

Neuropsychology, Delusions and Modularity: The Curious Problem of Belief

Vaughan Bell, Hadyn Ellis, Peter Halligan
School of Psychology, Cardiff University

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Abstract

The study of delusions caused either by mental illness, brain injury or other physical cause is being tackled by researchers wishing to understand the processes that cause and maintain both pathological and normal beliefs. The recently developed field of cognitive neuropsychiatry aims, as David and Halligan (1996) wrote, to "take a symptom (the disembodied critical voice; the disjointed utterances; the lack of feeling for others; etc) and treat it as if were a neuropsychological abnormality". Fodor (1983) has argued that belief is a central process that does not reside in the brain as a modular, encapsulated system, meaning many of the most useful conceptual tools used in neuropsychology (such as looking for double dissociations between patients' task performance after brain injury) cannot be easily applied. Nevertheless, a similar hurdle has been tackled once before, in the study of the frontal-executive system, which was considered to be similarly non-modular. We can draw useful parallels from this research to provide a conceptual framework to approach the neuropsychology of delusions and normal belief formation. Applying approaches such as using heterogeneous patient samples for group studies and multi-stage experimental paradigms to investigate behavioural sequences will be discussed in relation to their usefulness in understanding the neuropsychology of belief.

References

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