

Solitary Confinement Experiment

An experiment was performed to evaluate the effects of sensory deprivation on the arousal level of prisoners. To measure arousal level an electroencephalogram (EEG) recorded the frequency of brain waves. Different brain wave frequencies are associated with different behaviors. Frequencies from 12 Hz to 36 Hz are associated with alertness; from 8 Hz to 12 Hz are associated with relaxed inactivity; below 8 Hz are associated with lack of focus to lethargy and are considered abnormal in someone who is awake. Twenty prisoners at a maximum-security penitentiary volunteered to participate. Ten prisoners were randomly assigned to solitary confinement for a week while the other ten served as controls (e.g. no solitary confinement). Each prisoner had an EEG three times, once each on days 1, 4, and 7 of the experiment.

Response: Frequency of brain waves

Conditions:

Factor 1: Solitary Confinement – Yes/No (Whole plot/Between subjects)

Factor 2: Day EEG taken – 1, 4, 7 (Sub plot/Within subjects)

Experimental material: 20 prisoners who volunteered for the study.

Data:

Solitary Confinement	Prisoner	Day 1	Day 4	Day 7
Yes	1	14	7	6
Yes	2	24	16	14
Yes	3	21	10	7
Yes	4	20	14	13
Yes	5	15	5	2
Yes	6	17	6	3
Yes	7	16	11	9
Yes	8	10	8	5
Yes	9	6	3	0
Yes	10	32	20	19
No	11	20	20	17
No	12	16	15	17
No	13	15	17	14
No	14	20	17	19
No	15	14	16	15
No	16	13	13	13
No	17	4	6	6
No	18	22	22	21
No	19	21	21	22
No	20	13	12	14

