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## Neurocognitive Endophenotypes in First Degree Relatives of Bipolar Affective Disorder: an Indian Experience

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**Background-** The term endophenotype was first used by Gottesman to describe a trait that may be intermediate on the chain of causality from genes to diseases. An endophenotype may be neuropathological, neurocognitive, emotional, neuro-physiological or neurobiological in nature. There is dearth of studies about the use of neurocognitive dysfunction as endophenotype marker of BPAD, particularly from developing countries.

**Aim and Hypothesis-** We aimed to evaluate neurocognitive dysfunctions as endophenotype markers of bipolar affective disorder (BPAD) in first degree relative of BPAD patients. We hypothesized that first degree relative of BPAD patients differ significantly in regard to neurocognitive dysfunction from matched controls.

**Methods-** A cross sectional study was carried out. Sample was drawn from first degree relatives (FDR) of patients of BPAD and controls. After assessment of neurocognitive function first degree relatives of BPAD were compared with controls on measures of attention, verbal working memory, auditory verbal memory, Visuo spatial working memory, visual attention and executive functions.

**Results-** Results indicated that, first degree relatives of BPAD scored poorly on measures of neurocognition than controls. On conducting comparison over composite neurocognitive score we found that cognitive index in combination better discriminate the first degree relatives of BPAD from controls.

**Conclusion-** Neurocognitive dysfunction on measures of attention, verbal episodic memory, auditory verbal working memory, visuospatial working memory and executive functions significantly differentiated first degree relatives of BPAD patients from controls.