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DOES THE COMMUNICATION BEYOND FIVE SENSORY MODALITIES EXIST IN SD RATS?

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Objective: To demonstrate whether the communication between two SD rats base on the similar genetic basis or the same living environment, who separated (including visual, auditory, tactile, olfactory and tasting inputs)from each other, occurs.
Methods: One SD rat (RECEIVER) was examined by EEG spectral analysis and ECG analysis under anesthesia while the other SD rat (SENDER) received optimal stimuli or malignant stimuli. The course was conducted in the shielded and the unshielded. Compare the EEG and ECG of RECEIVER between the stimulation state and resting state of SENDER.
Results: This study show no significant difference in EEG (index: percentile weight and average weight of EEG on frontal lobe, temporal lobe, hippocampus of each frequency band) and ECG (index: R、PR segment、ST segment、QRS segment、QT segment) of RECEIVER during the time that the SENDER suffered from malignant stimulation、experienced optimal stimulation and of resting state.
Conclusion: The communication of SD rats, not through common five sense organ may not exist, even though the same genetic basis or the common living surrounding.The optimal stimuli and the malignant stimuli of SENDER cannot influence the EEG of Frontal lobe, temporal lobe, hippocampus and ECG on RECEIVER. There is no sufficient evidence for the existence of this communication of animal.

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