



Claims of crime-related amnesia in forensic patients

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1. Introduction

It is not uncommon for perpetrators to claim amnesia for their crime (Kopelman, 1995). Although the precise prevalence of such claims among various categories of perpetrators is not known, the estimates that can be found in the literature are rather consistent. In an early study, Leitch (1948) noted that 16 out of 51 offenders (31%) convicted of murder or manslaughter claimed amnesia for their crime. Guttmacher (1955) found that about 30% of the convicted murderers in his sample claimed that they could not remember their crimes. Likewise, O'Connell (1960) reported a 40% incidence of amnesia in his sample of perpetrators of homicides. In a more recent study, Taylor and Kopelman (1984) interviewed 203 men who had committed both violent and nonviolent crimes. Of the 34 men who had committed murder or manslaughter, 26% reported amnesia for their crime. When the authors omitted these homicide cases, there were 120 perpetrators of violent crimes. Amnesia claims were raised by only 8% of them, whereas no amnesia claims were found in the perpetrators of nonviolent crimes. A similar pattern was reported by Gudjonsson, Petursson, Skulasson, and Sigurdardottir (1989) who interviewed 62 Icelandic criminals. Amnesia was claimed by 32% of the offenders and was most common in perpetrators of homicides (see also Lynch & Bradford, 1980).

As to the correlates of amnesia claims, O'Connell (1960) reported that 40% of the perpetrators who claimed amnesia had an average or higher than average IQ as compared with 83% in the nonamnestic group. Relatively low IQ levels in patients claiming amnesia were also reported by Cima, Merckelbach, Hollnack, and Knauer (in press). However, Taylor and Kopelman (1984) were not able to replicate the association between low IQ and amnesia claims. One interesting finding in their study was that the mean age of the amnestic offenders was significantly above that of the nonamnestic offenders.

In keeping with earlier work (Bradford & Smith, 1979; Gross & Kaltenbäck, 1974; Hopwood & Snell, 1933; Lennox, 1943; Rasch, 1966), Taylor and Kopelman (1984) found a heightened frequency

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of alcohol abuse in offenders claiming amnesia. Similarly, in the study of [Barbey \(1990\)](#), 52% of 98 offenders who claimed amnesia had a diagnosis of alcohol abuse. However, this author also pointed out that acute alcohol intoxication was only partially responsible for the claims of amnesia because alcohol dosages that had been consumed in these cases were rather low. Moreover, 16% of the offenders who did not claim amnesia were intoxicated at the time of the crime. Apart from low IQ and excessive alcohol use, depressed mood and hysterical traits have been found to be associated with claims of crime-related amnesia ([Hopwood & Snell, 1933](#); [Kopelman, 1987, 1995](#); [Parwatiker, Holcomb, & Menninger, 1985](#)).

Basically, the psychiatric literature offers three types of explanations for the phenomenon of crime-related amnesia ([Cima, Merckelbach, Nijman, Knauer, & Hollnack, 2002](#)). The first emphasizes the stressful nature of crimes, notably murder. Thus, [Hopwood and Snell \(1933, p. 32\)](#) argued that most crimes are “accompanied by strong emotional reactions,” and this would undermine memory for crimes. Following this line of argumentation, some recent studies assume that it is the offenders’ dissociative reactions during the crime that produce subsequent amnesia (e.g., [Porter, Birt, Yuille, & Herve, 2001](#); [Tanay, 1969](#)). Although this stress-dissociation account of crime-related amnesia sounds plausible, it is at odds with studies showing that survivors of WW II concentration camps rarely report amnesia for their horrifying experiences in these camps ([Kuch & Cox, 1992](#); [Merckelbach, Dekkers, Wessel, & Roefs, in press](#)). While one can argue that violence of a singular event in which one is a perpetrator may have different effects from long-term exposure to horrific events, even single emotional events are difficult to reconcile with the stress-dissociation account. More importantly, most eyewitnesses to extreme violence have good, rather than impaired, memory for the events (e.g., [Porter et al., 2001](#)).

A second type of explanation for crime-related amnesia is based on the observation that many offenders who claim such amnesia also say that they were intoxicated at the time that they committed the crime. This has inspired state-dependency accounts of crime-related amnesia (e.g., [Eich, Weingartner, Stillman, & Gillin, 1975](#); [Swihart, Yuille, & Porter, 1999](#)). These accounts assume that when crime memories are encoded during an exceptional state (extreme agitation and/or intoxication), subsequent retrieval of these memories will remain difficult or even impossible as long as the original state is not reproduced. Attempts to test this idea have yielded disappointing results. A case in point is the study by [Wolf \(1980\)](#), which showed that inducing a state of intoxication in murderers who claimed amnesia did not lead to a return or recovery of crime memories. [Kalant \(1996\)](#) drew attention to another shortcoming of state-dependency accounts when he argued that the pharmacological action of alcohol is typical, such that it progressively suppresses both memory processes and complex behaviour. Thus, it is highly unlikely that an alcohol-intoxicated person engages in complex criminal behaviour, but has no memory of this behaviour.

A third explanation assumes that most cases of crime-related amnesia are a form of malingering ([Cima et al., 2002](#); [Cima et al., in press](#); [Sadoff, 1974](#)). The idea here is that by feigning a memory deficit, offenders might minimize their responsibility for the crime they committed. Unlike stress-dissociation and state-dependency accounts, the malingering interpretation of crime-related amnesia has met with considerable scepticism. Thus, [Kopelman \(1995\)](#) pointed out that offenders who claim amnesia often themselves are the ones who informed the police about their crime. According to [Kopelman \(1995, p.435\)](#), “this makes an account of amnesia as simulation to avoid punishment less plausible.” A similar point has been made by [Porter et al. \(2001\)](#), who argued that offenders who claim amnesia may confess, but maintain their amnesia claims. On the other hand, [Cima et al. \(in press\)](#) found that convicted offenders who maintain their amnesia claims display heightened scores on instruments tapping the tendency to endorse bizarre, atypical, and rare

symptoms. This finding is in line with a malingering interpretation. Cima et al. argued that the convicted offenders' motive for maintaining their claim of amnesia may have little to do with attempts to minimize legal responsibility, but more so with attempts to come up with a plausible rationale for not being able to discuss crime details during, for example, therapeutic sessions.

With a few exceptions (e.g., Taylor & Kopelman, 1984), large-scale studies examining the characteristics of criminals who claim amnesia are scarce. With this in mind, the current study explored demographic and psychiatric characteristics of a large sample of forensic patients who had been convicted and claimed amnesia for their index crime. More specifically, we tested the following predictions. First, the stress-dissociation account would lead one to expect that claims of amnesia are typically found among those who committed violent and spontaneous (i.e., unmediated) crimes. Secondly, on the basis of the state-dependency view, one would anticipate that a diagnosis of psychosis and/or substance abuse is rather common among those who claim amnesia. Thus, to the extent that agitated states are typical for psychotic and/or intoxicated individuals, one would expect that such disorders are intimately related to amnesia claims. Third, a malingering interpretation of amnesia claims would predict that such claims are typical for recidivists who have learned that claiming amnesia provides them with an opportunity to avoid discussions about their criminal career. The present study sought to test these predictions in a relatively large sample of German and Dutch forensic patients.

2. Methods

2.1. Patients

The sample consisted of 308 forensic male inpatients. One-hundred eighty of them were from high secure settings at the Forensic Clinic Düren, Germany, while 128 were from high secure settings at Forensic Psychiatric Hospital the Kijvelanden, the Netherlands. Mean age was 34.3 (S.D.=9.6). All patients had been convicted for serious crimes. That is, 103 patients had committed murder, attempted murder or manslaughter (33%), while the remaining patients had committed sexual offences (86 patients or 28%), grievous bodily harm (44 patients or 14%), and armed robberies or arson (75 patients or 24%). A majority of the patients (186 patients; 60%) met *DSM-IV* criteria (American Psychiatric Association, 1994) for one or more personality disorders, notably, disorders of the Cluster B type. The most common Axis I diagnosis was substance abuse (156 patients; 51%). Also common were psychotic (111 patients; 36%) and sexual disorders (50 patients; 16%), while 25 patients had a diagnosis of mental retardation (8%).

2.2. Measures

Extensive hospital records of all 308 patients were available. Patients' records, including psychotherapists' notes and police interviews, were studied to establish whether the patients had, during any point in time, raised a claim of amnesia for the index crime. When a patient had claimed amnesia for his crime, his records were evaluated for the presence of inconsistencies (e.g., retracting a claim of amnesia and replacing it by a full description of the crime), crime details provided by the patient, claims of intoxication during the crime, and evidence of neurological impairments (e.g.,

epilepsy, brain injury, meningitis). Records were also evaluated to determine whether the index crime had been premeditated.

For 201 patients (65.3%), recent information about intelligence levels was available. In most cases, IQ had been determined with the WAIS-R test (Wechsler, 1991) during standard diagnostic evaluations. Patients claiming amnesia and those who did not were compared with regard to frequencies of *DSM-IV* Axis I and II diagnoses. To explore whether the claims of amnesia were more often raised in the context of violent crimes (e.g., Kopelman, 1995), we looked at the frequency of certain crime types in those who claimed amnesia and those who did not. We also looked at the frequencies of prior convictions in both groups. Finally, patients claiming amnesia and controls were compared with regard to the age at which they had committed their index crime.

3. Results

3.1. Frequency and type of amnesia

Seventy-two patients (23%) claimed either total or partial amnesia for their crimes. Of these 72 amnesic patients, 26 (36%) said to have complete memory loss for their crime, without having been under the influence of alcohol or drugs during the crime. Seventeen patients (24%) claimed to be unable to remember the crime, while file information suggested that they had been alcohol and/or drug intoxicated during the crime. Another 26 patients (36%) claimed to have forgotten the crucial parts of their crime (usually the most violent ones) or said that they could not recall certain incriminating details. The remaining 3 (4%) patients claiming amnesia suffered from serious neurological disorders that probably contributed to their memory loss (e.g., epilepsy and brain trauma).

The records of 15 of the 72 patients (21%) claiming amnesia provided strong evidence that the index crime had been premeditated (e.g., buying a knife at the evening before the murder took place). In the sample of amnesic patients ($n=72$), 24 (33%) had committed murder, 18 (25%) were sexual delinquents, 8 (11%) had committed grievous bodily harm, and 22 (31%) were convicted for arson and/or theft.

3.2. Amnesia-claiming patients versus controls

Table 1 provides the demographic background variables and information about the psychiatric diagnoses of patients claiming amnesia and patients who did not raise such claims (controls). As can be seen, patients who claimed crime-related amnesia were older than the controls were [$t(306)=2.61$, $P<.01$]. However, the two groups had similar intelligence levels. Amnesia-claiming patients had had significantly more prior convictions than the controls had [$t(306)=3.22$, $P<.01$]. On the other hand, it was not the case that homicide crimes were more prevalent among patients claiming amnesia than among the controls [$\chi^2(1)<1.0$, NS]. A closer look at the crimes with fatal consequences revealed that such crimes had comparable rates among the amnesia-claiming patients and the controls, with means being 28% and 25%, respectively [$\chi^2(1)<1.0$, NS]. Neither did amnesia claiming nor control patients differ with regard to their age at the time of the first offence for which they had been convicted.

As to the psychiatric diagnoses, the frequency of substance abuse was higher among amnesia-claiming participants than among the controls [$\chi^2(1)=11.39$, $P<.01$]. The two groups did not differ

Table 1

Mean age, intelligence, number of prior convictions, and frequency of homicide crimes, diagnoses of substance abuse, psychotic disorder, and personality disorder in patients claiming amnesia ($n=72$) and control patients ($n=236$)

	Amnesic patients	Control patients
Age*	36.9 (9.2)	33.5 (9.7)
Intelligence ^a	92.7 (16.9)	93.1 (17.1)
Number of prior convictions*	4.4 (6.1)	2.6 (3.4)
Homicide crime	24 (33.3%)	79 (33.5%)
Substance abuse*	49 (68.1%)	107 (45.3%)
Psychotic disorder	22 (30.6%)	89 (37.7%)
Personality disorder	45 (62.5%)	127 (53.8%)

^a The n s are 60 for amnesic group and 141 for control group.

* $P \leq .01$, two tailed.

with regard to frequency of psychotic [$\chi^2(1)=1.23$, $P=.27$] or personality [$\chi^2(1)=1.69$, $P=.19$] disorder.

4. Discussion

The main findings of this study can be summarized as follows. To begin with, in line with earlier findings (e.g., Annon, 1988; Kopelman, 1995), about a quarter of the perpetrators claimed amnesia for their index crime. Second, unlike the studies of O'Connell (1960) and Cima et al. (in press), we found no evidence to suggest that amnesia-claiming patients had lower intelligence levels than the control patients had. Third, in contrast to earlier research (Annon, 1988; Bradford & Smith, 1979; Kopelman, 1995; Taylor & Kopelman, 1984), we found no specific connection between claims of amnesia and homicide. Fourth, perpetrators who claimed amnesia had significantly more prior convictions than the controls had. As well, perpetrators claiming amnesia were significantly older than the controls, which is in line with the findings of Taylor and Kopelman (1984). Fifth, as was the case in the Hopwood and Snell (1933) study, only a minority (20%) of our psychotic patients claimed amnesia for their crime. Thus, we found no specific relationship between psychosis and claims of amnesia. Yet, patients claiming amnesia more often suffered from substance abuse disorder than the controls did.

The frequencies of homicide and crimes with fatal consequences was not greater among patients claiming amnesia than among the controls. This is difficult to reconcile with a stress-dissociation view of crime-related amnesia. By this view, one would predict that amnesia is especially likely to occur in patients who were involved in crimes accompanied by extreme stress levels (e.g., "red outs"; Swihart et al., 1999). Our data do not provide evidence for this prediction.

Another interpretation of crime-related amnesia is the state-dependency view. According to this view, the combination of extreme arousal and alcohol or drug intoxication during the crime produces state-dependent encoding and subsequent retrieval problems when the perpetrator finds himself in a different state (e.g., Porter et al., 2001; Swihart et al., 1999). The current data are consistent with a state-dependency account in as much as they show that substance abuse was more common among patients claiming amnesia than among the controls. However, a closer look at the files of substance-abuse-disordered patients who claimed amnesia made it clear that only a minority of them (17 out of 49) had, at the time of the index crime, sufficiently high alcohol and/or drug levels to produce amnesia. Thus, patients' references to alcohol and/

or drug intake at the time of the crime might serve as an excuse for their offence and as a way for making their amnesia claim credible (Cima et al., 2002). Another observation that seems to run counter to the state-dependency view is our finding that there was no specific association between psychosis and claims of amnesia. To the extent that psychotic episodes represent extreme states, a state-dependency approach would predict that psychotic offenders have great difficulty remembering their offences. Although there are some hints in the literature (e.g., Taylor & Kopelman, 1984) that there might exist a link between psychosis and amnesia, our study failed to obtain evidence for such a link.

The most pronounced difference between patients claiming amnesia and the controls was that the former were older and had more prior convictions. Thus, it may well be that offenders who are familiar with the penal system have had more opportunities experiencing the advantages of claiming (partial) amnesia for their crime. For example, claiming amnesia may serve as a successful strategy for avoiding painful discussions about crime details during therapy sessions. More generally, if crime-related amnesia is indeed part of a conscious strategy to minimize responsibility, recidivism rates might also be higher for criminals with such claims. Thus, the association between crime-related amnesia and prior convictions found in the current study suggests that it might be worthwhile for future studies to examine more systematically to what extent amnesia serves as a predictor of criminal recidivism.

In sum, then, the current study provides little or no support for the stress-dissociation account of crime-related amnesia. Its findings also suggest that the state-dependency view accounts for only a small minority of the cases. The fact that claims of amnesia are related to length of criminal career indicates that such claims are often the product of a learning process. We should emphasize, though, that our study relied on forensic patients. Therefore, the mechanisms behind amnesia claims might be completely different in other populations (e.g., nonpsychiatric offenders). Nevertheless, we feel that the relationship between criminal career and amnesia claims warrants further study.

5. Summary

Many authors assume that crime-related amnesia arises from the stressful nature of crimes and/or drug intoxication at the time crimes are committed. The current study examined prevalence and correlates of crime-related amnesia in a German ($n=180$) and a Dutch ($n=128$) sample of forensic inmates. More specifically, patients claiming amnesia and control patients were compared with regard to their intelligence, criminal backgrounds, and psychiatric diagnoses. In contrast to the popular stress-dissociation interpretation, stressful features of the crime were not found to be related to claims of amnesia. Neither alcohol nor drug intoxication, nor psychotic episodes could fully account for claims of memory loss. Interestingly, amnesia claims were especially prevalent among recidivists. This suggests that such claims are the product of a learning process. Thus, it may well be that those who are familiar with the penal system may have experienced the advantages of claiming amnesia.

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