

Pattern of psychiatric morbidity among theft offenders remanded or referred for psychiatric evaluation and factors associated with reoffence

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INTRODUCTION In Singapore, theft and related crimes constitute more than 50% of all reported crime, and are the most common offences committed by accused persons remanded to the Institute of Mental Health (IMH), Singapore. There is a need for better understanding of the forensic psychiatric aspects of such offenders. This study aimed to determine the prevalence of psychiatric disorders among theft offenders remanded or referred for forensic assessment in 2010, compare the differences between first-time and repeat theft offenders, and identify the factors associated with reoffence.

METHODS Forensic evaluations of inpatient and outpatient theft offenders that were conducted at IMH in the year 2010 were retrieved and reviewed. The sociodemographic and clinical data of first-time and repeat theft offenders were collected and compared using Student's *t*-test and chi-square test for continuous and categorical variables, respectively. Multivariate regression was used to identify the factors that were predictive of repeat offence.

RESULTS Overall, 10% of offenders had no mental illness. Substance use disorders, mood disorders and psychotic disorders were the most common diagnoses. Psychotic disorders were significantly less common in repeat offenders. Repeat offenders also tended to have a history of conduct problems in childhood. Noncompliance with psychiatric treatment was positively associated with repeat offence, while psychotic disorders were negatively associated.

CONCLUSION The pattern of psychiatric morbidity among theft offenders in Singapore has changed over the last ten years. Kleptomania remains rare. Significant differences between first-time and repeat offenders have implications on the treatment, follow-up and rehabilitation of theft offenders in Singapore.

Keywords: forensic psychiatry, kleptomania, recidivism, remand, theft

INTRODUCTION

In 2009 and 2010, theft and related crimes constituted more than 50% of the overall crime in Singapore.⁽¹⁾ Individuals in Singapore who are charged with committing offences that do not warrant capital punishment, and are known or suspected to suffer from mental disorders are remanded by the courts to the Institute of Mental Health (IMH), the only psychiatric hospital in Singapore, for forensic psychiatric assessment. Small numbers of alleged offenders are also referred to forensic outpatient clinics for assessment. Not surprisingly, theft offenders constitute a large proportion of the population referred to IMH for forensic psychiatric evaluation. A review of offenders remanded to IMH found that the most common offence committed was theft.⁽²⁾

Not only has the annual number of court-mandated forensic evaluations doubled over the last ten years, forensic psychiatrists are also increasingly asked to make treatment recommendations so as to prevent reoffence, apart from assessing the remandees' soundness of mind and fitness to plead. The implementation of the Mandatory Treatment Order as a sentencing option is evidence that the judiciary is aware of the needs of mentally disordered offenders, with a case of kleptomania having received much media attention.⁽³⁾ A previous local study about remanded

theft offenders mainly analysed gender differences,⁽⁴⁾ and did not specifically examine the differences between first-time and repeat offenders. Hence, our study aimed to: (a) determine the prevalence of psychiatric disorders among theft offenders remanded or referred for forensic assessment in the year 2010; (b) compare the differences in demographics and pattern of psychiatric morbidity between first-time and repeat theft offenders; and (c) identify the factors associated with repeat theft offence.

METHODS

The study was approved by the domain-specific review boards of the National Healthcare Group and the need for patient consent was waived. Forensic evaluations of inpatients and outpatients in the year 2010 were retrieved from IMH and retrospectively reviewed. Only forensic evaluations of persons with a theft offence of any type were eligible for inclusion in the present study. In total, the forensic evaluations of 201 persons (148 men, 53 women) were used.

Sociodemographic data such as age, gender, marital status, highest level of education and family history of mental illness were collected. Other data collected were past and present Axis 1 diagnoses, history of childhood conduct problems, the

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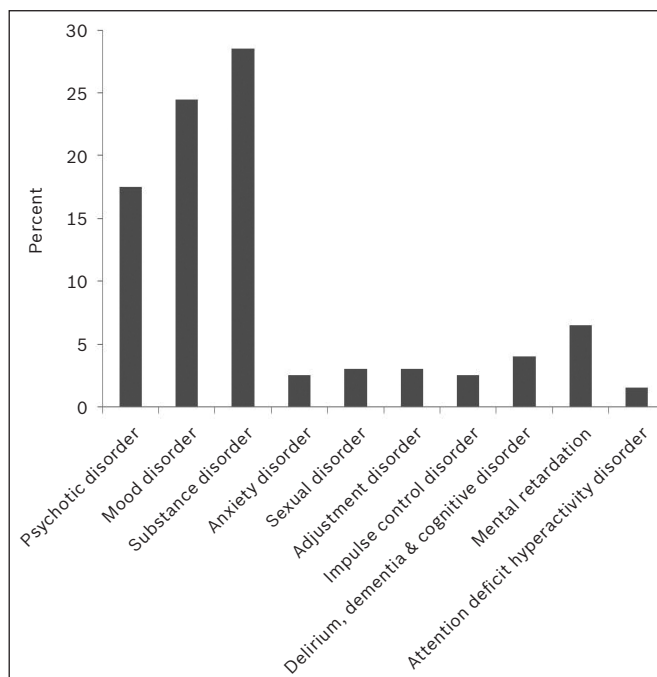


Fig. 1 Prevalence of Axis 1 disorders among theft offenders.

number and variety of past offences, history of substance misuse, the use of violence when committing an offence, noncompliance to treatment, the presence of social difficulties, and history of contact with community mental health resources and other community support services. Those with comorbid diagnoses had their discharge diagnosis recorded as the primary diagnosis. All cases were reviewed a second time by a different member of the study team to minimise missing data. Of the 201 persons, 12 had more than one remand admission in the same year. As all of these 12 patients had a single diagnosis in all their episodes, their data was entered only once per subject during data collection.

Student's *t*-test, chi-square test and regression analysis were used to compare the characteristics of first-time offenders with repeat offenders. Student's *t*-test was used to compare the mean age of offenders (a continuous variable), while the chi-square test was used to compare categorical variables. Multivariate logistic regression analysis was used to calculate the odds ratios (ORs) for factors that were thought to be associated with repeat offence. A *p*-value of < 0.05 was considered statistically significant.

RESULTS

A majority of theft offenders were single men. Substance use disorders, mood disorders and psychotic disorders were the most common psychiatric disorders found in the study sample. About 10% of theft offenders had no mental disorder. Mental retardation was one of the most common diagnosis (Fig. 1).

Apart from repeat theft offenders being older, there were no clinically significant differences between the sociodemographic profiles of first-time and repeat theft offenders (Table I). We observed a higher percentage of mood disorders and substance use disorders among repeat offenders, and a higher percentage

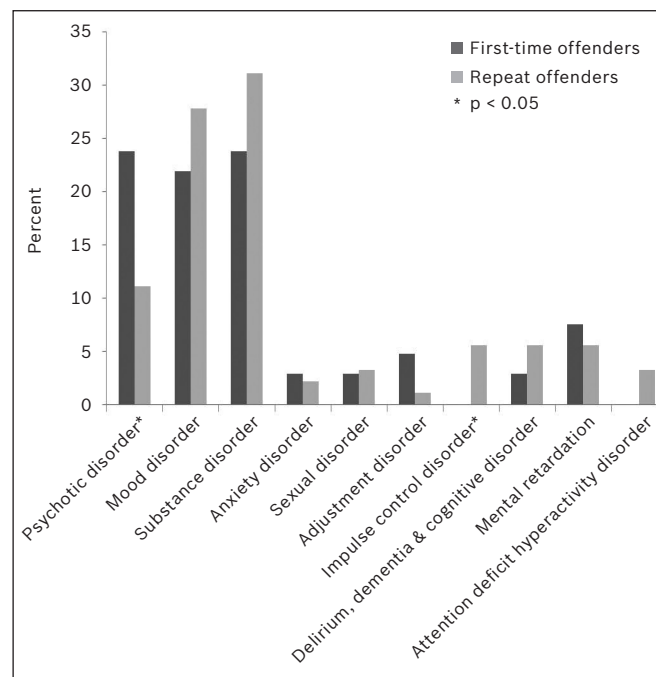


Fig. 2 Comparative prevalence of Axis 1 disorders among first-time and repeat theft offenders.

Table I. Sociodemographic characteristics of theft offenders (n = 201).

Characteristic	First-time offender (n = 111)	Repeat offender (n = 90)	p-value
Age* (yrs)	38.9 ± 11.4	41.8 ± 10.5	0.06
Marital status (%)			0.39
Single	57.4	58.9	
Married	27.8	24.4	
Divorced	12.0	16.7	
Widowed	2.8	0.0	
Gender (%)			0.47
Men	76.4	71.9	
Women	23.6	28.1	
Education (%)			0.14
Primary	37.9	29.3	
Secondary	44.8	59.8	
Tertiary	17.2	11.0	
Family history of mental illness (%)			0.85
Yes	7.4	8.1	
No	92.6	91.9	

*Data is presented as mean ± standard deviation.

of psychotic disorders and mental retardation among first-time offenders (Fig. 2). Only the difference in the prevalence of psychotic disorders between first-time and repeat offenders was statistically significant (*p* = 0.01) (Table II). Kleptomania constituted only a minor proportion of the sample (*n* = 5) and was not diagnosed in any of the first-time offenders.

Conduct problems in childhood and substance use disorders were more common in repeat theft offenders, with the difference approaching statistical significance (*p* = 0.06 and 0.07, respectively). Interestingly, none of the repeat offenders used violence during the index offence, and this was statistically significant (*p* = 0.01) (Table II). Noncompliance with psychiatric treatment was the strongest predictor (OR 3.926; *p* < 0.001) of the likelihood of repeat theft offence. Younger age at first theft

Table II. Clinical characteristics of theft offenders (n = 201).

Characteristic	First-time offender [†] (n = 111)	Repeat offender [†] (n = 90)	p-value
History of childhood conduct problems	15.6	28.1	0.06
Diagnosis			
No mental illness	11.7	9.0	0.35
Mental retardation	9.0	3.3	0.10
Substance use disorder	27.9	40.0	0.07
Psychotic disorder	21.6	7.8	0.01*
Mood disorder	21.6	26.7	0.40
History of non-theft offences	33.3	37.1	0.59
History of contact with			
Mental health services	12.7	16.7	0.43
Social services	18.2	23.3	0.46
Noncompliance to treatment	34.2	61.1	< 0.001*
Social difficulties	64.9	71.1	0.37
Use of violence			0.01*
Past	30.0	100.0	
Index	70.0	0.0	

*Statistically significant at $p < 0.05$. [†]Data is presented as percentages.

Table III. Multivariate regression analysis of variables predicting repeat theft offenders (n = 201).

Variable	Odds ratio (95% CI)	p-value
Noncompliance with psychiatric treatment	3.926 (1.939–7.951)	< 0.001
Presented with psychotic disorder at index offence	0.301 (0.109–0.828)	0.020
Age at first theft offence*	0.978 (0.953–1.004)	0.094
History of mood disorder	1.852 (0.817–4.201)	0.140

*Odds ratio calculated is for every increase in one year of age at first theft offence. CI: confidence interval.

offence and history of mood disorder also indicated a higher likelihood of repeat theft offence, although this was not statistically significant in the multivariate regression analysis. Repeat offence was less likely if there was a psychotic disorder at the time of the index offence (OR 0.301; $p = 0.02$) (Table III).

DISCUSSION

In 2010, 19,483 cases of theft and related crimes were reported in Singapore.⁽¹⁾ Around 1% ($n = 201$) of these reported theft cases were remanded to IMH for psychiatric evaluation, and about 10% ($n = 20$) of these referred cases (i.e. 0.1% of the total theft cases) were found to have no mental illness. This is consistent with previous local figures, which ranged between 6.5% for theft remandees only⁽⁴⁾ and 12.2% for all remandees.⁽²⁾ The consistently low number of cases assessed as having no mental illness reflect a good triaging process in the Singapore system as compared to centres overseas, where these figures have been assessed to be in the range of 12% to 45%.⁽⁵⁻⁷⁾ However, there is room for further improvement – closer links between mental health professionals and the law enforcement

and legal systems can be established. This is currently being considered in Singapore.

As our study was conducted nearly ten years after the last published local study of a forensic population, there are some notable differences in the pattern of psychiatric morbidities observed. For example, while the prevalence of schizophrenia and other psychotic disorders was 17.5% in our sample, it comprised about 40% of the samples in previous studies.^(2,4) This prevalence was even lower (7.8%) among repeat theft offenders in our study. This difference may be due to an improved understanding among law enforcers of the signs and symptoms of psychosis, resulting in a relatively higher proportion of arrested psychotic persons being released without being charged. In contrast, the much higher prevalence of substance use disorders and mood disorders in our sample is consistent with international studies.^(8,9) This may be due in part to such offenders often having a past psychiatric history of either remand or treatment for a mental disorder, hence requiring further forensic evaluation. International data also suggest a strong association between shoplifting and other disorders linked to poor impulse control, such as substance use disorders, bipolar disorders, and borderline and antisocial personality disorders.^(9,10) This association warrants further detailed research.

Mental retardation was the fourth most common diagnosis in our study. The prevalence of mental retardation among theft offenders has not changed since the last local study of theft offenders, which was conducted ten years prior to our study.⁽⁴⁾ Mental retardation is less common in Singapore as compared to other Asian study populations.⁽¹¹⁾ While this is likely due to a comparatively better understanding of mental retardation in our jurisdiction, further improvements should be made in the future through the knowledge garnered, via more research on forensic issues related to intellectual disability. It should also be noted that kleptomania remains a rare diagnosis, with only five cases observed in IMH in 2010. Kleptomania, therefore, should only be considered after the exclusion of more common disorders.

In our study, we were unable to ascertain causality between the parameters studied and theft reoffence. However, we found that repeat theft offenders were more commonly diagnosed with mood and substance use disorders, and less commonly with psychotic disorders. The repeat theft offenders also tended to be noncompliant with psychiatric treatment and have a history of conduct problems in childhood. This information has implications on the treatment, follow-up and rehabilitation of theft offenders in Singapore. Substance use disorders may be associated with theft because substance use disorders often result in impulsivity, intoxication and the need to prevent withdrawal or fund the habit of continued use. The mechanism by which mood disorders such as depression transmutes to theft is less well-understood, although previous studies have suggested poor concentration and relief from stress as possibilities.^(12,13)

The strength of our study lies in the fact that the study sample was obtained from the only psychiatric hospital in the country, and is thus representative of the local remand population. Studies done mainly on outpatients referred to psychiatric units of general hospitals are likely to show vastly different patterns of psychiatric morbidity.⁽¹²⁾ The main limitation of our study was its retrospective design. The diagnoses were based on the individual psychiatrist's assessment during the period of remand and not on structured clinical interviews. The results of our study may also be somewhat biased as we did not differentiate between the different types of theft and were limited to a sample that consisted mainly of inpatients, which increased the likelihood that the remanded offenders in our sample suffered from more severe forms of mental illness. The precision of our results was also limited by the sample size, which could have been improved by using a forensic population, seen at IMH, that spanned over a duration of more than one year. We also did not measure psychopathy and Axis 2 diagnoses in our study population, as these were not routinely done using structured objective measures in the clinical setting. This was also so that we could avoid interpreting another clinician's entries, which would have added substantial subjectivity bias. However, both psychopathy and Axis 2 diagnoses are likely important factors to consider in repeat offenders. In the present study, we also did not describe the outcomes of the forensic assessments and the causal links between the offence and the mental disorder, as we felt that this requires a qualitative methodology and analysis.

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