

ROUTLEDGE FOCUS

ARE MENTAL DISORDERS  
BRAIN DISORDERS?

Anneli Jefferson

ROUTLEDGE  
Focus

The logo for Routledge Focus, featuring a stylized white profile of a human head facing right, with the word 'ROUTLEDGE' written vertically to its left and the word 'Focus' written horizontally below it.

# Are Mental Disorders Brain Disorders?

The question of whether mental disorders are disorders of the brain has led to a long-running and controversial dispute within psychiatry, psychology and philosophy of mind and psychology. While recent work in neuroscience frequently tries to identify underlying brain dysfunction in mental disorders, detractors argue that labelling mental disorders as brain disorders is reductive and can result in harmful social effects.

This book brings a much-needed philosophical perspective to bear on this important question. Anneli Jefferson argues that while there is widespread agreement on paradigmatic cases of brain disorder such as brain cancer, Parkinson's or Alzheimer's dementia, there is far less clarity on what the general, defining characteristics of brain disorders are. She identifies influential notions of brain disorder and shows why these are problematic. On her own, alternative, account, what counts as dysfunctional at the level of the brain frequently depends on what counts as dysfunctional at the psychological level. On this notion of brain disorder, she argues, many of the consequences people often associate with the brain disorder label do not follow. She also explores the important practical question of how to deal with the fact that many people do draw unlicensed inferences about treatment, personal responsibility or etiology from the information that a condition is a brain disorder or involves brain dysfunction.

**Anneli Jefferson** is Lecturer in Philosophy, Cardiff University, UK. Her main research areas are moral philosophy and philosophy of psychology and psychiatry. She is especially interested in the intersection of these areas, for example in questions relating to moral psychology or the relationship between mental illness and moral responsibility.

## **Routledge Focus on Philosophy**

*Routledge Focus on Philosophy* is an exciting and innovative new series, capturing and disseminating some of the best and most exciting new research in philosophy in short book form. Peer reviewed and at a maximum of fifty thousand words shorter than the typical research monograph, *Routledge Focus on Philosophy* titles are available in both ebook and print on demand format. Tackling big topics in a digestible format the series opens up important philosophical research for a wider audience, and as such is invaluable reading for the scholar, researcher and student seeking to keep their finger on the pulse of the discipline. The series also reflects the growing interdisciplinarity within philosophy and will be of interest to those in related disciplines across the humanities and social sciences.

### **Newton's Third Rule and the Experimental Argument for Universal Gravity**

*Mary Domski*

### **The Philosophy and Psychology of Commitment**

*John Michael*

### **The Ethics of Undercover Policing**

*Christopher Nathan*

### **Are Mental Disorders Brain Disorders?**

*Anneli Jefferson*

For more information about this series, please visit: [www.routledge.com/Routledge-Focus-on-Philosophy/book-series/RFP](http://www.routledge.com/Routledge-Focus-on-Philosophy/book-series/RFP)

# Are Mental Disorders Brain Disorders?

Anneli Jefferson

First published 2022  
by Routledge  
4 Park Square, Milton Park, Abingdon, Oxon OX14 4RN

and by Routledge  
605 Third Avenue, New York, NY 10158

*Routledge is an imprint of the Taylor & Francis Group, an informa business*

© 2022 Anneli Jefferson

The right of Anneli Jefferson to be identified as author of this work has been asserted by them in accordance with sections 77 and 78 of the Copyright, Designs and Patents Act 1988.

All rights reserved. No part of this book may be reprinted or reproduced or utilised in any form or by any electronic, mechanical, or other means, now known or hereafter invented, including photocopying and recording, or in any information storage or retrieval system, without permission in writing from the publishers.

Trademark notice: Product or corporate names may be trademarks or registered trademarks, and are used only for identification and explanation without intent to infringe.

*British Library Cataloguing-in-Publication Data*

A catalogue record for this book is available from the British Library

*Library of Congress Cataloging-in-Publication Data*

Names: Jefferson, Anneli, author.

Title: Are mental disorders brain disorders? / Anneli Jefferson.

Description: First edition. | Abingdon, Oxon ; New York, NY : Routledge, [2022] | Series: Routledge focus on philosophy | Includes bibliographical references and index.

Identifiers: LCCN 2022003172 (print) | LCCN 2022003173 (ebook) |

Subjects: LCSH: Brain—Diseases. | Neurobehavioral disorders.

Classification: LCC RC386 .J44 2022 (print) | LCC RC386 (ebook) |

DDC616.8—dc23/eng/20220224

LC record available at <https://lcn.loc.gov/2022003172>

LC ebook record available at <https://lcn.loc.gov/2022003173>

ISBN: 978-0-367-42138-0 (hbk)

ISBN: 978-1-032-30632-2 (pbk)

ISBN: 978-0-367-82208-8 (ebk)

DOI: 10.4324/9780367822088

Typeset in Bembo  
by codeMantra

# Contents

	<i>Acknowledgements</i>	vii
1	Introduction	1
2	Brain disorders – the narrow view	9
3	A workable notion of brain dysfunction	27
4	Objections and clarifications	47
5	Implications for agency and responsibility	66
6	Conclusion	85
	<i>Bibliography</i>	89
	<i>Index</i>	97



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

# Acknowledgements

When I first started working on the philosophy of psychiatry, I was puzzled by how heated debates about whether mental disorders are brain disorders tend to be. This book is my attempt to untangle the debate and provide a workable notion of brain disorder applied to psychiatric conditions. Writing a book in a pandemic is not much fun, but the process has been greatly improved by the many people who have been generous with their time and comments. I have presented material from this book at Cardiff University, King's College London, the University of Wales Trinity Saint David, the Copenhagen 'Reactivity and Categorisations in the Human Sciences' Workshop and the BSPS and learned from my audiences and commentators. I would like to thank my colleagues in Cardiff for feedback on work in progress. I thank Nils Kürbis, Jon Webber and Katrina Sifferd for feedback on individual chapters. I was very fortunate to be able to workshop the manuscript with colleagues and friends, and thank Marko Jujarko, Luca Malatesti, Sofia Jeppsson, Sam Wilkinson, Marion Godman, Zsuzsanna Chappell, Liz Irvine, Tuomas Pernu and Harriet Fagerberg for their feedback. Special thanks go to David Papineau for support and incisive comments in this project and across the years, Jan-Hendrik Heinrichs for repeat reads and detailed feedback on everything, and Lisa Bortolotti for reading the whole manuscript and advising. I am also grateful to my two reviewers from Routledge for advice on how to further improve the manuscript and sharpen the presentation. Last but not least, I would like to thank my proof-reader extraordinaire and adviser on all things hardware-software distinction related, David Jefferson.



Taylor & Francis

Taylor & Francis Group

<http://taylorandfrancis.com>

# 1 Introduction

## 1 The controversy surrounding ‘brain disorder’ labels

We often hear that specific mental health conditions are brain disorders or diseases. For example, the American Psychiatric Association characterizes schizophrenia as a chronic brain disorder (APA 2020). The authors of the Research Domain Criteria (RDoC), which is a system for classifying domains of psychological and brain function proposed by the United States’ National Institute of Mental Health, also work on the assumption that mental disorders generally are brain disorders. We often hear statements like ‘depression is a chemical imbalance in the brain’. At the same time, many scientists and philosophers strongly oppose characterizing conditions like depression, schizophrenia or bipolar as brain disorders. In a recent opinion piece in *Nature*, neuroscientist Carl Hart argued that categorizing addiction as a brain disease is both inaccurate and harmful to people suffering from addiction (Hart 2017). Psychologist Richard Bentall argues that viewing mental disorders as brain disorders gives us a skewed view of these conditions that does not take into account people’s life history and the experiences that precipitated their mental distress.

We find ourselves in a strange stand-off: on the one hand, we have people saying that viewing mental disorders as brain disorders is the way forward in understanding and treating psychiatric conditions and applying this label will lead to more empathy towards people affected. On the other hand, many object that this view of psychiatric illness is both incorrect and harmful. According to both sides of the debate, there is a lot at stake in how we characterize these disorders, so we need to get this right.

Most people in the debate endorse a broadly materialist world-view, according to which mental processes depend on the brain, so

## 2 Introduction

the disagreement does not rely on fundamentally different assumptions about the mind-brain relationship such as, for example, Cartesian dualism.<sup>1</sup> So why do researchers, clinicians and philosophers disagree so violently as to whether conditions such as addiction, schizophrenia, bipolar disorder or depression are brain disorders? In a recent piece defending the brain disorder view, neuroscientist Camilla Nord states: “I suspect the heart of the disagreement originates from people’s vastly different ideas of what it means to say that something is a ‘brain disorder’” (Nord 2021). This is the correct diagnosis, the main source of disagreement is a conceptual one, regarding the question what a brain disorder is. But, as with many stubborn disagreements, it isn’t the case that we have clearly articulated conceptual differences – most of us aren’t even sure what we mean by ‘brain disorder’, even if we have strong views on what *isn’t* a brain disorder. While we agree about established cases of brain disorder such as neurosyphilis or Chorea Huntington, we lack good criteria for deciding how to categorize controversial cases such as addiction. Put differently, we may agree that a condition is a brain disorder when there is something wrong with the brain, but we don’t agree on what differences from normal functioning count as there being something wrong with the brain.

The problem with discussions about brain disorders is that there are a number of ill-articulated presuppositions at play which lead to unhelpful confusion and disagreement. The two interconnected questions that will be running through this book are ‘What is a brain disorder?’ and ‘What is the relationship between mental disorders and brain disorders?’. One important result from this book is that we have made so little progress on the second question because we don’t have a clear answer to the first. So, I will propose criteria for dysfunction in the brain. On my account, mental disorders are brain disorders if they involve brain dysfunction, but they need not be caused by a preceding defect in the brain.

## 2 Methodology

Which mental disorders are brain disorders is an empirical question, but it requires a theory of what makes something a brain disorder. My aim is to answer this theoretical question. My approach to these issues is not an empirical but a philosophical one, clarifying the models that are used in the debate and their implications. The primary focus will be on what theoretical presuppositions underlie disagreements about brain disorders, and how these could be resolved. To illustrate the contrast to the empirical project, one could argue about whether addiction