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## **Bullying at Workplace and Brain-Imaging Correlates**

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The relationship between psychosocial stress at work and mental health outcome is well known. Brain-imaging studies hypothesize morphological brain modifications connected to work-related stress. To our knowledge this is the first study describing the link between work

Characteristics and brain imaging in a sample of work-related psychiatric patients assessed according to standardized clinical and diagnostic criteria. The aims of the study are: (1) to evaluate hippocampal and whole brain volumes in work-related psychiatric disturbances; (2) to verify the relationship between brain changes and the anxious and/or depressive symptoms; (3) to observe the relationship between the brain changes and the degree of the bullying at workplace. The hippocampus and whole brain volumes of 23 patients with work-related adjustment-disorders were compared with 15 controls by means of MRI. MR images highlight a smaller hippocampal volume in patients compared with controls. Significant reduction in the patients' gray matter was found in three brain areas: right inferior temporal gyrus, left cuneus, left inferior occipital gyrus. The reduction of the hippocampi volumes was related to work distress and, above all, to bullying at workplace. The results confirm that the morphological brain abnormalities could be involved in work-related psychiatric disturbances.