Kleptomania: clinical characteristics and associated psychopathology

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SYNOPSIS A review of research on kleptomania – the syndrome of compulsive stealing – suggests that kleptomania may be a common disorder, especially among women, and that it may frequently be associated with other forms of psychopathology, such as mood, anxiety, and eating disorders. There appears to be a range of abnormal or non-antisocial stealing behaviours, all with impulsive and/or compulsive features. Kleptomania, as defined by modern criteria, may represent the most compulsive variant. Kleptomania may be related to mood disorder, and might be a form of 'affective spectrum disorder'.

INTRODUCTION

Since the early nineteenth century, it has been recognized that a small but distinct subgroup of thieves impulsively or compulsively steal worthless or un-needed objects, or objects easily obtainable by legitimate means (Seguier, 1966a, b). This behaviour, now called kleptomania, was first described by Matthey in 1816, under the name 'klopemanie' (Seguier, 1966a). The name was subsequently changed to 'kleptomanie' by Marc & Esquirol in 1838, and was included among Esquirol's 'monomanies instinctives', along with some forms of alcohol abuse, fire setting, and homicide (Esquirol, 1838).

Although phenomenological descriptions of kleptomania have varied over time, most state that the stealing is out of character and performed impulsively or compulsively, rather than for personal gain. It may seem to occur during an altered state of consciousness, and is often followed by tension reduction. The stolen objects are usually worth very little; often they are given away, discarded, returned, hidden, or hoarded (Seguier, 1966a, b). Indeed, Marc originally defined kleptomania as 'a conscious urge to steal in an individual in whom there is no

Through the years, since Marc's original definition, the validity of the kleptomania concept has been debated. Indeed, some authors (Antheaume, 1925; Abelson, 1989) have questioned whether kleptomania is a bona fide psychiatric disorder, or whether the selection criteria and interpretation of interview data in studies of kleptomanic individuals may have been open to question. Nevertheless, kleptomania is formally recognized as a mental disorder in the International Classification of Diseases, Ninth Revision (ICD-9) (World Health Organization 1978) and the Diagnostic and Statistical Manual of Mental Disorders, third edition - revised (DSM-III-R) (American Psychiatric Assocation 1987). Indeed, the DSM-III-R diagnostic criteria for kleptomania are not very different from Marc's definition. They are: (1) recurrent failure to resist impulses to steal objects not needed for personal use or their monetary value; (2) increasing sense of tension immediately before committing the theft; (3) pleasure or relief at the time of committing the theft; (4) the stealing is not committed to express anger or vengeance; and (5) the stealing is not due to conduct disorder or antisocial personality disorder.

ordinary disturbance in consciousness. The individual concerned frequently strives against this urge, but by its nature it is irresistible' (see Wimmer, 1921; Aggernaes, 1961).

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Individuals with kleptomania therefore differ from ordinary thieves in that they do not steal for personal gain, but rather for symptomatic relief. The disorder has many impulsive features, in that the stealing is usually done abruptly or suddenly in response to an impulse or urge, without premeditation, including long-term planning, collaboration with others, or full consideration of the likelihood of apprehension. But kleptomania also resembles a classic compulsion, in that it is a repetitive behaviour performed to neutralize discomfort, and is associated with a sense of urgency and mounting anxiety if the impulse to steal is resisted and tension reduction or relief when the act of stealing is performed. It is also recognized by the person as unreasonable or wrong; that is, it is ego-dystonic (Davidson, 1965). Thus, unlike ordinary thieves, kleptomanic individuals experience conflict about their stealing - they feel compelled or driven to perform an act which they consider wrong, often attempt to resist or strive against the drive to steal, but are often unsuccessful because the drive seems irresistible or beyond voluntary control.

Although kleptomania has been described for over 150 years, to our knowledge no published studies have examined a cohort of rigorously diagnosed kleptomanic individuals. The available studies that do mention kleptomania may be divided into three groups: (1) case reports or small case series of psychiatric patients who display stealing behaviour suggestive of kleptomania; (2) studies of arrested shoplifters or thieves usually referred by the courts for psychiatric evaluation and (3) studies of stealing or kleptomania among women with eating disorders. We collected and analysed available studies from each of these three groups. For the patients described in each study, we recorded demographic data, phenomenology of stealing, associated antisocial behaviour and psychopathology, and response to treatment.

I. CASE REPORTS AND CASE SERIES OF PSYCHIATRIC PATIENTS WITH KLEPTOMANIA

Although we located over 100 case reports of patients with kleptomania, dating back to the mid 1800s, we restricted our analysis to reports appearing in the English, French, and German

language literature in the past 40 years. Specifically, we found 21 case reports and 7 case series comprising 56 psychiatric patients displaying compulsive or impulsive stealing that provided sufficient information to permit either a possible or probable diagnosis of kleptomania according to DSM-III-R criteria. Such patients were variously described as exhibiting compulsive stealing, pathological stealing, fetishistic theft, neurotic stealing, symbolic stealing, stealing for inexplicable reasons, stealing during states of depression and tension, shoplifting, absent-minded shoplifting, and automatic shoplifting. These studies are summarized in Table 1.

Analysis of these cases was limited by lack of consistent documentation of demographic data. phenomenology, onset and course of stealing, associated antisocial behaviour and psychopathological symptoms, and response to treatment. Additionally, operational diagnostic criteria for kleptomania were rarely provided. For instance, in many cases, the person's motive for or internal experience of stealing was not described, and it was unclear whether the stealing was truly impulsive or compulsive, rather than for personal gain. In fact, some cases diagnosed as kleptomania did not appear to meet modern criteria for the disorder because the stealing was performed while the patient was psychotic (Marc & Esquirol, 1838) or was premeditated and for personal gain (Zavitzianos, 1971). These cases were thus excluded from Table 1 and from analysis.

Demographic data

Kleptomania, as reported in individual case studies, was more common in women than men. Of 56 cases, 43 (77%) were female. In some women, kleptomania appeared related to the premenstruum, as the stealing occurred or increased during this interval (Maisson-Verniory, 1957; Aggernaes, 1961; Gudjonsson, 1987). Age of presentation for treatment was fairly evenly distributed from early adolescence through to the seventh decade, with a slight preponderance of cases presenting in the second and third decades. Onset of stealing, when documented, occurred by the age of 20 years in approximately 50% of patients. Although some patients stole for less than one year, approximately half stole for five years or longer. In those with long histories of stealing, the course was often chronic, sometimes with exacerbations and remissions.

Associated antisocial behaviour

Of the 56 possible kleptomanics in Table 1, only 10 (18%) were reported to demonstrate additional types of antisocial behaviour. These included: lying, fraud, forgery, breaking and entering, treason, embezzlement, and torturing of animals.

Associated psychopathology

Patients demonstrated high rates of other types of psychopathology. The most frequently reported associated psychiatric syndromes were mood disorders. Of 56 kleptomanics, 32 (57%) some affective displayed symptoms. demonstrated in Table 1, 20 (36%) of these patients probably would have met modern diagnostic criteria for major depression or bipolar disorder, and 12 (21%) additional patients possibly would have met these criteria. Anxiety and related symptoms ranked second: 11 (20%) of the 56 patients were noted to be anxious, nervous, or tense, and 19 (34%) reported obsessive-compulsive symptoms, phobias, and/or panic attacks. For instance, 17 (30%) patients demonstrated compulsive behaviours in addition to stealing, including compulsive cleaning, hand-washing, checking, hoarding, collecting, buying, and giving away of personal belongings. Eating disturbances, ranging from cravings for sweets to bingeing and vomiting that would probably meet modern diagnostic criteria for bulimia nervosa, were described in six (11%) cases (all women). Finally, various forms of sexual dysfunction, including frigidity, vaginismus, promiscuity, and sexual feelings at the time of theft, were reported in seven (13%) cases.

Treatment and response were documented infrequently. Of those studies documenting outcome, four of five (80%) patients receiving psychoanalysis or related forms of psychotherapy; eight of eight (100%) receiving behavioural psychotherapy (aversive conditioning in all but two cases) and seven of eight (88%) receiving somatic treatment (antidepressants alone or in conjunction with antipsychotics or stimulants, ECT alone, or antidepressants together with ECT) demonstrated a significant reduction in

stealing behaviour. Four of the studies of behavioural therapy also noted a reduction in the impulse or urge to steal (Keutzer, 1972; Gauthier & Pellerin, 1982; Glover, 1985; Gudjonsson, 1987). In three patients treated with antidepressants, kleptomanic urges recurred with drug discontinuation, and responded again when drug was re-instituted (Fishbain, 1987, 1988; McElroy et al. 1989).

II. STUDIES OF SHOPLIFTERS

We located 12 studies that analyzed groups of apprehended shoplifters (summarized in Table 2). Taken together, these studies report on over 2400 shoplifters. In all but two of these reports (Gibbens & Prince, 1962; Cameron, 1964), the shoplifters examined were referred by judicial systems for psychiatric assessment, and hence were sometimes termed 'legally-referred' or 'abnormal' shoplifters.

Demographic data

Taken together, the studies of groups of shoplifters indicate that shoplifting may be more common in women than men, with reported percentages of women ranging from 52% to 100%. Even in the study reporting the lowest rate of female offenders among shoplifters (52%), Medlicott (1968) remarked that females constituted a much higher proportion in the study series compared with statistics of the New Zealand Magistrates Courts, in which seven times as many males as females are charged with 'offences against property'.

It may be argued that the rates of females among shoplifters in these studies are falsely elevated because women may be more likely to be referred to psychiatric systems when they display criminal behaviour than are men. Although this possibility cannot be excluded, Gibbens & Prince's (1962) study, which found that 69% of 776 shoplifters were women, included all shoplifters presenting to three Greater London courts in a one-year period, regardless of whether they were referred for psychiatric assessment.

The persons apprehended for shoplifting spanned all age groups. However, men were more likely to be apprehended for shoplifting during adolescence and young adulthood (Gibbens & Prince, 1962); women demonstrated

Table 1. Cases of probable or possible kleptomania reported in the Modern English, German and French-language literature

Barag (1953) 1 22/F Socarides (1954) 1 31/F Zulliger (1954) 1 17/F Solms (1955) 1 64/F Delay et al. (1955) 1 66/F Woddis (1957) 2 61/F Maisson-Verniory (1957) 4 35/F S8/F 38/F	6 31 Childhood 24 41 ND	Lying	Probable MD		response
1 31/F 1 17/F 1 64/F 1 66/F 2 61/F 49/F (1957) 4 35/F 58/K	31 Childhood 24 41 ND	°CZ		Probable PD, BN; possible OCD; SD;	PA; R
1 17/F 1 64/F 1 66/F 2 61/F 49/F (1957) 4 35/F 35/F 35/F 38/M	17 Childhood 24 41 ND	<u>)</u>	Possible MD	Probable OCD, SD; history of sexual abuse	PA; ND
1 64/F 1 66/F 2 61/F 49/F (1957) 4 35/F 35/F 35/F 38/M	Childhood 24 41 ND ND	ND	QN	ND	PT; R
1 66/F 2 61/F 49/F (1957) 4 35/F 59/F 38/F	42 4 N D N D D D D D D D D D D D D D D D D	Q	Q	Possible OCD	QN.
49/F 4 35/F 59/F 35/F 28.M	ON ON	ΩZΩ	ND Probable MD	Possible OCD Probable OCD	NA; NR ECT and
4 35/F 59/F 35/F 28/M	ND	Forgery	Probable MD	Anxiety; probable OCD,	Z Z S S S S
4 35/F 59/F 35/F 28/M	Q			phobías	
		Q	Q	Probable LLPDD; impulses to steal occurred	Q
	CZ	CZ	Prohable MD	Prohable PD	2
	Q Q	2 2	Probable MD	ON CAN	Q Z
	2	Q	CN	Somnambulism: homosexuality	Q Z
1 20/M	Q	Q	Q.	Anxiety	BT; R
(1960) I 20/F	ΩN	ΩN	ND	Experienced 'sexual	
Aggernaes (1961) 9 45/M	ND	ND	Probable MD	Anxiety; possible OCD,	PT; R
W/95	ND	Treason	Possible MD	Anxiety; probable AA;	PT; R
33/M	ND	Embezzlement	Probable MD	Possible PD. AG	QN
	51	Frand	QN	Nervous breakdown': SD	S
50/F	46	ND	Probable MD	Had dreams of theft	NO
30/F	ND	Breaking and	Probable MD	Possible LLPDD	ND
34/F	ND	QN	Probable BD	Probable SA; possible SD; patient stole during insulin reactions	NΩ
ND/F	ND	ΩN	Possible MD	Probable LLPDD, PH; thefis occurred	Ω̈́
45/F	45	ΩN	ND	Probable LLPDD;	ND
Ziolko (1966) 1 22/F	ND	ND	Possible MD	possible epitepsy Anxiety; probable OCD. BN	PA; ND
	14 49	225	225	ND Possible OCD	ND PA; ND
M/V M/74	ND ND	22	Q Q	ND Possible OCD	2 2

Z Z Z	ND	QN	ND	QN	BT; R	BT; R	BT; R	BT; R	NO	NO	AD and ECT: R	AD and S; R	BT: R	Ŋ	BT: R	PA, NR:	AD, AP	AD NR	BT, R	CN.	2	Q	QN	ND	Q	AD; R	AD; R	AD: PR
Possible OCD Anxiety; probable PSD;	Anxiety; probable PSD;	Possible PSD, OCD	Probable SA, PSD	Possible PSD	ΩN	Anxiety	ND	Q	Probable OMD due to	Anxiety; possible PSD, SD	ND	Narcolepsy; patient unaware of her actions during episodes of shootlifting	dN QN	Probable PH; possible OCD, somnambulism	Anxiety	Probable PSD, SD		Anxiety: probable OCD:	urges to steal increased	Sexual promisemity	Sexual promiscuity	Probable SD	Probable SD	Sexual promiscuity	SD	Probable BN	Probable BN, AA, SA	Probable BN
ND Probable MD	ND	Probable MD	Probable MD	Possible MD	Possible MD	Probable MD	NΩ	QX	Possible MD	QN	Probable MD	Possible MD	Possible MD	Possible MD	Possible MD	Probable MD		Probable MD		Š	2	QX	Q	ND	Possible MD	ND	Probable MD	Probable MD
N O O	ND	Tortured animals;	Stole narcotics	ND	S	ND	Q.	Q Z	Embezzlement;	ND ON	ND	ΩN	CN	Breaking and entering, lying	ND	QN		QN		Š	2	QX	ΩN	ND	ND	NO	Q	ΝD
2 SO	4	01	15	15	47	Childhood	12	Teens (10 yr earlier)	, 52	14	51	Q Q	26	N Q	42	70		Farly 20s	,	9	- E	QN	ND	ND	ND	30	20	91
25/F 28/F	36/F	46/M	25/F	53/F	47/F	25/F	24/F	20s/M	33/M	35/F	51/F	55/F	30/F	13·5/F	56/F	57/F		ND/F		79/F	ND/F	ND/F	ND/F	25/M	ND/F	33/F	35/F	19/F
9					_	-	_	-	-	-	-	-	_	-	-	_		_		٠	,					3		
Elizur & Jaffe (1968)					Krafi (1970)	Keutzer (1972)	Marzagao (1972)	Guidry (1975)	Kahn & Martin (1977)	Singer (1978)	Ramelli & Mapelli (1979)	Zorick et al. (1979)	Gauthier & Pellerin (1982)	Money (1983)	Glover (1985)	Fishbain (1987 & 1988)		Gudionsson (1987)	•	Turmbull (1987)	(10/1)					McElroy et al. (1989)		

4

compulsive disorder, AN = anorexia nervosa, BN = bulimia nervosa, PSD = personality disorder than APD, APD = antisocial personality disorder, SD = sexual dysfunction, LLPPD = Late Luteal Phase Dysphoric Disorder, OMD = organic mental disorder; "Treatments: PA = psychoanalysis, PT = psychotherapy, BT = behavioural psychotherapy, NA = narcoanalysis, AD = antidepressant medication, ECT = electroconvulsive therapy, S = stimulant medication, AP = antipsychotic medication; *Response: R = remission of stealing, PR = partial response, NR = not documented; *ND = none documented (the patient is said not to have a mood disorder or the presence or absence of affective symptoms is not documented) Key: Probable = Definitely or most likely met full DSM-III-R criteria; Possible = Some DSM-III-R criteria documented, but not enough to permit a definite or probable diagnosis; Associated Psychopathology: MD = major depression, BD = bipolar disorder, AA = alcohol abuse, SA = substance abuse, PD = panic disorder; AG = agoraphobia, PH = phobia, OCD = obsessive

Table 2. Studies of apprehended shoplifters referred by the courts for psychiatric evaluation

Authors (date)	N	% Compulsiv	% Female	Associated psychopathology
Dubuisson (1901)	120	ND¹	98	111 (93%) had a psychiatric or neurological illness: 33 (28%) had 'cerebral infirmities', 26 (22%) had physical and moral tiring with neurasthenia, 37 (31%) were hysterics. Also, 15 stole during
Arieff & Bowie (1947)	338	3.8	93	menstruation, pregnancy, or menopause. 265 (77%) exhibited a 'defineable mental, emotional or physical disorder': 55 (16%) had 'mental deficiency', 50 (15%) were psychotic, 49 (14%) were 'psychoneurotic with mild depression and/or ion and/or anxiety state', 48 (14%) had psychopathic personalities, 39 (12%) were 'emotionally unstable' and 24 (7%) had organic disorders.
Gibbens & Prince ^a (1962)	776	0	69	19% 'suffered from psychosis, neurosis, or psychosomatic illness with strong psychological implications'. Depression was the most common associated symptom, especially among women aged 40-55 years; rate of admission to psychiatric hospitals for women shoplifters was 3 times higher than average.
Ordway (1962)	85	ND	ND	Legally-referred shoplisters were compared with 148 non-referred shoplisters. Referred shoplisters showed a lower rate of recidivism, were more likely to be diagnosed as depressed, and showed a higher frequency of personal loss antedating thest. Of the legally-referred shoplisters, 43 % met DSM-1 criteria for depression and 33 % were 'seriously depressed' but not assigned a DSM-1 diagnosis due to 'inconclusive evidence'.
Cameron ² (1964)	873	0.1	Only women studied	56 (6.5%) were referred for psychiatric examination. Of these, 12 (1.4%) displayed depression, 6 (0.6%) emotional immaturity, 4 (0.4%) compulsive neurosis, and the rest a variety of diagnoses. Twelve (1.4%) were committed to a psychiatric hospital.
Medlicott (1968)	50	8	52	100% displayed psychological disorders: 14 (28%) displayed depressive illness (all women), 10 (20%) neurotic character disorder (14% women, 6% men), 9 (18%) psychopathic personality (4% women, 14% men); 8 (16%) adolescent instability (2% women, 14% men); 8 (16%) schizophrenia; 3 (6%) neurosis; 2 (4%) sexual deviation (all men).
Meyers (1970)	95	ND	70	93% women and 71% men reported physical symptoms; associated psychologic symptoms not assessed. Concluded that there was a marked disturbance in the sexual lives of shoplifters.
Gillen (1976)	48	4.2	Only women studied	100% showed evidence of psychological disorder. The most common feature at the time of offence was depression. Premenstrual tension, nail biting, bedwetting, and sleep walking also seen.
Davis (1979)	17	ND	100	100% showed evidence of 'clinical' depression and anxiety; 3 (18%) had previous treatment for depression.
Bradford & Balmaceda (1983)	50	4	62	Shoplisters were compared with a general forensic and a general psychiatric group. The most common diagnosis among shoplisters was depressive neurosis (42%), which was similar to the psychiatric group, but significantly higher than in the forensic group (16%).
Cupchik & Atcheson (1983)	24	ND	71	On the MMPI, 10/15 (67%) women and 3/7 (43%) men scored significantly high on the psychopathology scale, 8/15 (53%) women and 4/17 (24%) men had significantly high depression scores; actual or anticipated loss occurred in close temporal proximity to theft in most cases.
Silverman & Brener (1988)	34	ND	Only women studied	Shoplifters were compared with 3 groups – 42 agoraphobics, 18 in- patients with depression, and 36 consecutive patients attending a family practice clinic. Shoplifters scored significantly higher for marital disharmony, sexual rejection by spouse, time since last sexual intercourse, depression, and phobic anxiety than those of the family practice control group.

¹ ND = Not documented; ² The majority of shoplisters in this study were not referred for psychiatric evaluation.

a bimodal age distribution, with one peak from puberty through early adulthood and the other around the age of menopause (Gibbens & Prince, 1962; Meyers, 1970; Gillen, 1976; Gibbens, 1981; Bradford & Balmaceda, 1983).

None of the studies systematically assessed the motives for, or phenomenology of, the stealing. Although several studies reported that shoplifting was not related to lower socioeconomic level (Arieff & Bowie, 1947; Gibbens & 1962; Gillen, 1976; Bradford & Balmaceda, 1983), most shoplifters undoubtedly stole for personal gain (Craft & Spencer, 1984; Gudjonsson, 1987). However, some were reported to steal objects impulsively (Gibbens & Prince, 1962; Gillen, 1976) or automatically without awareness of the act (Gibbens & Prince, 1962; Meyers, 1970; Gillen, 1976; Bradford & Balmaceda, 1983). Also, the stolen objects were often not needed or used but discarded, given away, returned, or hoarded (Meyers, 1970; Gillen, 1976). Finally, the stealing behaviour was sometimes described as out of character or unusual (Cupchik, 1983). Despite these observations, the six studies which formally assessed the rate of kleptomania (defined as compulsive stealing) among their subjects produced rates ranging from none (Gibbens & Prince, 1962) to 8% (Medlicott, 1968). In the one report that used operational criteria (DSM-III) (American Psychiatric Association, 1980) to diagnose kleptomania, Bradford & Balmaceda (1983) reported that of 50 apprehended shoplifters referred for psychiatric examination, only 4% met criteria for kleptomania. The authors argued, however, that the rate of kleptomania found may have been spuriously low because the recurrent nature of kleptomania might lead to repeated apprehensions, and hence be interpreted as recidivism and not result in psychiatric referral. These authors noted that of their cohort of 50 shoplifters, 50% had no previous convictions of any type and only 4% had two or more convictions.

Therefore, although studies of shoplifters consistently report low rates of kleptomania, these rates may be inaccurate because psychiatric evaluations may not always have been sufficiently thorough, operational diagnostic criteria were rarely used, and kleptomania may have been under-represented in the samples due to selection bias.

It should also be considered that shoplifting in general is extremely common. Astor (1969) reported that of 263 randomly chosen customers followed while shopping, 27 (10%) were observed stealing. Shapson (1976) estimated that about 140 million thefts occurred per year, but that only four million people were arrested. Canadian crime statistics estimated the dollar from shoplifting during 1978 approximately one million dollars per day (Bradford & Balmaceda, 1983). Furthermore, it appears that the incidence of shoplifting may be increasing. Gibbens & Prince (1962) documented a nearly two-fold increase in convictions for 'larceny from shops and stalls' from before World War II to 1960 in England and Wales. In the United States, figures calculated by the Federal Bureau of Investigation indicated a 10% increase in the rate of shoplifting in a single year between 1978 and 1979 (United States Department of Justice 1979). Also, a self-help association for shoplifters, Shoplifters Anony-International (Encyclopaedia mous Associations 1989), was founded in 1977. Given these data, it appears that even if kleptomania accounts for a small proportion of shoplifters, it may account for a large absolute number of individuals.

Associated antisocial behaviour

The majority of studies in this group reported that most shoplifters had no previous arrests, with rates of first offenders ranging from 50% (Bradford & Balmaceda, 1983) to 80 % (Gibbens & Prince, 1962). When compared with other forensic groups, shoplifters were less likely to have committed crimes other than shoplifting and had lower rates of recidivism (Gibbens & Prince, 1962). Those with prior arrests were usually arrested for the same offence shoplifting (Arieff & Bowie, 1947). When male and female shoplifters were analysed separately, females had fewer previous convictions, were less likely to have committed crimes other than shoplifting, and had lower recidivism rates (Cameron, 1973; Gibbens & Prince, 1962).

Associated psychopathology

Many studies showed that shoplifting was frequently associated with various types of psychopathology (see Table 2). In the two studies assessing shoplifters not referred for psychiatric assessment, 19% of 766 (Gibbens & Prince, 1962) and 7% of 873 (Cameron, 1964) demonstrated psychopathology. In both studies, however, many patients did not receive systematic psychiatric evaluations. In the other studies, which examined shoplifters specifically referred by the courts for psychiatric evaluation, higher rates of psychopathology were observed, not surprisingly, ranging from 76% (Ordway, 1962) to 100% (Gillen, 1976; Davis, 1979).

Upon examining specific psychopathological symptoms among shoplifters, depression was the most frequently reported. All but two (Arieff & Bowie, 1947, Cameron, 1964) of the studies in Table 2 noted an elevated rate of depression in their subjects. Finally, in addition to the reports in Table 2, others have suggested a link between depression and shoplifting, providing case reports or case series of patients who impulsively or automatically stole worthless objects while demonstrating symptoms of major depression (Neustatter 1953, 1954; Woddis, 1957; Russell, 1973; Coid, 1984).

Other forms of psychopathology reported with variable frequency among shoplifters included anxiety (Arieff & Bowie, 1947; Gibbens & Prince, 1962; Davis, 1979; Silverman & Brener, 1988), personality disorder (Arieff & Bowie, 1947; Gibbens & Prince, 1962; Medlicott, 1968; Bradford & Balmaceda, 1983); psychosis (Bradford & Balmaceda, 1983); organic mental disorder (Arieff & Bowie, 1947; Bradford & Balmaceda, 1983); alcohol and psychoactive substance abuse (Arieff & Bowie, 1947; Bradford & Balmaceda, 1983); premenstrual tension and other abnormalities in sexual behaviour and reproductive function, including stealing that occurred in conjunction with the menstrual cycle, pregnancy, and menopause (Dubuisson, 1901; Gibbens & Prince, 1962; Meyers, 1970; Gillen 1976); obsessive-compulsive symptoms or personality traits (Gibbens & Prince 1962); and eating disturbances that in some patients probably would have met modern diagnostic criteria for eating disorders, particularly bulimia nervosa (Medlicott, 1968). Infrequently symptoms included nail-biting, bed-wetting, sleep-walking and altered mental states at the time of stealing – including dissociation, absentmindedness, and mild confusional states due to physical illness or medication side-effects (Segal,

1976; Todd, 1976; Bradford & Balmaceda, 1983).

Thus, in the studies of apprehended, legallyreferred shoplifters there is a preponderance of women, the stealing is often impulsive, the objects stolen are often useless or of little value, but there is a low rate of other criminal or antisocial behaviour and a high incidence of other forms of psychopathology, especially symptoms or syndromes of depression and anxiety.

III. KLEPTOMANIA IN PATIENTS WITH EATING DISORDERS

Six studies have examined the prevalence of stealing or kleptomania in patients with eating disorders (summarized in Table 3). A seventh study (McElroy et al. 1989), reporting the successful treatment of kleptomania with antidepressant medication in three women with concurrent bulimia nervosa, has previously been presented in Table 1.

Demographic data

The great majority of patients in these studies were female, with rates ranging from 94% (Hudson et al. 1983) to 100% (Crisp et al. 1980 a; Casper et al. 1980; Pyle et al. 1981). Age of presentation ranged from adolescence through the fifth decade, with several studies (Garfinkel et al. 1980; Pyle et al. 1981; Hudson et al. 1983; Gerlinghoff & Backmund, 1987) reporting mean ages of presentation ranging from 20 to 25 years. Reported rates of stealing or kleptomania ranged from 12% (Garfinkel et al. 1980) to 79% (Pyle et al. 1981). Taken together, of 719 patients with anorexia nervosa, bulimia or bulimia nervosa, or both, 154 (21 %) displayed stealing or kleptomania. In the studies that evaluated stealing rather than rigorously defined kleptomania, the stealing similarities to kleptomania in that it was described as 'out of character' (Crisp et al. 1980a), impulsive (Crisp et al. 1980a, b; Garfinkel et al. 1980), or compulsive (Casper et al. 1980). Although many patients stole only food items, an equal proportion stole items other than food. Furthermore, stealing occurred both in the presence, and in the absence, of eating disorder symptoms. Pyle and colleagues (1981) noted that of 27 patients with bulimia and a history of stealing, the onset of stealing preceded the onset of bulimia in nine (33%) and occurred after the onset of bulimia in 18 (67%).

Associated antisocial behaviour

Only one study systematically assessed antisocial behaviour other than stealing. Hudson and colleagues (1983) reported that of 90 women with anorexia nervosa, bulimia nervosa, or both, 28% of whom displayed kleptomania, only one (1%) met DSM-III-R criteria for antisocial personality disorder. Of note, although other types of criminal behaviour were not evaluated, Crisp and associates (1980) concluded that the stealing demonstrated by their group of eating disorder patients, 'contrast[ed] markedly with premorbid behavior and family value systems'.

Associated psychopathology

Patients in several of these studies displayed significant psychopathology in addition to their eating disorder – most commonly, major mood, anxiety, and alcohol and substance abuse disorders (Pyle et al. 1981; Hudson et al; 1983; McElroy et al. 1989). Additionally, when compared with non-stealers, stealers were more likely to have bulimia or bulimia nervosa with or without anorexia nervosa, as opposed to anorexia nervosa alone (Crisp et al. 1980 a, Casper et al. 1980; Garfinkel et al. 1980; Krahn et al. 1989); to have more severe bulimic symptoms (Crisp et al. 1980a; Casper et al. 1980; Krahn et al. 1989); and to have other forms of psychopathology – particularly depression anxiety (Crisp et al. 1980a; Krahn et al. 1989).

In summary, kleptomania may be frequently associated with eating disorders, and may be more common in women with eating disorders than in shoplifters in general. Furthermore, patients with eating disorders who steal usually display an impulsive or compulsive quality to their stealing, low rates of concurrent criminality, increased severity of eating disorder symptoms, and high rates of associated psychopathology – particularly depression and anxiety.

DISCUSSION

Although kleptomania has been recognized for more than 150 years, no published studies, to our knowledge, have examined the demographics,

phenomenology, course, or treatment of a cohort systematically diagnosed kleptomanic patients. Thus, information about kleptomania must be derived primarily from three sources: (1) case reports or small series of psychiatric patients with compulsive or impulsive stealing; (2) studies of 'legally referred' shoplifters; and (3) reports of kleptomania in patients with eating disorders. Our analysis of studies from these three groups suggests that all include patients with similar demographic and phenomenological features, and with similar associated psychopathology, perhaps representing a spectrum of related stealing behaviours. Kleptomania, especially as defined by modern criteria, may represent the most severe and most compulsive end of the spectrum, whereas the infrequent, impulsive theft of worthless or unneeded objects may reflect a milder form of the disorder. Indeed, Arieff & Bowie (1947) speculated that kleptomania might simply represent an 'intensified instance' of abnormal shoplifting. Moreover, other authors have speculated that there are different types of kleptomania along an impulsive versus compulsive dimension. Lacassagne (1896) divided kleptomanics into collectors (those who steal without necessity and hoard the stolen objects), the dysequilibrated (those who give in to abrupt temptations to steal), and the sick (those with organic or major psychiatric syndromes). Dupouv (1905) divided kleptomanics into those with an 'impulsive obsession', where the person is commanded by obsessional ideas of stealing; those whose stealing is a reflexive or automatic act; and those with 'morbid desire', whose symptoms fall between the two earlier categories. He believed that most kleptomanics fell into the latter category. More recently, McCord & McCord (1956) proposed that kleptomania be expanded to include all impulsive thefts 'without cognitive motivation and goal' (see Elizur & Jaffe, 1968).

If, indeed, kleptomania represents only the most severe variant of a continuum of abnormal stealing, then this family of stealing disorders may be more common than previously suspected. Shoplifting in general is extremely common, and though the reported rates of kleptomania among shoplifters are low, studies have not assessed kleptomania systematically and thus may have failed to detect many cases of compulsive and/or

Table 3. Studies of stealing and/or kleptomania among patients with eating disorders

	1	5	. D. MCLIFO	y ana oinei	, ,			
Objects stolen	6 stole only food; the other 8 stole combinations of food, money, cosmetics, and clothes	Issociated psychopathology and comments Compared with non-shoplifters, shoplifters were significantly older, heavier at presentation, had not lost as much weight, and had a longer duration of litherss. On the CCEIt, stealers reported significantly more anxiety, depression, functional somatic complaints, and sociability than non-stealers. Highly significant associations were noted between stealing and bulimia, vomiting, and purgative abuse. Stealers did not differ from non-stealers in terms of social class, marital status at follow-up, and outcome 4 to 8 years there. Stealing occurred before presentation in 10 and after presentation in 4. In 13, stealing occurred during bulimic phases of the illness.	ND	us have AN with B than AN alone. o have AN with B than AN alone. ntly higher depression, anxiety, scores compared with those	ND	its likely to steal than those without B. E likely to use alcohol and street injury, and to exhibit mood lability	Of 22 patients, 15 stole food, 3 cosmetics or jewellery, 3 clothing, and 1 alcohol	issociated psychopathology and comments Most' reported depression, 7(21%) had received chemical dependency freatment, and 11 (32%) exhibited amphetamine abuse. 30 patients given the MMP1 ³ showed significant elevations on the Psychopathic Deviant, Depression, Psychasthenia and Schizophrenia Scales, Of 27 patients with stealing behaviour, 18 (67%) began stealing after and 9 (33%) before onset of eating disorder.
% demonstrating stealing and/or kleptomania (criteria)	14 of 102 (13.7%); 4 of 14 (29%) had been prosecuted for shoplifting (ND); the stealing was usually 'out of character' and 'on impulse'	Associated psychopathology and comments Compared with non-shoplifters, shoplifters were significantly older, heavier at presentation, had not lost as much weight, and had a longer duration of illness. On the CCEI,* stealers reported significantly more anxiety, depression, functional somatic complaints, and sociability than non-stealers. Highly significant associations were noted between stealing and bulimia, vomiting, and purgative abuse. Stealers did not differ from non-stealers in terms of social class, marital status at follow-up, and outcome 4 to 8 years later. Stealing occurred before presentation in 10 and after presentation in 4. In 13, stealing occurred during bulimic phases of the illness.	14 (13:3%) displayed kleptomania (ND): 2 (4%) with AN alone and 12 (24%) with AN and B; kleptomania defined as compulsive stealing	Associated psychopathology and comments Stealers were significantly more likely to have AN with B than AN alone. Patients with B demonstrated significantly higher depression, anxiety, somatization, and obsession with food scores compared with those without B.	None with AN alone and 12% with AN and B displayed 'impulsive stealing' (ND)	Associated psychopathology and comments Patients with B were significantly more likely to steal than those without B. Patients with B were significantly more likely to use alcohol and street drugs, to attempt suicide, to self-inflict injury, and to exhibit mood lability than patients without B.	27 (79%) had a history of stealing (ND); stealing not described	Associated psychopathology and comments 'Most' reported depression, 7 (21 %) had received chemical dependency treatment, and 11 (32%) exhibited amphetamine abuse. 30 patients given th MMP1's showed significant elevations on the Psychopathic Deviant, Depression, Psychosthenia and Schizophrenia Scales. Of 27 patients with stealing behaviour, 18 (67%) began stealing after and 9 (33%) before onset of eating disorder.
Diagnosis¹ (criteria)	55% AN alone; 45% AN and B (Crisp, 1967)		56 (53%) AN alone (Feighner <i>et al.</i> 1972); 49 (47%) AN and B		73 (52%) AN alone (Feighner et al. 1972); 68 (48%) AN and B		34 (100%) B; 16 (47%) with AN in the past (but not currently) (DSM-III)	
N (% Female)	102 (100)		105 (100)		141 (96)		34 (100)	
Age range (years)	Mean age 21		Mean age 20		Mean age 21		19–51; median age 24	
Authors (year)	Crisp <i>et al.</i> (1980 <i>a</i>)		Casper et al. (1980)		Garfinkel <i>et al.</i> (1980)		Pyle et al. (1981)	

ND	s lifetime history of an affective 29 (32%) a substance use disorder, (2%) intermittent explosive disorder	Of 12 evaluated 4 stole food only; 6 food and other items; 2 items other than food	8	1 stole only non-food items, 2 food and other items	s ession and 1 had alcohol and amphe-	QN	d elevated scores on many SCL-90* ey, laxative use, vomiting, and owed increased scores on SCL-90 ive-compulsive, depression, anxiety, eased interpersonal distrust; increased by of normal meals.
25 (28 %) had a lifetime diagnosis of kleptomania (DSM-III): (13 %) with AN alone, 12 (24 %) with B alone, and 11 (44 %) with both	Associated psychopathology and comments Of 90 patients, 79 (88%) demonstrated a lifetime history of an affective disorder, 49 (54%) an anxiety disorder, 29 (32%) a substance use disorder, 11 (12%) a personality disorder, and 2 (2%) intermittent explosive disorder by DSM-III criteria.	15 (24%) reported kleptomania (ND): 9% with AN alone, 75% with B alone, and 27% with both	Associated psychopathology and comments ND.	3 (100%) demonstrated kleptomania (DSM-III-R)	Associated psychopathology and comments Two patients had concurrent major depression and I had alcohol and amphetamine abuse by DSM-III-R criteria.	51 (28%) reported a history of stealing (ND): 1 (6%) with AN alone, 31 (33%) with BN alone, and 4 (31%) with both AN and BN; stealing not described	Associated psychopathology and comments Compared to non-stealers, stealers showed elevated scores on many SCL-90* subscales and increases in binge frequency, laxative use, vomiting, and enema use. Among bulimics, stealers showed increased scores on SCL-90 subscales including somatization, obsessive-compulsive, depression, anxiety, hostility, phobia, and psychopathy: increased interpersonal distrust; increased binge frequency; and decreased frequency of normal meals.
16 (18%) AN alone; 49 (54%) B alone; 25 (28%) both (DSM-III)		22 (35%) AN alone; 4 (6%) BN alone; 36 (57%) both (ND)		3 (100%) BN alone (DSM-III-R)		16 (9%) AN alone; 95 (52%) BN alone; 13 (7%) both; 57 (31%) eating disorder not otherwise specified (ND)	
90 (94)		63		31 (100)		181 (ND)	į
17–37; mean age 25		Mean age 20·4				Q	
Hudson <i>et al.</i> (1983)		Gerlinghoff & Backmund (1987)		McElroy et al. (1989)		Krahn <i>et al.</i> (1989)	

¹ AN = Anorexia Nervosa, B = Bulimia, BN = Bulimia Nervosa; ² CCEI = Crown Crisp Experiential Index (Crown & Crisp, 1979); ³ MMPI = Minnesota Multiphasic Personality Inventory; ⁴ SCL 90 = Symptom Check List 90.

impulsive stealing. Also, it appears likely that kleptomania and related forms of abnormal stealing may be more prevalent in psychiatric than in criminal populations.

Although the aetiology of kleptomania in particular and abnormal stealing in general is unknown, numerous theories on the cause of this disorder, from a variety of schools of psychiatric thought, have been put forth over the last 150 years (Seguier 1966 a, b). Social theories have held that shoplifting is due in part to the availability of merchandise, and hence may be more common in women because they shop more than men (Sohier, 1969). Indeed, Dubuisson (1901) noted an increase in shoplifting in Paris at the turn of the century when large department stores, which put merchandise on display, began replacing smaller shops which restricted the availability of merchandise. Psychodynamic theories have postulated that kleptomania reflects a defence against, or the symbolic enactment or gratification of, unconscious or unacceptable impulses, wishes, conflicts, or needs – including sexual impulses 1911-12, 1922; Abrahamsen, 1960); castration anxiety (Alexander, 1922; Levy, 1934); penis envy (Alexander, 1922); masochism (Rado, 1933); protection, forgiveness and self-esteem (Fenichel, 1945); oral eroticism (Barag, 1953); 'unresolved dependency strivings' (Allen, 1965); and 'neglected proofs of love' (Abraham, 1968). That kleptomania may be related to sexuality is supported by reports of kleptomanics and legally-referred shoplifters demonstrating various forms of psychosexual dysfunction (Meyers, 1970; Turnbull, 1987), as well as reports of sexual excitement or orgasm during the act of stealing (Fenichel, 1945; Abrahamsen, 1960). Indeed, Maisson-Verniory (1957) divided kleptomania into two categories: nervous, in which the stealing, in women, was related to menstruction; and perverse, in which the individual experienced sexual thrill at the time of theft.

On the other hand, others have hypothesized that kleptomania is attributable or related to coexisting medical or psychiatric illness, including impulse control disorders, obsessive-compulsive disorder, organic mental disorder, factitious disorder, and mood disorder. For instance, Kernberg (1967) included kleptomania under the category of 'impulse neurosis' along with obesity, drug addiction, and alcoholism, stating

that the behaviour reflected a 'chronic repetitive eruption of an impulse which gratifies instinctual needs in a way that is ego-dystonic outside of the impulse-ridden episode but which is ego-syntonic and highly pleasurable during the episode itself'. Furthermore, in DSM-III-R (American Psychiatric Association 1987), kleptomania is classified under 'Impulse Control Disorders Not Elsewhere Classified' along with intermittent explosive disorder, pathological gambling, pyromania, and trichotillomania. Presumably noting phenomenological similarities between impulse control disorders and obsessive compulsive disorder, Laughlin (1956) classified both kleptomania and obsessive compulsive disorder as 'impulsions', which he stated were similar to 'compulsions' because they were characterized by 'repetitive compulsions to commit and carry out various unlawful or socially disapproved series of similar, related, or identical actions'. Abrahamsen (1960)similarly kleptomanics among 'neurotic offenders' whom he defined as 'people who carry out criminal acts as a result of obsessive-compulsory afflictions'. More recently, Tynes and colleagues (unpublished data) have hypothesized that kleptomania and other impulse control disorders may represent variants of obsessive-compulsive disorder. Others have suggested that kleptomania may be caused by organic conditions that increase impulsivity, including hypoglycaemia (Mohnite, 1946; Wilder, 1947; Neustatter, 1954), head trauma (Bychowski, 1932), dementia (Khan & Martin, 1977), narcolepsy (Zorick et al. 1979), and epileptic phenomena (Solms, 1955). In sharp contrast, Antheaume (1925) expressed doubt as to the validity of kleptomania as a true entity and argued that kleptomania was a factitious disorder.

Finally, many theorists have suggested that kleptomania may be related to depression (Janet, 1911; Coid, 1984; Gudjonsson, 1987). For example, several authors have postulated that the tension relief or pleasure associated with kleptomanic stealing may exert antidepressant effects. Janet (1911) described a woman with recurrent major depression whose depressive symptoms remitted when she compulsively stole worthless items and recurred after she was apprehended and ceased stealing. He concluded that the patient stole to relieve her depression. Coid (1984) described a 54-year-old woman with

no previous convictions whose impulsive stealing of unneeded food items rapidly relieved profound depression and anxiety due to diazepam withdrawal. He postulated that the 'excitement' of stealing alleviated her dysphoria via a 'symptom-relief mechanism'. Gudjonsson (1987) reported the case of a middle-aged woman with major depression whose compulsive shoplifting transiently alleviated her depressed mood by exerting 'sudden mood-elevating and anxiety-relieving effects'. Fishbain (1987) described yet another woman whose depression was relieved by kleptomania, and concluded the 'thrill of risk taking' self-medicated her depression. Others have postulated that kleptomania and abnormal shoplifting may be an responses underlying depression to representing the enactment of unconscious guilt to elicit punishment (Russell, 1973); a request for help (Chiswick, 1976); or an attempt to overcome feelings of inferiority (Gibbens & Prince, 1962). Might kleptomania and the other psychiatric disorders associated with it be due to a common underlying abnormality? Hudson & Pope (1990) have proposed that major depression, bulimia nervosa, obsessive compulsive disorder, and panic disorder, among other disorders, may be due to a common underlying pathophysiological disturbance, and termed this family of disorders 'affective spectrum disorder' (ASD). Indeed, four lines of evidence suggest that kleptomania may be related to major depression, and hence may represent yet another form of ASD: (1) the high frequency of associated depressive and anxiety symptoms in persons with kleptomania; (2) reports of kleptomanic behaviour alleviating symptoms of major depression; (3) reports of the resolution of kleptomanic symptoms in response to thymoleptic medication or ECT; and (4) the association of kleptomania with eating disorders - which, in turn, appear related to mood disorders with respect to phenomenology, outcome, family history, and response to thymoleptic medications (Hudson & Pope, 1987). Along similar lines, it may be hypothesized that all impulse control disorders, or, more broadly, all disorders sharing phenomenology marked by irresistible impulses, urges, or compulsions to perform senseless, repugnant, or ego-dystonic behaviours, might be related to one another (Popkin, 1989) and to depression,

and thus might all be forms of ASD. Indeed, there exist some preliminary data to support a relationship between impulse control disorders general and depression. **Pathological** gamblers, for instance, have been shown to have increased rates of mood disorder in their personal and family histories (Linden et al. 1986). Individuals with trichotillomania have been reported to have concomitant depression (Sachdeva & Sidhu, 1987; Swedo et al. 1989) to respond to the antidepressant clomipramine (Swedo et al. 1989). Although not classified as impulse control disorders, patients with obsessive compulsive disorder, bulimia nervosa, and paraphilias – disorders which may involve urges to perform ego-dystonic acts have been reported to have concurrent depression (Allen, 1949; Woddis, 1957; Hudson & Pope, 1987; Rasmussen & Eisen, 1989) and to respond to thymoleptics (Eyres, 1960; Ward, 1975; Snaith, 1981; Pope & Hudson, 1986; White & Cole, 1990).

The above observations invite the hypothesis that kleptomania and other impulse control disorders may share a common biological abnormality with the other forms of ASD. In short, the urge of the kleptomanic to steal, the bulimic to binge eat, the obsessive-compulsive to carry out senseless rituals, the pathological gambler to gamble, and the trichotillomanic to pull out hair might all involve abnormalities in central nervous system function similar to those hypothesized to occur in major mood disorder. Support for such a common biological abnormality comes not only from the phenomenological similarities of these disorders, but also from biochemical studies. A growing body of data from animal and human studies suggests that serotonergic neurotransmission may be important not only in the regulation of mood (Meltzer & Lowy, 1987) and appetite (Wurtman & Wurtman, 1979; Blundell, 1984; Leibowitz & Shor-Posner, 1986) but in the genesis of obsessive-compulsive disorder (Insel et al. 1985; Benkelfut et al. 1989), bulimia nervosa (Kaye et al. 1987), impulse control disorders other than kleptomania (i.e. intermittent explosive disorder and impulsive fire setting) (Virkkunen et al. 1989) and impulsive behaviour in general (Brown et al. 1979; Soubrie, 1986; Asberg et al. 1987; Roy & Linnoila, 1988; Coccaro *et al.* 1989).

Of course, conceptualizing kleptomania and

other impulse control disorders as forms of ASD does not necessarily challenge the diagnostic validity of the impulse control disorders. For instance, it does not follow that kleptomania and all of the associated forms of ASD will arise in any single individual. Certainly, some individuals develop depression without impulse control disorders and others develop impulse control disorders without depression, but this is not incompatible with the ASD concept, since no one individual will necessarily display all of the symptoms or features of any underlying disease. Further research will be required to elucidate the biological and environmental factors which may cause individuals with ASD to display one or another, or a combination, of the postulated ASD-related syndromes.

In conclusion, kleptomania is an inadequately studied disorder, probably afflicting many more individuals than previously thought - especially since subsyndromal variants may exist which do not meet all DSM-III-R criteria for the disorder. Specific aspects of kleptomania clearly warrant further research. In particular, operational diagnostic criteria should be developed to embrace other forms of abnormal stealing not included in the modern psychiatric nomenclature. These diagnostic criteria should then be applied to large groups of people to determine the prevalence of kleptomania and other forms of abnormal stealing in psychiatric, criminal, and general populations. Systematic studies of demographic features, course of illness and outcome, associated psychopathology and antisocial behaviour, family history, biological tests, and response to both psychosocial and pharmacological treatments then need to be conducted in individuals with this disorder.

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