

To cite this article: J. Egeland, A. Lund, N. I. Landrø, B. R. Rund, K. Sundet, A. Asbjørnsen, N. Mjelle, A. Roness, K. I. Stordal (2005)

Cortisol level predicts executive and memory function in depression, symptom level predicts psychomotor speed

Acta Psychiatrica Scandinavica 112 (6), 434–441.

doi:10.1111/j.1600-0447.2005.00599.x

Cortisol level predicts executive and memory function in depression, symptom level predicts psychomotor speed

- *J. Egeland*¹,
- *A. Lund*²,
- *N. I. Landrø*³,
- *B. R. Rund*³,
- *K. Sundet*³,
- *A. Asbjørnsen*⁴,
- *N. Mjelle*⁵,
- *A. Roness*²,
- *K. I. Stordal*²

- ¹Vestfold Mental Health Care Trust, Tønsberg, ²Department of Psychiatry, Haukeland University Hospital, Bergen, ³Department of Psychology, University of Oslo, Oslo, ⁴Department of Psychosocial Sciences, University of Bergen, Bergen and ⁵Norway

Jens Egeland, Department of Research, Vestfold Mental Health Care Trust, PO Box 2267, 3103 Tønsberg, Norway.

E-mail: jens.egeland@piv.no

Abstract

Egeland J, Lund A, Landrø NI, Rund BR, Sundet K, Asbjørnsen A, Mjelle N, Roness A, Stordal KI. Cortisol level predicts executive and memory function in depression, symptom level predicts psychomotor speed. Acta Psychiatr Scand 2005; 1–9. © 2005 Blackwell Munksgaard.

Objective: On a group level depression is related to hypercortisolism and to psychomotor retardation, executive dysfunction and memory impairment. However, intra-group heterogeneity is substantial. Why some are impaired while others remain in the normal range, is not clear. The present study aims at discerning the relative contribution of present symptom severity and hypercortisolism to impairment in the three domains of cognition.

Method: Morning saliva cortisol was measured in 26 subjects with recurrent major depression prior to a neuropsychological examination with tests known to be sensitive to cognitive impairment in depression.

Results: Cortisol level correlated with executive dysfunction and post-encoding memory deficits, but not with processing speed. Depression level correlated with processing speed. These patterns remained significant after controlling for confounders through partial correlations.

Conclusion: The association between cortisol and cognition is not an artifact of psychiatric symptom load. High level of saliva cortisol is associated with aspects of cognition that can be dissociated from psychomotor retardation, which is dependent on symptom load.

