Introduction

All too often, the very mention of the words 'mathematics' or 'statistics' is enough to instil fear and trepidation into the hearts and minds of our university students. It can surface a whole range of feelings and, consciously or otherwise, invoke familiar narratives such as 'I'm no good at maths', 'I can't do this', or 'I don't need to know this'. Indeed, many students sign up to courses in wide-ranging fields, for example in the social sciences or biosciences, expecting to be able to avoid these subjects. The reality is, we live in a data-driven world where training in mathematics and statistics is becoming increasingly important both within academic disciplines and in cross-disciplinary research, hence it is crucial for student employability across diverse fields.

Meena's keynote talk at the 2019 'Transform Statistics' conference united a diverse audience of educators from the Universities of Birmingham and Nottingham, who came together from many disciplines to unpack the challenges faced by non-specialist students and identify actionable ways to improve learning of statistics and research methods. Within the pages of this book, you can expect the same kind of warmth and heartfelt guidance, distilling Meena's experience in statistics education from the last two decades into research-informed, relatable strategies for educators across disciplines.

In this book, Meena delivers a thoughtfully articulated gift for educators of quantitative methods across the globe. The book brings a research-informed perspective on the causes of mathematics anxiety and its wide-ranging consequences for students, from their personal wellbeing to experiences in the learning environment, academic performance, and careers. A pedagogical intervention is presented through the lens of Symbolic Interactionism, focusing on how the social interactions and shared meanings between the people involved in the learning process (teachers and students) can shape the experience of learning statistics and quantitative research methods. A valuable collection of student perspectives illustrates

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clearly how the intervention works to address mathematics anxiety within the context of building more emotionally intelligent learning environments. While the underpinning research was carried out with social science students, the lessons learnt will be hugely valuable for teachers in any discipline where students can be perceived as 'non-specialists', from biosciences to modern languages and beyond. Meena shows us a new way forward in creating the kind of supportive learning environment where students feel valued, safe, and able to contribute more fully, bringing their authentic selves to the learning experience.

So, whether you are new to teaching statistics and quantitative research methods or have spent decades teaching it, read on to discover how to connect with your students more effectively and create a more joyful learning experience for all involved in quantitative methods!

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