

Europe's Journal of Psychology, 7(1), pp. 198-200

www.ejop.org

Brain, Mind and Behaviour:
A New Perspective on Human Nature

2nd edition

Authored by David L. Robinson

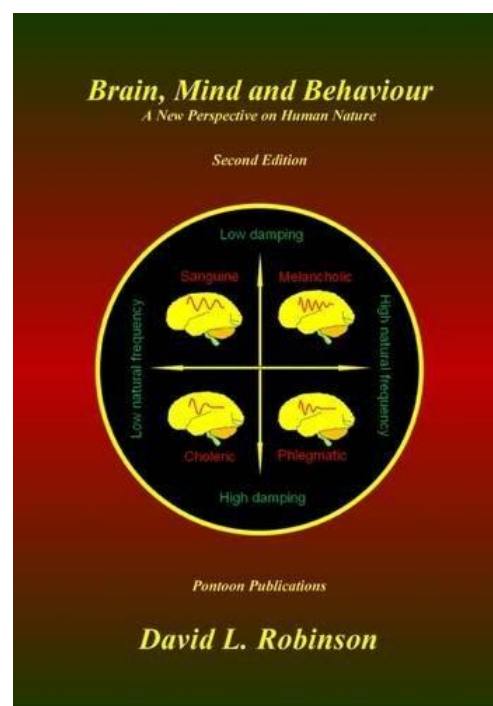
Pontoon Publications, 2009

Reviewed by Daljinder Virk

EJOP Associate Editor

Crescent Road, Alverstoke, GOSPORT, Hants PO12 2DL

dallyvirk@googlemail.com



Brain, Mind and Behaviour describes new discoveries concerning the relationship between brain-function and individual differences in human personality and intelligence. These new findings along with related theoretical developments provide new insights concerning the greatest mystery of all: human nature and the human mind.

The book will be of great interest to those who wish to know more about human nature, especially psychologists and those concerned with the psychological significance of neuroscience. It is an essential reading for undergraduate and postgraduate psychology students with a main interest in personality and individual differences and for those psychologists who are professionally concerned with mental health, education, human resource management and areas where knowledge of personality and individual differences is of primary and fundamental importance.

Brain, Mind and Behaviour: A New Perspective on Human Nature introduces the reader in chapter one to the fundamentals of what this book aims to convey and sets the scene for the new discoveries which have been made based on existing classic theories in experimental psychology.

Any theory which omits reference to the mind is clearly inadequate when considering the human brain or human behaviour. However, it must also be acknowledged that the study of mind does involve some special difficulties precisely because subjective phenomena cannot be ignored. These difficulties are greatly exacerbated since those who study brain and behaviour are inevitably influenced and constrained by concepts that have been adopted in the domain of the more elementary but better established physical sciences.

Stemming back to experimental psychology roots, it touches upon the issue of how science should accumulate knowledge through the application of objective procedures to ensure that one investigator can always replicate the work of another, and hopefully obtain similar results. However conceptually tied to this is the emphasis on the use of objective procedures which is only linked to material objects and is distinct from mental concepts, ideas or beliefs; and that this is the only objective which is real and one which exists – and that true knowledge is something distinct from the sensations and emotions that people actually experience. The chapter goes on to explore Locke's claims on the distinction between subjectivity and objectivity.

For the first time, it has been possible to map out in a clear and unambiguous manner the neurological determinants of the major dimensions of personality and to show, after more than two millennia, the validity of the ancient fourfold classification of temperaments. There is support for a definition of intelligence in terms of 'the availability of information' and it has been possible to specify in precise terms just how the more fundamental neurological differences can influence different neurological processes mediating the acquisition, retention and utilization of information. It has also been possible to demonstrate how intelligence differences relate to personality or temperament differences and in this way to achieve the first integrated, detailed and comprehensive explanation of the relations between brain, mind and behaviour.

To provide the reader with an adequate historical context for the new discoveries discussed in this book, and to show how these new discoveries refine and extend the foundation concepts developed by Pavlov and Eysenck, Chapter two gives consideration to Pavlov's study of brain-behaviour relationships, and to his ideas concerning the causation of temperament differences.

Chapter three reintroduces Pavlov's conflicting findings concerning the 'balance of excitation and inhibition' and how they are reconciled and partly explained in terms

of cerebral and brainstem interaction. Several unresolved questions are identified and additional questions arise in the next chapter.

Chapter four, provides the reader with new insights from the comparison of the theory of brain-function, that can best account for Pavlov's findings concerning temperament, with Eysenck's more recent theory of the manner in which individual differences in cortical arousal determine personality differences.

In Chapter five the theoretical basis for a new approach to EEG analysis is described. The information provided by this method reveals how functional properties of the brain relate to temperament, personality and intelligence. These relationships are further explored in chapters six, seven, eight and nine; here ideas are presented and the resolution of fundamental theoretical issues leads to the formulation of a new theory of brain, mind and behaviour relationships. The first focus is on explaining Pavlov's findings and then the author goes on to develop and greatly extend the theories of Pavlov, Eysenck, Spearman and Cattell.

In Chapter ten the new theory is further demonstrated by providing the reader with alternative explanations which have been derived from psychological phenomena that most interested Freud. Although Freud's theory has been heavily criticised and although most of the criticism is valid according to the author, however no satisfactory alternative account has yet been offered to explain the observations on which Freud's theory is based. However in chapter ten such an account is offered with reference to Jung, Maslow and Roger's ideas.

The final chapter deals with the influence of genetic endowment on personality, temperament and intelligence and illustrates how the new theory relates to and explains the results obtained in twin studies. Chapter eleven is mainly concerned with what the new theory and related information tell us about the essential nature of human beings.

Brain, Mind and Behaviour: A New Perspective on Human Nature is an informative and thoroughly researched book which the author suggests is useful for those who maybe practice psychology both in an occupational and an academic setting. I believe that this is a book for anyone who is interested in the fundamentals of brain, mind and behaviour and especially in how newer discoveries have led to either accepting or rejecting previous classic work in experimental psychology. I would recommend this book to third year undergraduate students who are interested in this area and wish to go further afield.