Doing Time: A Qualitative Study of Long-Term Incarceration and the Impact of Mental Illness

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Abstract

Once convicted, the perpetrator of serious crime embarks upon a new journey: the challenge of adjusting to long-term imprisonment. On the basis of brief narrative responses collected during an epidemiological survey of the psychological health of prisoners in France, this study examines the impact of incarceration on psychological state in a group of 59 inmates serving long sentences, by analyzing brief narrative responses. Qualitative content analysis and computer-assisted linguistic analysis (using ALCESTE software) were performed on the textual data of open responses to three standardized questions. Using a combination of these two approaches, seven categories of the subjective experience of prisoners in the sample were identified. Further qualitative analyses were then performed to compare the responses of severely mentally ill (SMI) subjects and subjects with no psychiatric disorders. These analyses revealed contrasting attitudes towards incarceration. SMI subjects spoke in more hostile and persecutory terms about their experience in prison, attributing suffering to external circumstances, while subjects with no psychiatric disorder evoked themes regarding prison life, but with an introspective attitude. Prisoners’ views of incarceration and of the society from which they have been removed are a key component of their later readjustment to life in the community. The themes evoked by mentally ill individuals in our sample suggest that their reactions to the prison environment include factors specific to this population, which have relevance to future policy and practices.

Keywords: life sentence, mental illness, natural language processing, punishment, prison

1. Introduction & Background
Incarceration is the accepted means in Western society for punishing offenders who have committed serious crimes. Over the past 30 years, the prison population in the U.S. has grown by over 600%, and there are currently over two million individuals incarcerated in U.S. jails and prisons. Over five million U.S. residents (one in 37) have served time in prison. Although the U.S. incarceration rate is much higher than that in Europe [ref], rates in countries such as France are also elevated and increasing [ref]; include numbers... The experience of incarceration thus touches the lives of a substantial segment of the population in Western countries. If imprisonment were a disease entity, its prevalence would be of epidemic proportions. From the point of view of policy and penology, a punitive measure that affects such a large number of individuals can only be justified if its effects correspond to its stated aims.

The invention of prisons during the Enlightenment was viewed as a humane alternative to corporal punishment and death sentences: instead of pain inflicted upon the individual's body, punishment became internalized as pain wrought upon a person's “soul” or mind through penitence. In prison, the criminal was to be isolated from society in order to reflect upon his past acts under the watchful eyes of guards and in an environment of constraint that constantly reminded him of his wrongdoing. Although this form of punishment inherently causes distress due to the individual’s loss of liberty, it remains unclear today whether the mental suffering induced by prison environments has a meaningful relationship to the intended purpose of criminal sanctions -- namely: retribution, deterrence, incapacitation and rehabilitation.

Viewed from the public’s perspective, the very fact of putting a convicted criminal behind bars would appear to be sufficient confirmation that some of these goals have been attained. Arguably, imprisonment achieves the goal of incapacitation, protecting society from offenders. And
yet, the other stated purposes of punishment imply that sanctions should have profound subjective effects on individuals who are convicted. Two of the classic reasons for inflicting punishment on criminal offenders – retribution and deterrence – imply that punishment should result in mental suffering. Without this component of punishment, the legal system cannot ensure that the offender has paid a price proportional to his illegal acts (thus fulfilling retribution to society and the victim) nor can it assert that capture of one offender will have any preventive impact on the future behavior of the offender himself or others in society (thus fulfilling the goals of specific and general deterrence). At the same time, the infliction of suffering must not go too far: the state undermines the perceived fairness of the law if punishment is disproportionately harsh relative to the crime. Furthermore, protection against excessive suffering is acknowledged as a fundamental right. The Eighth Amendment of the U.S. Constitution guarantees that punishment shall not be “cruel and unusual.” Article Three of the Convention for the Protection of Human Rights and Fundamental Freedoms of the Council of Europe likewise states that “[n]o one shall be subjected to…inhuman or degrading treatment or punishment.” In order for punishment to be fair and effective, mental suffering must be sufficiently present, but not excessive.

Does prison serve its intended purpose? Are prisoners indifferent to the sentence that they serve? According to Foucault, the transition from corporal punishment to imprisonment marked a shift towards abstraction. Whereas the effects of corporal punishment and death can be verified through direct observation, the abstract, subjective impact of punishment in prison is most accurately discovered by asking those who undergo it to describe their experience. Understanding the subjective experience of incarceration and internal change during imprisonment may allow us to more precisely
assess the impact and limitations of the modern prison as a mechanism for achieving the intended goals of criminal justice.

1.1 The subjective impact of imprisonment and the problem of re-entry

Yet, we know little about the subjective experience of inmates. In general terms, incarceration is inherently viewed as an unpleasant, negative experience. Some prisoners, however, express the intention to benefit from imprisonment, using their time to plan a better future, while others, once released, return rapidly. For some, the structured living conditions in prison may be experienced as a form of material and affective care that they are otherwise unable to obtain in society. Release from prison may thus be marked by ambivalence.

Given the potential range of perceived meanings and the impact of these interpretations on later behaviour, more nuanced views about the subjective experience of imprisonment are needed. The phenomenon of “prisonization” – or adaptation to prison through identification with the role of being a criminal among criminals -- has been described and characterized by many authors. Although controversy exists regarding the time course of prisonization and its continuing impact after release, observers generally agree that the prison environment induces a highly challenging lifestyle that requires the individual to adapt to a culture that is unlike that of any other environment in the world outside. Understanding how the experience of prison alters the inmate’s view of himself is critical for the development of interventions to prepare the inmate for re-entry as well as in pre- and post-release programming that resonates with the person’s perceptions, interpretations and memories of his prison experience.
1.2 Mental illness behind bars

Knowledge about the ways in which individuals process the subjective experience and lasting impact of incarceration may be particularly important for improving the mental health care of patients in prison or those who have been in prison. In many Western countries, including France, an increase in the rate of mental illness in prisons has been observed over the past 15 years. This phenomenon, “criminalization of the mentally ill,” has been associated with a number of factors (e.g., the closure of public sector psychiatric beds, changes in sentencing practices, changes in legal statutes for the determination of criminal non-responsibility) but the cause of this increase is not well understood at this time.

Whatever the causes of this increase in the number of mentally ill inmates, issues regarding adequate access to mental health care in prisons and the effects of this form of punishment on mentally ill individuals have become priorities for public policy-makers as a result. Very little is known, however, about how the most severely mentally ill prisoners experience detention and whether the purposes of punishment are in fact attained by incarcerating this population. A number of states in the U.S have noted that mentally ill inmates are vulnerable to decompensation in solitary (disciplinary) confinement and have responded to this observation by requiring separate, specialized housing for prisoners diagnosed with a Severe Mental Illness (SMI) if their behavior is such that disciplinary isolation is needed. Beyond the specific issue of solitary confinement, however, mentally ill inmates may perceive and interpret their incarceration differently than non-mentally ill prisoners.

1.3 The present study
The present qualitative study takes advantage of an opportunity presented by a larger epidemiological survey of the mental health of prisoners in France, commissioned in 2001 by the Ministry of Health and the Ministry of Justice. The first phase of the survey began in 2003 and assessed the prevalence of mental disorders in the general population of jails and prisons in France [ref]. The second phase examined the evolution of the mental condition of new inmates incarcerated for the first time, through a sequence of interviews: (i) within two weeks of arrest, (ii) after one month of incarceration, and (iii) at nine months. The third and present phase of the study, conducted in 2005, focussed on inmates in long-term detention, assigned to prison sentences of greater than 10 years, in order to assess the impact of incarceration, using a retrospective design.

A qualitative methodology was chosen, involving short interviews with open-response questions. Qualitative methods are the preferred approach for obtaining in-depth information regarding the structure of subjective experience, which by its nature is difficult to measure using quantitative variables with predefined categories. Analysis of brief interviews with standardized open-response questions were a reasonable approach, given that there have been prior ethnographic studies of prison life. Although these prior studies, with the exception of Rhodes (2004), did not specifically address the mental health impact of imprisonment, their findings provided sufficient background information to allow succinct questions regarding the prisoner’s psychological state to be formulated in this study.

**Methods**

*Study overview*
This study analyzes data gathered during a large-scale clinical epidemiological survey of the psychological health of inmates in France (refs). As part of this larger study, a retrospective interview regarding the subjective impact of imprisonment was conducted with prisoners who had been incarcerated for 10 years or longer. These interviews were analyzed qualitatively, using two complementary methods, in order to identify the psychological effects of imprisonment on both mentally ill and non-mentally ill offenders, as described below.

**Sample**

Approval of the regional Comité de Protection des Personnes (CPP), the French Ministry of Health’s Institutional Review Board for the monitoring of research involving human subjects, was obtained prior to the beginning of the study. In France, inmates who are sentenced to prison terms of 10 years or longer are housed separately in one of six security institutions called “Maisons Centrales” (central facilities) or in specialized sectors of other facilities. In three of these facilities, lists were obtained of inmates who had been incarcerated for at least 10 continuous years since the time of arrest. All prisoners on these lists were given a letter of information for recruitment into the study, with instructions to respond by placing the response form in a designated location in the prison.

**Data Collection**

Written informed consent was obtained prior to the interview. Each prisoner was interviewed for approximately two hours by a team of two clinicians (a clinical psychologist and a psychiatrist), both of whom were present throughout the entire interview. Basic socio-demographic
information (marital status, education, employment and housing prior to arrest) was obtained, along with information about events that had occurred over the course of the subject’s incarceration, the quality of relationships with correctional personnel and other prisoners, and access to and use of medical and psychiatric care resources. A brief qualitative interview regarding the subjective experience of the prisoner during incarceration was conducted at the beginning of the interview. The psychiatrist presented three questions to the prisoner, and after each question was read, the prisoner was given 30 seconds to gather his thoughts before speaking freely for up to two minutes in reply. Standardized prompts were included, to reframe the question if the prisoner was silent or did not understand the initial phrasing (provided below in parentheses). The three questions are reported here in close literal translation in English, but were more colloquial in tone and vocabulary in French. The questions were:

1. In what psychological state have you felt yourself to be in lately? (How is your morale? How do you feel about your relationships with others?)

2. What differences have you noticed in your psychological state between the time of your incarceration and today? (Has your morale changed since the beginning of your incarceration?)

3. How do you think that prison has modified your psychological state? (Do you think that prison has changed your morale?)

Because prison regulations did not permit audio recording, the prisoner’s words were transcribed verbatim in handwritten form by the psychologist.

A diagnostic interview was then conducted, using the Mini-International Neuropsychiatric Interview, version 5.0 (MINI; ref), followed by a consensus diagnosis by the two investigators,
according to the procedure described in [ref]. The MINI is a brief diagnostic instrument compatible with the DSM-IV and the ICD-10 that screens for major Axis I psychiatric disorders, suicide risk and Anti-Social Personality Disorder. After administration of the MINI by the psychologist, the psychiatrist conducted an open interview of approximately 15 minutes, to follow up on and clarify answers that the subject gave to questions on the MINI. At the end of the interview, each interviewer coded the subject’s psychiatric diagnoses independently on the basis of all data obtained, and rated the subject on the Clinical Global Impressions (CGI) scale (ref). The two interviewers then established a consensus diagnosis and CGI rating after discussion of any discrepancies.

**Qualitative Analysis of Prisoner Statements**

*Individual qualitative reviews.* Thematic qualitative analysis of responses to the three open response questions was conducted, using a modified version of Framework (ref) as operationalized in (ref). In the first step, one of the researchers read the 59 texts, to obtain an initial overview of the data set. A brief synopsis of the main thematic axes was then written to summarize these initial findings. The data set was then read another time in greater detail, with keywords and exemplary phrases identified and listed. In a first step, parameters of grounded theory were applied [Glaser & Straussref], including the identification of basic content elements as being initially of equivalent value [Colaizzi](ref). The second step involved organizing the key words, exemplary phrases and themes into a preliminary model involving themes grouped under broad categories. A second analyst with extensive experience in qualitative research read the transcripts independently and identified major categories. A revised model was developed after discussion by these two investigators based on the convergence of the categories identified and discussion of divergences in interpretation.
Computer-assisted Linguistic Analysis. The combined text of all 59 subject responses was also examined using ALCESTE software (Analyse des Lexèmes Coocurrents dans un Ensemble de Segments de Textes, or Analysis of Co-occurring Lexemes in a Set of Text Segments). This software uses built-in dictionaries to perform a “lemmisation” (reduction of vocabulary) on the textual data set; it provides an overview of the patterns found in the text according to how often roots and word forms appear together (eliminating from the analysis common modifiers such as articles and prepositions). This establishes a vocabulary of “reduced forms” specific to the text at hand.

The ALCESTE program uses an algorithm to construct solutions that identify distinct classes of words that occur together consistently. According to the parameters set in the software and the level of specificity that makes sense on a theoretical basis, several possible solutions can be generated from the same body of text. Due to overlapping content in the three questions, the text of each subject across all three questions was analyzed as a single unit for the purposes of portraying associations among words in this study.

ALCESTE divides the body of text into short segments called Elementary Contextual Units (ECU), which serve as the basic unit of statistical analysis. The ECU’s are generally of identical length, and the software concatenates successive ECUs into larger segments called Contextual Units (CU), defined as segments varying in length according to a minimum number ($\lambda$) of different words to be analysed. The value of $\lambda$, calculated automatically by the software with reference to the total size of the text, determines whether a truncated segment constitutes a new CU or will be incorporated into the preceding CU. The computer program performs an iterative hierarchical classification on the totality of the CUs, in a “top-down” or “descending” sequence, moving from
larger groupings of multiple CUs to smaller ones. A correspondence table is established of CUs and
the presence or absence of each word in the reduced vocabulary within the CU.

At each step, the software partitions the array into two zones of word presences that are as
mutually exclusive as possible, using a chi-square statistic to maximize the difference between the
two groups of CU. This procedure leads finally to a division of the text into several classes of
associated word forms. After the classes are established, the software output lists the word forms
significant for each class, using a chi-square statistic which reflects the extent to which the particular
word or set of words is representative of the given class. The default setting in ALCESTE is useful in
class discovery, and is not hypothesis-driven. It provides a solution with the most stable, robust
findings of word associations, which may exclude a large percentage of the text. By programming
additional parameters, the operator then chooses the optimal solution generated based on the
coherence of the categories identified and also the amount of coverage that the solution provides for
the text of interest (i.e., the proportion of the words in the body of the text that are successfully
included in one of the identified classes of the solution).

In this study, the chosen ALCESTE solution was compared to the content-based categories
derived from the qualitative review of the text. The computer-generated solution was used as a guide
for further refining the qualitatively generated categories. The word associations identified using this
computerized method presented alternative themes and differentiations with the text, which were
then explored through additional qualitative reading of the text.

Comparison of Severely Mentally Ill and Non-Ill Subsets
One of the aims of the study was to explore potential differences in the prison experiences of individuals with and without a mental disorder. Subgroups of mentally disordered and non-mentally disordered prisoners in the sample were identified. The responses in each group were then compared using both qualitative reading and a feature of the ALCESTE program that identifies word use specific to predefined sets of cases.

The subset of Severely Mentally Ill (SMI) subjects was identified according to the following criteria. We defined SMI as: lifetime or current diagnoses of (i) Schizophrenia, (ii) Schizoaffective Disorder, (iii) Non-Schizophrenic Psychotic Disorder (Delusional Disorder, Psychotic Disorder Not Otherwise Specified), (iv) Bipolar Disorder with psychotic features, (v) Major Depressive Disorder with psychotic features. Subjects with the above diagnoses were identified using the consensus diagnosis assigned by the two interviewers. We also identified a subset of subjects with no psychiatric disorder. Inclusion in this group required: (i) the absence of a psychotic disorder, a mood disorder, or an anxiety disorder in the consensus diagnosis or the MINI; and (ii) Clinical Global Impression rating of “normal” or “borderline mentally ill” according to the consensus of the two interviewers.

In addition to the development of classes as described above, ALCESTE has other functionalities that were useful for comparing the text of mentally ill and non-mentally ill research participants. The software allows for the coding of categorical variables, testing whether this variable rises to a statistically significant association with each of the identified word classes. In a second step, it then identifies the word forms that are the most characteristic of a particular variable (in this case, the presence or absence of mental illness). Given the small number of subjects in each subgroup, this
approach was used to generate information about the distinct word associations that could inform the qualitative analysis of the text for each subgroup.

**Results**

**Sample Characteristics**

Of the 135 subjects who were approached regarding participation in the study, 67 agreed to participate (50%). This response rate was comparable to that in other phases of the study, where no systematic basis for refusal was identified when interviewers were asked to comment. Eight of those agreeing to participate could not be interviewed for logistical reasons, such as other appointments, work schedule or disciplinary confinement. All subjects were male, since these were all prisons for men. On average, subjects had served 13.2 continuous years of jail and prison time (SD = 4) and had lived in 5 different correctional facilities over the course of the current incarceration prior to arriving at the study site. 49.2% of the inmates enrolled in the study were serving life sentences.

Table 1. Characteristics of the study sample (N=59)

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Mean</td>
<td>47 years</td>
</tr>
<tr>
<td>(SD)</td>
<td>9</td>
</tr>
<tr>
<td>Current incarceration for violent crime</td>
<td>96.6 %</td>
</tr>
<tr>
<td>Currently in contact with spouse</td>
<td>44.2 %</td>
</tr>
<tr>
<td>No current contact with family</td>
<td>20.7 %</td>
</tr>
<tr>
<td>At least one current psychiatric diagnosis</td>
<td>62.8 %</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Percentage</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Had a prior psychiatric hospitalization</td>
<td>8.9 %</td>
</tr>
<tr>
<td>Current mood disorder</td>
<td>23.7 %</td>
</tr>
<tr>
<td>Current anxiety disorder</td>
<td>42.4 %</td>
</tr>
<tr>
<td>Current psychotic disorder</td>
<td>8.5 %</td>
</tr>
<tr>
<td>Suicide risk rated as “high” (MINI)</td>
<td>22.0 %</td>
</tr>
<tr>
<td>Antisocial personality (MINI)</td>
<td>18.0 %</td>
</tr>
</tbody>
</table>

Table 1 presents the general characteristics of the sample. Percentages qualifying for each diagnosis represent diagnoses established by the consensus of the two clinicians. The prevalences regarding suicide risk level and the diagnosis of Anti-Social Personality Disorder were determined by ratings on the MINI.

**Qualitative Analysis**

In an initial review of the data, three topics were identified by the primary reader: (i) imagined versions of life outside the prison; (ii) the meaning of life and death; (iii) the purposes of punishment. A second, more detailed reading was conducted approximately eight weeks later, and basic content elements (Colaizzi? Glaser & Strauss? ) were recorded in written form on the transcription of each subject’s responses immediately after reading. After annotation of all 59 subject responses, these elements were reviewed and classified into thematic groups and broad categories.
Theoretical saturation, i.e., the point at which review of further data does not generate new categories (citation), was attained at approximately two thirds of the subjects.

Categories were defined as heterogeneous, and distinct, so that two categories could not be combined on the basis of conceptual similarity. During the construction of thematic groupings, attention was given to opposite meanings, and passages indicating contrasting (opposite) attitudes or feelings toward a topic were considered similar for their thematic consistency. For instance, acceptance of imprisonment was combined with rebellion or an attitude of rejection towards confinement, as belonging to the same theme. Independent examination of the data by a reader with extensive experience in qualitative research and content analysis revealed four categories which matched four of the six categories generated by the primary reader. The six categories initially identified are presented below.

**Computer-assisted linguistic analysis**

Following the construction of qualitatively-derived categories, computer-assisted linguistic analysis by ALCESTE was then performed. These analyses produced tenable solutions with relevant themes in addition to those derived from the qualitative analyses. These solutions included the categories that were analogous to the six seen in the qualitative review. However, they also revealed linkages between categories that were not immediately apparent to the qualitative readers, and yet were convincing in interpretation of the content of the interviews.

The additional category (speech) identified using this method was overlooked in the qualitative analyses, but was readily identified as significant in the text. Computerized analysis identified some important terms that had not been themes in the qualitative reading: words about
words (speaking, saying) and 'thing,' ['truc'] a particularly vague demonstrative, deitic word. Using this result as a guide and re-reading the data, themes regarding speech and the act of speaking emerged strongly. The initial category structure was retained with one added (7th), while the linkages revealed by ALCESTE analysis are included and elaborated upon within each category.