



Kleptomania and Co-morbid addictive disorders



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ABSTRACT

We examined the association between kleptomania and addictive disorders, including behavioral addictions. Fifty-three individuals with a diagnosis of kleptomania completed measures of kleptomania severity, semi-structured clinical interviews to assess co-morbid diagnosis of addictive disorders, and the Shorter PROMIS Questionnaire (SPQ) assessing an array of addictive behaviors. 20.75% of the sample met criteria for an addictive disorder; four for a substance use disorder and four for a behavioral addiction. Kleptomania severity was significantly associated with compulsive work and shopping measured by the SPQ. The results suggest the need to assess a wide array of addictive behaviors in individuals with kleptomania.

Kleptomania is a rare disorder that occurs in .3–.6% of the population and is defined as “the recurrent failure to resist impulses to steal items even though the items are not needed for personal use or for their monetary value” (American Psychological Association, 2013, p. 478). Kleptomania is currently classified in the Disruptive, Impulse Control, and Conduct Disorders section of the Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (American Psychiatric Association, 2013). The hallmark characteristic of disorders in this class is failure in controlling behaviors and emotions that violate the rights of others (Grant and Leppink, 2015). However, it has recently been argued that kleptomania might be better classified as an addictive disorder (Grant et al., 2010).

Providing support for this supposition, the existing literature has elucidated many parallels between kleptomania and substance use disorders. For example, they both show similar trajectories where rates are elevated among adolescents and young adults and then decrease with older age (see Grant, 2006). Furthermore, rates of substance use disorders are increased among family members of individuals with kleptomania (Grant, 2003), suggesting both disorders may share a common etiology. Dysfunction in the dopamine reward pathway has also been implicated in the development of both kleptomania and substance use disorders (Grant et al., 2006). Indeed, naltrexone, an opiate agonist used in the treatment of substance use disorders has shown efficacy in treating kleptomania (Grant et al., 2009). Taken together, the empirical literature suggests kleptomania shares many similarities to substance use disorders.

While the evidence to date suggests a possible link between

kleptomania and substance use disorders, more research is needed in this domain. Specifically, a paucity of attention has been focused on the relationship between kleptomania and behavioral addictions. Exploring this relationship is of importance as kleptomania is more conceptually similar to behavioral addictions than substance use disorders given that no psychoactive substances are ingested. To address this empirical gap, we examined the relationship between kleptomania and a wide array of addictive disorders, including behavioral addictions, in individuals with a diagnosis of kleptomania.

1. Methods

1.1. Participant and procedure

Fifty-three individuals (10 males, 43 females) voluntarily seeking treatment for kleptomania were recruited consecutively from a specialized health service in Sao Paulo, Brazil. Ages ranged from 17 to 79 years with an average age of 33.77 ($SD=14.77$). Treatment was not contingent upon participation and informed consent was obtained. All participants were seen by a registered psychiatrist specializing in impulse control disorders to confirm a diagnosis of kleptomania using an Impulse Control Disorders semi-structured interview modeled after the Structured Clinical Interview for DSM (SCID-ICD; First and Gibbon, 2004).

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2. Measures

2.1. Kleptomania severity

Severity of kleptomania was assessed using the Portuguese adaptation of the Kleptomania Symptom Assessment Scale (K-SAS; Grant and Kim, 2002). The K-SAS is a widely used 11 item self-report scale assessing the frequency and severity of kleptomania. Scores range from 0 to 44. The Portuguese version of the K-SAS (P-K-SAS) has demonstrated strong psychometric properties and was validated in a clinical sample of individuals diagnosed with kleptomania (Christianini et al., 2015).

2.2. Addictive behaviors

The validated Portuguese version of the Mini International Neuropsychiatric Interview (M.I.N.I.; Amorim, 2000) was used to provide a current diagnosis of alcohol use disorder, substance use disorder and binge eating disorder.

The ICD-SCID was used to provide current and lifetime clinical diagnoses of gambling, sex, and Internet addictions. Specifically, the clinical assessment of sex and Internet addictions was conducted by a registered psychiatrist using a semi-structured interview modeled after the SCID (First and Gibbon, 2004). The assessment of disordered gambling was made using the gambling section of the SCID (First and Gibbon, 2004). It should be noted that while there is some empirical support for conceptualizing trichotillomania and excoriation disorder as addictive disorders (Grant, Odlaug, & Potenza, 2007; Odlaug and Grant, 2010), we felt more research was needed to justify the inclusion of the above disorders in the present research.

The Shorter PROMIS Questions (SPQ; Christo et al., 2003) provided a measure of potentially addictive behaviors. The SPQ is a 160-item questionnaire that assesses 16 domains of addictive behaviors: alcohol, caffeine, compulsive helping (dominant/submissive), drugs, exercise, food bingeing, food starving, gambling, tobacco, prescribed drugs, compulsive relationship (dominant/submissive), sex, shopping, and work. Similarly to trichotillomania and excoriation disorders, the domains of compulsive helping, compulsive relationship, and food starving were excluded given the lack of empirical evidence for these constructs as addictive behaviors. Each domain is scored on a summed continuous scale ranging from 0 to 50. The SPQ was translated from English to Portuguese by one of the authors fluent in both languages (H.T.).

3. Analytic plan

To examine the association between kleptomania and addictive behaviors, a two-step analytic approach was utilized. First, the total number and percentage of the sample meeting diagnostic criteria for substance use and behavioral addictions was calculated. Next, bivariate correlations assessed the relationship between kleptomania severity and severity of addictive behaviors. The analysis was conducted with 37 participants, as the P-K-SAS was not available for the first 16 participants. Pearson correlations were used for variables that met the assumption of normality, and Spearman's Rho was used when normality was violated. Bonferroni correction was applied for the analyses between kleptomania severity and SPQ with significance value set at $p < .005$.

4. Results

4.1. Preliminary analysis

To test whether systematic differences existed in addictive behaviors between participants with and without P-K-SAS scores, we first conducted a series of chi-square tests to assess differences in diagnosis.

No differences existed between the two groups in clinical diagnosis of addictive disorders, $ps > .107$. Next, an independent t -test was conducted to compare the two groups on SPQ. One significant difference was found between the two groups. Specifically, results showed that participants for whom P-K-SAS scores were available reported increased severity of prescription drugs, $t(40.57) = -2.16$, $p = .037$. No other significant differences were found in the other domains of SPQ, $ps > .115$. Finally, the Kolmogorov-Smirnov indicated that with the exception of work, all other variables on the SPQ violated assumptions of normality.

4.2. Main analysis

Eleven participants (20.75%) met diagnostic criteria for addictive disorder. Four participants met criteria for substance use disorder, four for a behavioral addiction and three met criteria for both. Current, alcohol abuse/dependence was the most common ($n = 5$), followed by current drug abuse/dependence ($n = 4$). Three participants met criteria for a current binge eating disorder, two participants met criteria for sex addiction (1 past, 1 current), two for Internet addiction (1 past, 1 current) and one participant met criteria for past disordered gambling. Two significant correlations were found between kleptomania and addictive behaviors when controlling for multiple comparisons. Specifically, increased severity of kleptomania was associated with compulsive shopping, $\rho(37) = .49$, $p = .002$ and compulsive work $r(37) = .46$, $p = .004$ (see Table 1). Lastly, participants with a diagnosis of a co-morbid addictive disorder scored higher on the P-K-SAS (33.78 vs. 26.11), $p = .026$. However, a between groups t -test found no differences between participants with and without a co-morbid diagnosis of addictive disorder in compulsive shopping, $p = .554$, or compulsive work, $p = .529$.

5. Discussion

The aim of the present research was to examine the association between kleptomania and a wide array of addictive disorders, including behavioral addictions. The results found that 20.75% of the sample met diagnostic criteria for a diagnosis of an addictive disorder, with an equal distribution of participants meeting criteria for a substance use disorder (4) or a behavioral addiction (4). Two significant correlations were found between kleptomania and compulsive behaviors: shopping and work, both which have been conceptualized as behavioral addictions (Mudry et al., 2011). Given that the results of our study found kleptomania was associated with substance use and behavioral addictions, the results suggests the need to assess a wide array of addictive disorders in kleptomania.

Table 1

Correlations between Kleptomania and addictive behaviors as measured by the Short PROMIS Questionnaire.

Addictive behaviors	Kleptomania severity (ρ)	p
Alcohol	.24	.150
Caffeine	.45	.005
Drugs	.28	.091
Tobacco	.20	.226
Prescription Drugs	.35	.032
Compulsive Shopping	.49	.002*
Food Bingeing	.43	.007
Gambling	.21	.205
Sex	.29	.081
Work	.46 ^a	.004*
Exercise	.16	.360

Note. Kleptomania Severity was assessed using the Portuguese Kleptomania Symptom Assessment Scale (Christianini et al., 2015).

* denotes significance after applying Bonferroni correction.

^a Pearson r

The significant association between kleptomania and compulsive shopping provides support for Kraepelin's view that compulsive shopping is a sub-threshold form of kleptomania (Kraepelin, 1915). Indeed, whilst both disorders involve the acquisition of items, in compulsive shopping the item is acquired legally whereas illegal means are used in kleptomania. Further research would do well to further empirically assess the association between kleptomania and compulsive shopping. In regards to the association with compulsive work, kleptomania and compulsive buying can both be regarded as facets of an acquisition disorder (Filomensky et al., 2012). The association with excessive work may suggest that under the pressure of a strong drive for acquisition individuals with kleptomania will likely engage in behaviors, either legal or illegal, in search of enhancing their power for acquiring items.

5.1. Limitations

Several limitations of the present research are worth noting. First is the relatively small sample size. Because kleptomania is a rare disorder, it is a difficult population to recruit for research. Indeed, the sample size used in the present research represents one of the larger samples of individuals with kleptomania in the literature to date. Nevertheless, replication of these results with larger sample sizes is crucial. Secondly, P-K-SAS scores were not available for the first 16 participants as the measure was not available at the time of treatment. Importantly, the results of our preliminary analysis found that the groups did not systematically differ in regards to the main findings of the present research, thus providing some degree of confidence in our findings. Lastly, the correlational nature of some of our findings (compulsive work and shopping) should be noted as a limitation. This is because higher scores on compulsive shopping and work may not always indicate a pathological behavior (i.e., clinical diagnosis). Furthermore, due to the correlational nature, the results cannot identify any causal links between kleptomania and compulsive shopping and work.

6. Conclusions

The results of the current research add to the growing understanding of kleptomania by demonstrating an association between

kleptomania and behavioral addictions. Continued research elucidating the link between kleptomania and addictive disorders, including behavioral addictions, is needed to determine whether new boundaries need to be drawn in the nosology of kleptomania.

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