Prison studies of solitary confinement:
A bibliography of research on psychological effects of social isolation, pre-trial isolation and supermax conditions

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November 2012

This is a bibliography of the psychological effects of solitary confinement, limited to studies based on samples of prison populations. Case studies, animal studies, autobiographies, and studies on volunteers are not included. After an extensive search of a range of research literature databases, 39 articles were found. The following are the results of 20 of these studies.

Questionnaire studies

Andersen et al. (2000) conducted a longitudinal study on Danish remand prisoner in solitary confinement (n = 133) and non-solitary confinement (n = 95). The method of assessment included questionnaires and clinical interviews. Results showed that incidence of psychiatric disorders was significantly higher in prisoners in solitary confinement. The most common disorder was adjustment disorder, followed by depression.

O'Keefe, Klebe, Stucker, Sturm, and Leggett (2010) studied prisoners in solitary confinement (n = 127) compared to prisoners in the general prison population (n = 76) and prisoners sent to a psychiatric care facility (n = 67). The method of assessment included questionnaires and clinical interviews. Results showed that mentally ill prisoners in solitary confinement improved slightly over time, while prisoners without mental illness did not change.

Zinger, Wichmann, and Andrews (2001) conducted a longitudinal study of prisoners in administrative segregation (n = 83) and prisoners from the general prison population (n = 53). The method of assessment included questionnaires and clinical interviews. Results showed no evidence for deterioration of the psychological health of segregated prisoners.

Gamman (1995) studied Norwegian remand prisoners in solitary confinement (n = 27) and non-solitary confinement (n = 27). Results showed that prisoners in solitary confinement experienced more sleeps problems, concentration problems, problems with their circadian rhythm, anxiety symptoms, depressive symptoms, and pains. The study also found that treatment of depressive symptoms was ineffective during isolation.

Miller (1994) studied prisoners in administrative detention (n = 10), disciplinary segregation (n = 10), and the general prison population (n = 10). Results showed a positive correlation between level of restriction and level of psychological distress.

Miller and Young (1997), in a follow-up study of Miller (1994), studied prisoners in administrative detention (n = 10), disciplinary segregation (n = 10), and the general prison population (n = 10). Results showed a positive correlation between level of restriction and level of psychological distress, which replicated the previous study.

Suedfeld, Ramirez, Deaton, and Baker-Brown (1982) studied prisoners (n = 78) who had experienced solitary confinement and prisoners who had not experienced solitary confinement. The method of assessment included questionnaires and clinical interviews. Results showed no

significant difference between the two groups.

Clinical interviews

Lovell (2008) studied prisoners in solitary confinement (n = 87). The method of assessment was clinical interviews and review of medical records. Results showed that 45% of prisoners in solitary confinement suffered from serious mental illness, marked psychological symptoms, psychological breakdowns, or brain damage.

Andersen, Sestoft, Lillebæk, Gabrielsen, and Hemmingsen (2003) conducted a longitudinal study on remand prisoners in solitary confinement (n = 133) and non-solitary confinement (n = 95). Results showed that the non-solitary confinement group had decreasing scores of psychopathology and improved functioning over time, while the solitary confinement group remained unchanged. After transferral from solitary confinement to non-solitary confinement, scores on psychopathology were reduced. According to the authors, this indicates that the conditions in solitary confinement are distressing, and that the psychopathological symptoms are, at least partially, temporary.

Cloyes, Lovell, Allen, & Rhodes (2006) studied prisoners in solitary confinement (n = 87). Results showed that 22% of inmates in solitary confinement had a marked or severe degree of distress. This does not necessarily indicate serious mental illness, but rather what the authors describe as psychosocial impairment.

Hodgins and Côté (1991) studied prisoners in two types of solitary confinement units (n_1 = 41, n_2 = 32). Results show that severe mental disorders are more prevalent in solitary confinement prisoners. However, most of the mentally ill prisoners suffered from mental illness before they were sentenced to the penitentiary.

Coid et al. (2003a) studied prisoners from England and Wales in two stages (n_1 = 3,141, n_2 = 496). Results showed that prisoners with mental illness did not have a higher likelihood of being sent to solitary confinement than other prisoners.

Medical and prison records

O'Keefe (2007) studied prisoners with mental illness in administrative segregation (n = 443), prisoners with mental illness in the general prison population (n = 3,802), prisoners without mental illness in administrative segregation (n = 766), and prisoners without mental illness in the general prison population (n = 12,382). Results show that mental illness is both more prevalent and more severe in solitary confinement.

Sestoft (1998) studied Danish prisoners in solitary confinement (n = 152) and non-solitary confinement (n = 193). Results showed that the incidence of psychiatric problems is higher in solitary confinement. The risk of getting psychiatric problems also increased with time spent in

solitary confinement.

Lanes (2009) studied prisoners categorized with self-injurious behavior (n = 132) compared to prisoners without self-injurious behavior (n = 132). Results showed that prisoners with self-injurious behavior, and that were being treated for mental disorder, had drastically reduced time between episodes of self-harm after being placed in solitary confinement.

Lovell, Johnson, and Cain (2007) studied prisoners (n = 200) in supermax prisons compared to a control group (n = 6,453) in Washington State. Results showed a significantly higher recidivism rate in prisoners released directly from supermax, compared to other prisoners. No significant relationship was found between time spent in supermax and recidivism.

Smith (2008) conducted an archival study on prisoners from a Pennsylvania-model prison and an Auburn-model prison in the period of 1878 – 1915. Results showed that one third of the prisoners were negatively affected by solitary confinement. Of mental health problems, what was described as "insanity" was the most common. The most common physical symptoms were lethargy and dyspeptic problems.

Mears and Bales (2009) studied prisoners from Florida in solitary confinement (n = 1,241) and matched prisoners from the general population (n = 1,241). Results showed that recidivism associated with solitary confinement prisoners is more often related to violent crimes. No relationship was found between time spent in solitary confinement and recidivism, as well as between direct release from solitary confinement and recidivism.

Psychophysiological studies

Ecclestone, Gendreau, and Knox (1974) studied prisoners in solitary confinement (n = 8) and prisoners from the general prison population (n = 8). The method of assessment was measurement of adrenocortical activity. Results showed that there was no significant difference in stress levels between the two groups.

Gendreau, Freedman, Wilde, and Scott (1972) studied prisoners in solitary confinement (n = 10) and prisoners from the general prison population (n = 10). The method of assessment was EEG measurement. Results showed that the prisoners in solitary confinement had reduced EEG frequencies, while the other group's EEG frequencies remained stable.

Conclusion

Thus, of the 20 studies summarized here, 15 studies found solitary confinement to be detrimental, four studies had neutral results, and one study found it to be beneficial.

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