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Psychology Statistics FOR DUMMIES®

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- Master statistical methods and procedures using psychology-based explanations and examples
- Create better reports
- Identify key concepts and pass your course

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Psychology Statistics For Dummies®

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Psychology Statistics For Dummies[®]

**by Donncha Hanna and Martin
Dempster**



A John Wiley and Sons, Ltd, Publication

Psychology Statistics For Dummies®

Published by
John Wiley & Sons, Ltd
The Atrium
Southern Gate
Chichester
West Sussex
PO19 8SQ
England
www.wiley.com

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British Library Cataloguing in Publication Data: A catalogue record for this book is available from the British Library

ISBN 978-1-119-95287-9 (pbk); ISBN 978-1-119-95393-7 (ebk); ISBN 978-1-119-95394-4 (ebk); ISBN 978-1-119-95395-1 (ebk)

Printed and bound in Great Britain by TJ International, Padstow, Cornwall.

10 9 8 7 6 5 4 3 2 1



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Donncha Hanna is, among other more interesting things, a lecturer at the School of Psychology, Queen's University Belfast.

He has been teaching statistics to undergraduate students, postgraduate students and real professional people for over 10 years (he is not as old as Martin). His research focuses on mental health and the reasons why students do not like statistics; these topics are not necessarily related. He attempts to teach statistics in an accessible and easy to understand way without dumbing down the content; maybe one day he will succeed.

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Martin Dempster is a Senior Lecturer in the School of Psychology, Queen's University Belfast. He is a Health Psychologist and Chartered Statistician who has also authored *A Research Guide for Health & Clinical Psychology*.

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Martin lives in Whitehead, a seaside village in Co. Antrim, Northern Ireland, which isn't very well-known, which is why he lives there.

Dedication

From Donncha: For my mother and father. Thank you for everything.

From Martin: For Tom, who joined the world half way through the development of this book and has been a glorious distraction ever since.

Author's Acknowledgments

From Donncha: I'm very grateful to the team at Dummies Towers for their work and guidance in getting this book to print – particularly our editors Simon Bell and Mike Baker.

I would like to thank all the students, colleagues and teachers who have helped shape my thinking and knowledge about statistics (and apologise if I have stolen any of their ideas!). I must also acknowledge Pamela (who didn't complain when I used the excuse of writing this book to avoid doing the dishes) and my sister, Aideen, who offered practical help as always. Thanks to my friend and colleague Martin Dorahy who put up with me in New Zealand where half of this book was written. And of course to Martin Dempster, without whom there would be no book.

From Martin: This book is the product of at least 20 years of interaction with colleagues and students; picking up their ideas; answering their questions; and being stimulated into thinking about different ways of explaining statistical concepts.

Therefore, there are many people to thank – too many too list and certainly too many for me to remember (any more).

However, there are a few people who made contributions to the actual content of this book. My brother, Bob, who has a much better sense of humour than me, helped with some of the examples in the book. Noleen helped me to better formulate my thinking when I was having some difficulty and supported my decision to undertake this project in the first place. My mum and dad spurred me on with their ever-present encouragement. Finally, thanks to my colleague Donncha, who floated the idea of writing this book and asked me to collaborate with him on its development.

Publisher's Acknowledgments

We're proud of this book; please send us your comments at <http://dummies.custhelp.com>. For other comments, please contact our Customer Care Department within the U.S. at 877-762-2974, outside the U.S. at 317-572-3993, or fax 317-572-4002.

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Introduction

We recently collected data from psychology students across 31 universities regarding their attitudes towards statistics; 51 per cent of the students did not realise statistics would be a substantial component of their course and the majority had negative attitudes or anxiety towards the subject. So if this sounds familiar take comfort in the fact you are not alone!

Let's get one thing out of the way right now. The statistics component you have to complete for your degree is not impossible and it shouldn't be gruelling. If you can cope with cognitive psychology theories and understand psycho-biological models you should have no difficulty. Remember this isn't mathematics; the computer will run all the complex number crunching for you. This book has been written in a clear and concise manner that will help you through the course. We don't assume any previous knowledge of statistics and in return we ask you relinquish any negative attitudes you may have!

The second point we need to address is why, when you have enrolled for psychology, are you being forced to study statistics? You need to know that statistics is an important and necessary part of all psychology courses. Psychology is an empirical discipline, which means we use evidence to decide between competing theories and approaches. Collecting quantitative information allows us to represent this data in an objective and easily comparable format. This information must be summarised and analysed (after all, pages of numbers aren't that meaningful) and this allows us to infer conclusions and make decisions. Understanding statistics not only allows you to conduct and analyse your own research, but importantly it allows you to read and critically evaluate previous research.