinforcement from the clinician, motivational enhancement strategies (including supporting self-efficacy and providing assessment results), identifying and removing barriers, sending a letter to confirm the next appointment, and completing a decisional balance sheet. They found that both groups yielded clinically significant change at post treatment, which was maintained at the 9-month follow-up. The inclusion of compliance-improving interventions resulted in superior outcome compared to the cognitive-behavioral treatment alone, although this improvement was not maintained at 9 months. In a similar effort, the influence of motivational enhancement on retaining pathological gamblers in cognitive-behavioral therapy was examined.<sup>38</sup> All gamblers who received the motivational enhancement completed the treatment and at a 12-month follow-up, six of the nine gamblers were abstinent, two showed significant improvement and one was unimproved.

CBT has also been studied as a minimal intervention. In a 24-month follow-up, two brief treatments for problem gambling were compared. Pathological gamblers ( $n = 102$ ) were randomly assigned to receive a self-help workbook, a motivational telephone intervention plus a self-help workbook, or a one-month wait-list control group. The individuals who received the motivational intervention (but not the workbook only group) gambled fewer days and lost less money than the wait-list control group at 3- and 6-month follow-ups. At 12 months, this effect only held for individuals with less severe gambling problems.<sup>39</sup> The 24-month follow-up revealed that the motivational intervention group was more likely classified as improved compared to the workbook only group.<sup>40</sup>

In sum, both individual and group cognitive-behavioral therapies appear effective for decreasing gambling behavior. A meta-analysis on the treatment of pathological gambling<sup>41</sup> indicated that psychological intervention was more effective than a control condition, even at follow-up (average 17-month follow-up); however, the methodological difficulties associated with many of these studies (small samples sizes, lack of randomization, inconsistent provision of treatment, insufficient drop-out data, etc.) prohibits conclusions regarding long-term efficacy.<sup>42</sup>

#### General treatment guidelines for ICDs

It has been noted that there is no standard manual for the cognitive-behavioral treatment of impulsivity or impulse control disorders.<sup>43</sup> Research has yet to isolate the cognitive-behavioral elements responsible for therapeutic change in impulse control disorders; therefore an eclectic, flexible approach is recommended when developing a treatment plan for an individual client. The cognitive-behavioral approaches used in the treatment of impulse control disorders generally include three major components: *problem solving skills* to help generate various responses to stress, *cognitive restructuring techniques* to correct the irrational thoughts associated with the impulsive behavior, and *relapse prevention* to help identify high-risk situations and generate alternative plans. Treatments are often multimodal and vary in the extent to which they include relatively more cognitive or more behavioral techniques. Common cognitive techniques include education about the

cognitive model, identifying cognitive errors, and cognitive restructuring; common behavioral techniques include conducting functional analyses, decreasing positive reinforcement associated with impulsive behaviors and positively reinforcing non-impulsive behaviors. In addition, techniques are included to address the specific symptoms of each disorder such as financial counseling for pathological gambling and compulsive buying.<sup>44</sup>

We offer other general guidelines when dealing with individuals with ICDs. As with all therapy, it is crucial to develop the therapeutic relationship. It is also important to assess motivation for treatment initially and on an ongoing basis throughout therapy. Drop-out rates tend to be high and can be minimized by addressing motivational issues early and directly. Cognitive-behavioral therapy promotes that home practice of skills and therapy is enhanced by the use of bibliotherapy where appropriate. Rates of comorbidity are high; therefore common comorbid disorders should be assessed and treated: mood, anxiety, substance use, and other ICDs. Risk for suicide should also be screened as many ICDs are known to have relatively high rates of suicide attempt and completed suicides.<sup>45</sup>

A number of specific techniques are outlined below and the choice of which technique or combination of techniques to implement can be individualized to the client by utilizing a cognitive-behavioral case formulation.<sup>46</sup> Such a formulation draws on the cognitive-behavioral theory to generate an individualized conceptualization for each case. Persons provides a template for this process (see Table 1). The first step in Persons' approach involves eliciting an extensive list of the client's difficulties covering functioning in the areas of psychological/psychiatric, interpersonal, occupational, financial, medical, legal, housing, and leisure. Brief assessment questionnaires are helpful in quantifying some problems. The next step involves the generation of a DSM diagnosis. A diagnosis can be helpful in formulating the initial working hypothesis of the problems. A working hypothesis includes a description of the core beliefs or schemata that maintain the problems (including the clients beliefs about the self, others, world and future), the precipitants that activate schemata which lead to the problems, the activating events of the problems, as well as its' origin. A summary of the working hypothesis describes the relationship among the above elements and the presenting problems. Careful examination of the problem list and working hypothesis can inform the choice of treatment. For example, with a client who reports having few friends and family and who partakes in few activities but the problem behavior, an important goal would be to increase the amount of social support and alternative enjoyable activities for that client. As another example, a client who scores low on a measure of cognitive distortions would benefit little from cognitive restructuring. This type of client may find a more behaviorally oriented approach, such as exposure and response prevention, more effective.

It is also important to collect a list of the client's strengths and assets. A client may possess excellent problem solving skills and therefore not need the problem solving component as part of the treatment plan. The treatment plan includes a list of goals, strategies to obtain those goals (modality, frequency, interventions, adjunct therapies), as well as a list of obstacles that may hinder attainment of the goals. A

**Table 1 - Cognitive-behavioral formulation for Michelle****I. Problem list**

**Kleptomania:** Thoughts: *"I'll never be able to stop stealing"*, Behaviors: Shoplifting unusable items from department stores almost daily.

**Social isolation** due to embarrassment about stealing. Michelle has many friends and family members but does not spend time with them or her husband. She feels she is unable to share her problem with anyone. Thoughts: *"It would be awful if other people knew about my stealing"*; *"My husband won't love me if he knows about my stealing."*

**Depression:** Beck Depression Inventory score at initial session was 15. Thoughts: *"I'm a failure as a mother"*; *"I'm a bad person"* and *"How could I have done that?"*

**Anxiety:** Beck Anxiety Inventory at initial was 12. Thoughts: *"I can't possibly go to jail!"*; *"My life is ruined."* Michelle expresses that she constantly feels on edge and is worried about getting caught shoplifting by her family and friends.

**Low assertiveness:** Michelle feels unable to tell her friends and husband Thoughts: *"It would ruin my marriage if I told my husband about my kleptomania"*, *"My friends would think I am horrible for doing such a thing."*

**II. Diagnoses**

Axis I: Kleptomania, dysthymia.

Axis II: None.

Axis III: None.

Axis IV: Socially isolated, marital discord.

Axis V: Global Assessment of Functioning score: 60.

**III. Working hypothesis**Schemata maintaining problem

Michelle's view of herself, others, the world and the future:

*"I am undeserving, inadequate, and incompetent."*

*"Others are unsupportive, unforgiving, and critical."*

*"The world is demanding"*

*"The future is bleak."*

Precipitating/activating events of problem

Michelle's precipitants were her desire to be a good role model for her children, and to have an open, honest relationship with her husband. The impending court date for the current shoplifting charge pushed Michelle to seek therapy for her kleptomania. Activating situations are any situations where Michelle feels pressured to perform well including daily activities such as preparing meals, driving the children to appointments on time, or spending intimate time with her husband.

Origins

Michelle's mother abused alcohol and was verbally abusive toward her; her mother often remarked on how hard it is to be a good mother and how Michelle will do no better than she did. Her father was critical of both her mother and Michelle and constantly ridiculed them for making mistakes.

Summary of working hypothesis

Michelle's working hypothesis proposed that when Michelle became a wife and mother, her schemata that she is inadequate and incompetent were activated. She learned from her mother's verbal abuse and her father's unsupportive behaviors that she is an incompetent wife and mother, undeserving of being loved when you make a mistake. When these schemata were activated, Michelle experienced tension and dysphoria, and turned to stealing as a way to release her tension and alleviate the depression. Although temporarily alleviated, the anxiety and depression increased with each episode, a pattern that repeated itself over the years.

**IV. Strengths and assets**

Excellent social skills, stable lifestyle, financially secure, intelligent.

**V. Treatment plan**Goals:

1. Reduce kleptomaniac symptoms (measured by self-report of number of urges, intensity of urges [1=extremely low to 10=extremely high], and frequency of shoplifting episodes).
2. Increase social contact with friends and family (measured by the number of social activities per week).
3. Decrease feelings of depression and anxiety (measured by Beck Depression Inventory and Beck Anxiety Inventory).
4. Increase assertiveness (measured by Michelle telling her husband about the recent charges).

Modality: Individual cognitive-behavioural therapy.

Frequency: Weekly.

Initial interventions:

Psychoeducation (present formulation to provide rationale for treatment).

Cognitive restructuring (thought records, challenge cognitive distortions, replace distorted cognitions).

Behavioural interventions (covert sensitization; exposure with response prevention; alternative sources of satisfaction; stress management).

Assertiveness training.

Adjunct therapies: Pharmacological intervention is an option if Michelle does not respond to cognitive-behavioural therapy.

Obstacles: *Unassertiveness* predicts that Michelle may experience difficulty in collaborating with homework.

commonly cited obstacle seen in pathological gambling and compulsive buying is financial issues. To help overcome this obstacle, clients would benefit from a referral to a free financial counseling agency. The individualized case formulation offered by Person provides a useful framework with which to assist in treatment planning of the impulse control disorders of kleptomania, compulsive buying and pathological gambling.

**A case example**

Table 1 provides a case conceptualization for Michelle, a 39-year-old married woman with two children, who has a history of kleptomania since age 30. Prior to treatment, she

was stealing approximately 25 times per month, though her kleptomaniac behavior has fluctuated from 1 to 90 episodes per month. She noted that she usually feels the urge to steal when she awakens in the morning which increases in intensity throughout the day. She steals items from department stores that she does not need or cannot use (e.g., baby toys). Michelle usually places the shoplifted item in the donation box at the mall as she is afraid to hoard them in case her husband or children find them. Initially, when she steals she experiences relief of tension and when she gets home, she has tremendous guilt and shame. Michelle sees her stealing as inconsistent with her view of herself as a mother,

**Table 2 - CBT techniques used in the treatment of kleptomania**

CBT Techniques	Description	Citation
Covert sensitization	Client is asked to imagine stealing and the aversive consequences associated with getting caught (either natural consequences such as arrest or other aversions such as vomiting.)	5,7
Imaginal desensitization or Systematic desensitization	Progressive muscle relaxation paired with imagery of successfully avoiding stealing by better dealing with the anxiety. Use of hierarchy to overcome anxiety.	8,9
Aversion therapy	Aversive breath holding until mild pain is experienced when an urge to steal occurs.	10
Alternative sources of satisfaction	Substitute urge to steal with alternative behavior that is a source of satisfaction or excitement.	11
Cognitive restructuring	Identify and dispute irrational statements (i.e., those self-harming thoughts that lead to inappropriate emotions.)	13
<b>Multimodal techniques</b>		14
Covert sensitization, functional analysis and behavioral chaining, problem solving, and cognitive restructuring	Covert sensitization - client recounts a recent episode of feeling the urge to steal and describes thoughts, feelings and the consequences in detail. Other behavioral strategies (e.g., disclosing to family and friends the history of kleptomania; use of behavioural interruption and incongruent activities to distract from stealing.)	5
Covert sensitization and exposure with response prevention	Exposure training - <i>in sensu</i> and <i>in vivo</i> . Response prevention involves identifying antecedent cognitions and behaviors, noting the consequence of the problematic buying, and generating alternative cognitions and behaviors. Relapse prevention includes review of the abstinence violation effect.	15
Cognitive restructuring, problem solving, and relapse prevention Exposure with communication training, social skills training, relaxation training and confrontation training	Role plays.	12

wife and daughter and experiences depression as a result. She also reports that she does not see her friends or participate in any social activities because she is embarrassed about her stealing behaviors. Michelle noted that her husband is aware of a previous conviction for shoplifting, but that he is not aware of current charges. Michelle came to treatment with the goals to stop her kleptomaniac behaviors and to help build her courage to inform her husband of the current charges prior to the court date.

#### Specific treatment guidelines

A careful formulation provides treatment goals that suggest specific interventions. Tables 2, 3, and 4 outline specific treatment interventions that have some theoretical and empirical support in the research literature. As described above, little empirical data are available to guide treatment planning for kleptomania and compulsive buying. Covert sensitization is cited as having the most empirical support in the cognitive-behavioral treatment of kleptomania.<sup>2</sup> For compulsive buying,

**Table 3 - CBT techniques used in the treatment of compulsive buying**

CBT Techniques	Description	Citation
Covert sensitization	Client is asked to imagine having an urge to steal, being caught and the aversive consequences that occur when caught.	6
Exposure and Response prevention	<u>Exposure</u> Graded exposure to increasingly tempting high-risk situations. <u>Response Prevention</u> Impulse control. Conditioned stimulus control. Initially response prevention occurs with a buddy and then alone.	18
<b>Multimodal techniques</b>		22
Pros and cons analysis	<u>Functional analysis</u> Antecedents, behaviors and consequences of behavior.	
Functional analysis		
Behavioral chains	<u>Behavioral chains</u> Cognitive model of maladaptive buying.	
Stimulus control	<u>Stimulus control</u> Strategies to control buying (e.g., clients are encouraged to choose a shopping partner, limit access to money.)	
Cognitive restructuring	Change response to cues, rearrange or avoid cues to buy, rearrange consequences, strengthen cues to avoid buying, restructure thoughts.)	
Relapse prevention		
Self-monitoring	<u>Cognitive restructuring</u> Review maladaptive thinking styles associated with buying and challenge those thoughts (what is evidence for and against thought, what if it were true, what are possible alternative explanations?) or test accuracy of thought via behavioral experiments.	
Stress management		
Problem solving	<u>Self-monitoring</u> Use of a purchasing record, restructuring thoughts worksheet.	
Increase social support		
Self-esteem and assertiveness training		
Cash management		

**Table 4 - CBT techniques used in the treatment of pathological gambling**

CBT Techniques	Description	Citation
Stimulus control and exposure with response prevention	<u>Stimulus control</u> Avoid high-risk situations or routes of risk; maintain control of money. <u>In vivo exposure with response prevention</u> <i>In vivo</i> exposure forces client to experience the urge to gamble and response preventions helps them learn to resist the urge in a self-controlled way.	32
Imaginal desensitization	Imagine responding to high-risk situations while in a relaxed state.	8,25,26
Cognitive restructuring	Recognition and modification of cognitive distortions including selective memory for wins not losses, the gambler's fallacy, concept of randomness, overestimating the odds, and superstitious behaviors.	28,29,30,48
Behavioral techniques	Behavioral chain (identify high-risk situations; develop strategies to avoid or deal with high-risk situations; problem solving).	
Relapse prevention	Prevent a slip; manage a slip.	
<b>Multimodal techniques</b>		
Functional analysis	Identify triggers for gambling, patterns of gambling, and consequences of gambling.	49
Manage triggers	Stimulus controls (avoid high-risk situations; limit access to money; stay away from gambling; inform others of the plan).	
Handle urges	Gradual relaxation techniques, engage in a distracting activity, complete a cost-benefit analysis of the gambling. Extend time frame of decision to gamble. Problem solving.	
Financial analysis	How to manage finances, repay debts, and prepare for financial problems as a trigger for gambling. Referrals to GA, consumer credit organizations, and bankruptcy lawyers.	
Handle interpersonal conflict	Positive communication training, role playing, social skills training.	
Reinforce non-gambling behavior	Activities are usually inexpensive or free, and ideally compete with the gambling behavior in terms of high-risk times. Goal is to increase enjoyment from life.	
Relapse prevention	Prepare for future events and possible stressors that may affect decision to gamble.	
Cost-benefit analysis of gambling	Identify, challenge and replace irrational thoughts.	50
Functional analysis	Identify triggers for gambling, patterns of gambling, and consequences of gambling.	
Deal with urges	Handle urges by thinking (self-talk) or by acting (behavioural activities to deter from gambling).	
Stimulus control	Stay away from gambling; limit access to money.	
Cognitive restructuring	Identify and replace irrational thoughts; understand the concept of randomness.	
Relapse prevention	Plan ahead. Prepare for slipping and relapses; deal with other life problems.	

there are a few cognitive-behavioral techniques that have shown success in a number of case studies and uncontrolled trials. The research on the cognitive-behavioral treatment of pathological gambling has received more attention than that of compulsive buying or kleptomania.

### Conclusions

This paper examined the research on disorders of impulse control namely kleptomania, compulsive buying, and pathological gambling and, in drawing from the literature, presented general guidelines for treatment planning using a cognitive behavioral case formulation. All of these impulse control disorders lack research with large, randomized controlled trials and the case studies presented are complicated by comorbidity, adjunctive treatments, subclinical cases, and lack of appropriate outcome measures. Also, small samples and lack of follow-up data limit the generalizability of these results. Research should consider dismantling studies to isolate the efficacious components of cognitive-behavioral psychotherapy for impulse control disorders, and comparison studies to examine the efficacy of psychotherapy versus pharmacological interventions and individual versus group intervention.

The general consensus in the literature is that cognitive-behavioral therapy is useful in the treatment of impulse control disorders; although the use of some cognitive techniques have been shown to worsen symptoms (e.g., thought stopping for

the treatment of kleptomania).<sup>6</sup> The cognitive-behavioral techniques used in the treatment of impulse control disorders range from purely behavioral (e.g., exposure with response prevention) to purely cognitive (e.g., cognitive restructuring). However, most studies incorporated a mixture of both cognitive and behavioral techniques and it is therefore difficult to know which components contributed to therapeutic change. In deciding which techniques to use in clinical practice, the clinician should generate an idiographic conceptualization from the cognitive-behavioral case formulation presented earlier<sup>46</sup> and consult the summary tables of CBT techniques for each disorder. It may be necessary to re-assess and adjust the treatment approach as therapy proceeds to achieve maximal success. The use of pharmacological interventions in the treatment of impulse control disorders can be helpful if cognitive-behavioral therapy is unsuccessful.<sup>43,47</sup>

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