ABSTRACT

Background  Stealing is a fairly common behaviour among young adults. Understanding the potential associations and characteristics of individuals who steal may help educational institutions, health services and young people themselves resolve difficulties before the behaviour impacts on their academic performance and health.

Aims  We aim to test the hypothesis that desires to steal among students would be associated with worse academic achievements and higher rates of mood and impulse control disorders.

Methods  One thousand eight hundred and five students completed the College Student Computer User Survey online and were included in this analysis at a large Midwestern United States University. Responders were grouped according to self-reported stealing urges and behaviours and were compared on measures of psychosocial function, mental health disorders and impulsivity.

Results  Urges to steal were associated with worse depressive symptoms, higher levels of perceived stress and a number of psychiatric disorders including bipolar disorder and multiple disorders of impulse control (kleptomania, compulsive sexual behaviour, skin picking, trichotillomania and compulsive buying).

Conclusions and implications for practice and/or future research  These following data indicate that stealing for many college students may be considered within a spectrum of impulsive behaviours.

•  Illegal behaviours among students point to mental health difficulties among them.
• Our findings may provide clinicians, researchers and health professionals with a clearer picture of a range of impulsive behaviours among college students and promote treatment for this group.
• Our findings could also inform preventative approaches to impulsive problems in young adults. Copyright © 2015 John Wiley & Sons, Ltd.

Introduction

Stealing is common. One epidemiological study of adults found that 11.3% admitted to having shoplifted at some time in their lives (Blanco et al., 2008). Stealing generally appears to start in childhood or adolescence (Blanco et al., 2008), and one study of 3999 high school students found that 15.2% had stolen in their lifetimes (Grant et al., 2011). Stealing has often been associated with other anti-social behaviours and a range of mental health conditions, particularly substance abuse and mood disorders (Grant et al., 2011; Toprak et al., 2010).

Despite evidence of significant associated morbidity, stealing among young adults has, historically, received relatively little attention. Limited research suggests that adolescent stealing is associated with higher rates of scholastic failure and negative peer influences (Moncher & Miller, 1999). In the case of college students who steal, however, the data concerning related social and personal problems are far less convincing. In one of the first studies to examine these issues, Beck and McIntyre (1977) grouped 170 college students based upon previous shoplifting behaviour (never shoplifted, shoplifted once and shoplifted many times) using the Minnesota Multiphasic Personality Inventory (MMPI). The authors concluded that shoplifting among college students was associated with delinquent personalities, psychopathy, neurosis and depression and was generally symptomatic of maladjustment. A later study of 78 college students convicted of shoplifting, however, found little evidence of personality pathology or maladjustment when compared with healthy controls (Moore, 1983).

The association between stealing and other health and functional variables, including academic achievement, among college students is poorly characterised to date. Understanding these potential associations and the characteristics of individuals who steal may help university administration, health services and students themselves to reduce symptoms before the behaviour impacts on their academic performance and health within the collegiate setting. Based on the extant literature, we hypothesised that a desire to steal would be associated with worse academic achievement and higher rates of mood and impulse control disorders.

Methods

The College Student Computer User Survey (CSCUS) was developed in collaboration between the psychiatry department and the student health centre
at a large Midwestern university. The main goal of its development was to attain a better understanding of the mental and physical health of the college population. Well-validated scales and screening instruments, as detailed later, are included to assess students’ mental/physical health status and overall quality of life. The institutional review board of the participating university approved all study procedures, including informed consent procedures. The study was carried out in accordance with the latest version of the Declaration of Helsinki.

The sample

A total of 6000 full-time college and graduate students were chosen by random, computer-generated selection and invited by email to take part in the CSCUS. Invitees viewed and consented to the institutional review board-approved informed consent document prior to being directed to the online survey. All students who participated were entered into a weekly draw for a portable music device or a gift certificate ($250, $500 and $1000).

Assessments

The CSCUS gathered detailed information on demographic information, mental and physical health history, scholastic achievement (measured by overall self-reported grade point average), physical activity levels and psychosocial functioning. All answers were self-reported and anonymous. No links or identifiers to specific respondents were obtained so that participant anonymity was preserved. No follow-up with respondents was, therefore, possible.

In addition to these questions, participants also completed the following valid and reliable scales:

Patient Health Questionnaire (PHQ-9) (Kroenke et al., 2001). The PHQ-9 is a self-report scale mirroring the diagnostic criteria for major depressive disorder found in the US Diagnostic and Statistical Manual, fourth edition (DSM-IV). The PHQ-9 provides a measure of depression severity.

Perceived Stress Scale (PSS) (Cohen et al., 1983). The PSS is a valid and reliable, 10-item, self-report scale, which assesses the degree to which individuals find their lives to be unpredictable, uncontrollable and stressful based on the 30 days prior to scale completion. Higher total scores indicate greater levels of life stress; the range is from 0 to 40.

Internet Addiction Test (IAT) (Young, 1998). The 20-question IAT assesses overall levels of internet use. Scores on the IAT range from 0 to 100 with 20 to 49 points reflecting mild internet use, 50 to 79 moderate internet use and 80 to 100 points for heavy internet use.

Minnesota Impulsive Disorders Interview (MIDI) (Christenson et al., 1994; Grant, 2008). The MIDI examines the prevalence of impulse control disorders.
The disorders are screened to include intermittent explosive disorder, kleptomania, gambling disorder, compulsive sexual behaviour, compulsive buying, excoration (skin-picking) disorder and trichotillomania.

Data analysis

Both partial and completed surveys were considered in this analysis. Respondents were grouped by answers to the first two questions of the MIDI, which screen for kleptomania as follows: ‘Have you ever stolen anything?’ and ‘Do you experience an irresistible urge or uncontrollable need to steal things or mounting tension that can only be relieved by stealing?’ If a student answered ‘yes’ to both of these questions, they were grouped into the stealing category. All others were included in the group of people who did not steal. The reason for asking the second question was that many people may have stolen one time in their lives based on peer pressure and the behaviour might be insignificant at this time (for example, stealing candy when a child). The second question assesses the current drive of the person to steal, regardless of whether or to what extent they are acting on their urges.

The two groups were compared in terms of demographics, health behaviours, functioning and psychiatric diagnoses. Chi-square and Fisher’s exact tests were used for analyses, which where appropriate. As an exploratory study, significance was set to \( p \leq 0.05 \). All data analysis was conducted in SPSS (IBM SPSS Statistics for Windows, Version 22.0; Armonk, NY, USA).

Results

Of the 6000 students who received the invitation to participate in the survey, 2108 (35%) completed the survey. Their mean age was 22.6 ± 5.1 (range 18–58); \( n = 1665 \) (79%) were white, and \( n = 885 \) (42%) were male. These demographics were similar to the overall demographic profile of the university. Of the 2108 participants who completed the survey, four students were eliminated for apparently inappropriate or careless responses (inserted positive responses to nearly every available item, many of which contradicted each other), and additional 241 were removed because of missing data for the stealing questions. The final sample size was, thus, 1863.

Just under 1% of the sample (17, 0.9%) endorsed having urges to steal. The prevalence of stealing urges was significantly higher among the young men \((p = 0.003)\), and lower among white or heterosexual students (Table 1).

Students with urges to steal were significantly more likely than those without to report higher perceived stress (PSS) and more symptoms of depression (PHQ-9) (Table 2). Those with urges were also significantly more likely to report a psychiatric history of bipolar disorder and to meet criteria for one of several impulse
control disorders, including kleptomania, excoriation (skin-picking) disorder, trichotillomania, compulsive sexual behaviour or compulsive buying (Table 3).

Table 1: Demographic characteristics of college students (n = 1863) grouped by stealing urges

<table>
<thead>
<tr>
<th></th>
<th>Students with urges to steal n = 17</th>
<th>Students with no urges to steal n = 1846</th>
<th>Test statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age, mean (SD)</td>
<td>24.87(8.98)</td>
<td>22.68(5.14)</td>
<td>t = 1.63</td>
<td>0.103</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>df = 1829</td>
<td></td>
</tr>
<tr>
<td>Female gender</td>
<td>8(47.1)</td>
<td>1075(58.4)</td>
<td>*</td>
<td>0.003</td>
</tr>
<tr>
<td>Race/ethnicity</td>
<td>8(47.1)</td>
<td>1472(80.1)</td>
<td>*</td>
<td>0.003</td>
</tr>
<tr>
<td>Caucasian</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undergraduate</td>
<td>15(88.2)</td>
<td>1412(76.9)</td>
<td>*</td>
<td>0.389</td>
</tr>
<tr>
<td>Relationship status:</td>
<td>single</td>
<td>1067(58.0)</td>
<td>χ² = 0.16df = 1</td>
<td>0.631</td>
</tr>
<tr>
<td>Sexual orientation</td>
<td>heterosexual</td>
<td>1705(94.5)</td>
<td>*</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Note: All scores are n (%) unless stated otherwise. Standard deviation (SD).
*Fisher’s exact test.

Table 2: Health indices of college students (n = 1863) grouped by stealing urges

<table>
<thead>
<tr>
<th></th>
<th>Students with urges to steal n = 17</th>
<th>Students with no urges to steal n = 1846</th>
<th>Test statistic</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>College GPA</td>
<td>3.16(0.61)</td>
<td>3.35(0.47)</td>
<td>t = −1.57</td>
<td>0.116</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>df = 1823</td>
<td></td>
</tr>
<tr>
<td>Average number of</td>
<td>2.35(1.84)</td>
<td>3.28(2.18)</td>
<td>t = −1.75</td>
<td>0.08</td>
</tr>
<tr>
<td>days within the past</td>
<td></td>
<td></td>
<td>df = 1847</td>
<td></td>
</tr>
<tr>
<td>7 days engaged</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Mass Index</td>
<td>26.93(13.91)</td>
<td>23.74(4.46)</td>
<td>t = 0.917*</td>
<td>0.374</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>df = 15.03</td>
<td></td>
</tr>
<tr>
<td>Internet Addiction Score</td>
<td>36.69(20.58)</td>
<td>29.82(11.21)</td>
<td>t = 1.33*</td>
<td>0.202</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>df = 15.08</td>
<td></td>
</tr>
<tr>
<td>Days poor physical</td>
<td>15.06(25.11)</td>
<td>3.37(6.3)</td>
<td>t = 1.92*</td>
<td>0.073</td>
</tr>
<tr>
<td>health, (past 30 days)</td>
<td></td>
<td></td>
<td>df = 16.02</td>
<td></td>
</tr>
<tr>
<td>PHQ-9 Score</td>
<td>9.75(7.81)</td>
<td>4.86(4.47)</td>
<td>t = 2.50*</td>
<td>0.024</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>df = 15.09</td>
<td></td>
</tr>
<tr>
<td>Perceived Stress</td>
<td>20.82(3.71)</td>
<td>15.99(6.72)</td>
<td>t = 5.29*</td>
<td>0.000*</td>
</tr>
<tr>
<td>Scale score</td>
<td></td>
<td></td>
<td>df = 17.03</td>
<td></td>
</tr>
</tbody>
</table>

Note: All values are mean standard deviation (SD).
*Equality of variances not assumed based on Levene’s test.
*aSignificant using Holm sequentially rejective adjustment.
Abbreviations: GPA = grade point average; PHQ-9 = Patient Health Questionnaire.
Our study is one of few to address the prevalence of stealing urges in college students. Although our numbers were small, the overall prevalence of urges to steal (0.9%) is similar to rates of kleptomania found among college students (0.4%) and high school students (0.7%) in previous studies (Grant et al., 2011; Odlaug & Grant, 2010). Only 3 of the 17 students with stealing urges in our study, however, met all criteria for kleptomania (overall prevalence 0.2%); they did not generally endorse a sense of calm or relief after the stealing. Our findings suggest that most stealing among college students is not directly accounted for by kleptomania per se and raises questions about how best to understand and classify this behaviour. Given the morbidity associated with stealing in this sample,
prevention strategies and recognition and treatment efforts should target concerns about stealing regardless of whether they meet full, formal diagnostic criteria (Sarasalo et al., 1997).

Our findings provide clues to possible causes of stealing behaviour among college students. Among those who had urges to steal, the stealing was associated with multiple mental health problems, but particularly those defined by poor impulse control. This suggests that perhaps stealing in some college students is part of a larger constellation of impulsive behaviours, which include sex, gambling and shopping. Stealing may co-occur with other disorders of impulse control for several reasons, and the extent to which the relationship between stealing and other impulse disorders is mediated by specific environmental, genetic or other biological factors, as seen in the addictive disorders (Nestler, 2000) that warrant further examination. It may be useful to screen for stealing behaviour among students, providing this effort links them to help without breaching confidence.

Urges to steal were associated with higher rates of bipolar disorder, worse depressive symptoms and higher levels of perceived stress. This finding is consistent with previous research that has suggested that many impulsive behaviours work to modulate emotional dysregulation (Perugi & Akiskal, 2002; McElroy et al., 1996). College students might think of stealing as a means of distracting themselves from emotions that are more disturbing. The physiological or psychological effects of stealing (calming, stimulating, attention related and coping with stress) may work to self-medicate mood symptoms. In this way, the entire range of impulse disorders may follow from underlying mood. Conversely, and not mutually exclusively, depression and stress symptoms may be secondary to a sense of being out of control.

We acknowledge that there are several limitations to this study. Information about stealing urges was based entirely on self-report, without interpersonal clinical evaluation, and thus, rates may be under-reported or over-reported. We did not include a measure of urge severity in our survey, thereby potentially limiting the descriptive power of these data. Finally, our sample represents students from a single university in a specific region of the USA and may not generalise to college students at other universities in other geographical areas or non-college students. Future research would be likely to benefit from sampling college populations from multiple sites, within and outside the USA.

Conclusions

Our data indicate that, although stealing urges are uncommon among college students, they are associated with worse depressive symptoms, greater stress and multiple disorders characterised by poor impulse control. We suggest further that stealing for many college students may be best considered within a spectrum of impulsive behaviours. Based on the variety of problems associated with stealing
found in our sample, future research should strive to incorporate clinical interviews with participants to improve assessment of the specific profiles of individuals who steal. This may provide clinicians, researchers and health professionals with a clearer clinical picture of this behaviour in college students and subsequently inform future preventative or treatment approaches.

Declarations of interest

Dr Grant receives yearly compensation from Springer Publishing for acting as editor-in-chief of the Journal of Gambling Studies and has received royalties from Oxford University Press, American Psychiatric Publishing, Inc., Norton Press, and McGraw Hill. Mr. Odlaug has received research funding from the Trichotillomania Learning Center and a travel award from the American College of Neuropsychopharmacology, receives honoraria from Oxford University Press and works for H. Lundbeck A/S. Drs Lust and Christenson have no declarations of interest to disclose.

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References


Address correspondence to: Jon E. Grant, JD, MD, MPH, Department of Psychiatry & Behavioral Neuroscience, University of Chicago, Pritzker School of Medicine, 5841 S. Maryland Avenue, MC 3077, Chicago, IL 60637, USA. Email: jongrant@uchicago.edu
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