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Gerald Matthews, Ian J. Deary and Martha C. Whiteman
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Personality Traits

Now in its third edition, this dynamic textbook analyses the traits fundamental to human personality: what they are, why they matter, their biological and social foundations, how they play out in human life and their consequences for cognition, stress and physical and mental health. The text also considers the applications of personality assessment in clinical, educational and occupational settings, providing the reader with a detailed understanding of the whole field of personality traits. This edition, now in 2-colour with improved student features, includes the latest research from behavioural genetics, neuroscience, social psychology and cognitive science, assesses the impact of new research techniques like brain imagery, and provides additional content on positive aspects of traits and practical uses of personality assessment. This is an essential textbook for students taking courses in Personality and Individual Differences and also provides researchers and practitioners with a coherent, up-to-date survey of this significant area.

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THIRD EDITION

Gerald Matthews

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To my wife, Diana – GM

To my parents,
Hugh and Isobelle Deary – IJD

To my parents – MCW

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Preface to the third edition

The first and second editions of *Personality Traits* explicated and consolidated our opinion that the science of personality could be built on a foundation of traits. The first edition had the job of defining the field. It grew out of the growing consensus regarding traits as entities, and particularly well-validated personality trait models. The second edition was more comfortable in the presence of its psychological neighbours. It absorbed the confidence building around traits and trait models and reached out to companion disciplines that could inform personality trait science and also benefit from it. That maturity and integration was the dual driving force for this third edition. It is no longer necessary primarily to be marking territory, to be showing what is and what is not trait land. In this third edition, with personality traits and their models more securely established and connected within psychology, there is more reaching out: to the revisionary critics, who have some interesting new ideas; to the fast-growing sciences that can offer explanations for trait differences; and to the applied fields that are increasingly enjoying the benefits of including personality trait variance in their models. The structure of the book has been retained. Readers will first find out about the distinctive characteristics of traits, then their biological and social foundations, and then how they play out into human life: what traits are and which ones there are, how differences in them come about, and why they matter. The book's message is that traits are tractable and important variants of the human condition. Those variants are still not fully understood, and we have tried to make it clear how much is well established and how much is mysterious. We avoid hand-waving to fill in the gaps. Where there are data we try to explain their meaning and implications clearly. Where there are gaps or chasms we point them out.

The staples of the book's first part have not changed. The principals of traits and the major models are covered and updated. There are interesting challenges. There are still urges to increase traits beyond the still-in-favour five (perhaps plus or minus two). New looks have taken place at higher-order trait variance, with more discussion about the possibility of even a single general personality trait, and what that could mean. There is more emphasis on the lesson that traits are tendencies that play out in situations. Accordingly, the section on interactionism explains how traits act differently depending on the situation, and how understanding more about situations that trigger destructive behaviours opens up potential to help treat psychological problems. A distinctive part of the book that we have

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developed is the treatment of psychological states and moods. It is important both to distinguish them from traits and to explain their associations with them. In this new edition there is further articulation of neural bases for emotions. We cover the growing evidence that multiple paths may link traits to individual differences in emotional states. We still think it is important to alert the reader to accounts that are complementary to trait approaches and we highlight new interest in unconscious processes and the development and evaluation of implicit trait measures.

Part two – the causes of personality traits – caused excitement and concern, especially with regard to the biological section. In previous editions, the biological basis of traits has largely meant the behaviour genetics and psychophysiology of traits. Those are still covered in detail, and part of the updating has reflected the increasing prominence of reinforcement sensitivity theory (RST) in personality trait science; the interest from the investment made by Jeffrey Gray. But the real changes have come in the pace of the research on molecular genetics and brain imaging as applied to traits. Both are exciting, and both brought problems. Obvious excitement lies in possibly realising molecular mechanisms and neural networks that provide foundations for trait differences. The problems lie in the facts that the genetic studies have small effect sizes and problems of replication, and that the brain imaging studies can have relatively small numbers of subjects and few attempted replications. One major avenue towards the biological basis of traits are studies that conduct genetically-informed brain imaging examinations using validated cognitive paradigms, such as emotional and social stimulus processing. Examples of this new approach are described and explained. Social foundations of traits are considered too. There is growing evidence for relationships between traits and key social-psychological processes including attachment, self-knowledge and self-regulative motivations.

Part three has grown, reflecting the increasing evidence that traits matter: to mental health professionals, to health psychologists, to cognitive psychologists, and others. Each of these, it is increasingly obvious, will do disservice to their clients and participants – and they will be acting, advising and experimenting suboptimally – if they ignore trait variation. There is more in this edition on research into stress-buffering traits such as optimism, hope and spirituality. New approaches to treat depression, such as mindfulness-based therapies, show promise that a wider set of tools is available for psychologists and other practitioners to help bring about lasting change in levels of distress. The growing evidence for the importance of conscientiousness as a health-related trait is covered. Psychobiological research is showing that emotional triggers, together with biological risk factors, play a role in the triggering of heart attacks. There is further understanding of the place of personality traits in the multiple pathways of risk across the whole life course for complex illnesses such as cardiovascular disease and cancer. We have tried to capture the fascinating development of personality disorders. For decades, the evidence that personality disorder can be captured in continua has been growing. Coverage of this evidence has been a

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distinctive aspect of all editions of this book. Now, with the evidence becoming more and more solid, we see the dimensional approach to personality disorder waiting in the wings to see if it will appear when the curtain goes up on the fifth revision of the Diagnostic and Statistical Manual for Mental Disorders (DSM-V). Our opinion is that some compromise will emerge between traits and syndrome labels. Applied to human performance, there are increasingly successful information-processing models, especially for anxiety. We are also seeing – as was the case with the brain-imaging studies that are informed by personality variation – that there is more application to traits of theories and methods from cognitive neuroscience. In applied psychology there is increasing acceptance of dimensional models in various fields. There are accumulating data supporting the use of trait-based meta-analyses, especially in organisational settings. There is continued interest in new trait constructs – notably emotional intelligence – which do not always fulfil their initial promise.

This third edition, then, finds traits in rude health and increasing their social networks. The health is ensured by the continued work of able trait mechanics-psychometricians who optimise construct content and measurement. The social networks are growing: because a greater range of biological, neuroscience, psychological, and social scientists are applying themselves to explaining trait variation; and because a diverse range of scientists and practitioners are benefiting from taking trait variation into account. These new partners mean that the reader of *Personality Traits* has to cope with concepts and their interactions from an increasing range of scientific disciplines. There's no escaping that; the human condition lives in a multivariate world.

Gerald Matthews
Ian Deary
Martha Whiteman

Preface to the second edition

The first edition of this book was motivated by the authors' perception that research on personality traits had reached a 'critical mass' that would justify a textbook focusing on the trait as an organising construct for understanding personality. We are gratified by the success of the first edition, which satisfied the need for a book on personality based on modern scientific research. Since the publication of the first edition, other authors appear to be distancing themselves from the traditional Hall of Fame text that we criticised initially. It is a relief to see the Hall of Fame approach receding into the distance so that the teaching of personality can be based on empirical data rather than historical relics.

We appreciate the feedback that we received from colleagues concerning the first edition. These comments helped to shape both the content and organisation of this new edition. We encourage academic faculty, practitioners and students to continue to share their opinions of the text with us. So far as content is concerned, the challenge has been to keep pace with the surge of new data and theorising on traits. In consequence, all chapters have been updated, and readers will note that a high proportion of the studies cited are recent. To better keep up with new developments, we invited a new author to join the original duo: Dr Whiteman brings expertise in health, epidemiology and lifespan aspects of personality.

Recent research confirms our original contention that trait research is becoming ever more interwoven into mainstream psychology. Focal topics as diverse as behaviour genetics, stress and abnormality simply cannot be understood without reference to traits. Several fields of inquiry have seen the extension and elaboration of research that we highlighted in the first edition. Recent psychometric studies largely take the Five Factor model as a reference point, even when seeking to fractionate or collapse its dimensions. The trend towards integration of trait psychology and social-cognitive psychology has accelerated, for example with the important new work on how Agreeableness relates to social behavior. We have also expanded our coverage of self-efficacy. In other cases, we have added much new material to develop more fully topics such as sex differences, brain-imaging studies, molecular genetics, psychopathy and traits in occupational psychology. We have added three new chapters to review in more depth personality across the lifespan, traits and health, and the practical applications of personality trait assessment. Other new research areas include psychophysiological studies inspired by recent work on reinforcement sensitivity, schizotypy, spirituality and the controversial but influential construct of emotional intelligence.

From its inception, the book has aimed to meet the needs of both the researcher requiring an introductory survey of traits, and the student of personality. Thus, we have also responded to feedback on the use of the book for teaching. The layout and structure are better geared to teaching needs: including summaries, space for notes, and more boxes on special topics. In addition, the new chapter on practical application is intended to emphasise the real-world utility of personality assessment (and its limitations) for the benefit of the practitioner.

As a closing thought, it is satisfying to see a valid edifice of personality psychology rising ever higher from its solid foundation in the rigorous assessment of stable traits. The flourishing dialogue between trait psychologists and social psychologists – traditional adversaries – is especially welcome: both sides have much to learn from one another. However, this undoubted success brings new challenges and issues. We have referred already to the potentially overwhelming volume of new research, which raises special difficulties for theory. How can we have a unified theory of personality traits that explains findings from so many disparate subdisciplines, ranging from molecular genetics to high-level social cognitive processes? We have sketched out some tentative suggestions for theory development in the concluding chapter. It is important also to maintain boundaries between core personality research and other disciplines. Social psychology and personality are often seen as a single field, but are there aspects of social psychology that should be sharply differentiated from personality? The possible evolutionary basis for human nature has been much debated of late, but perhaps it is unwise to merge evolutionary psychology with personality. We continue to anticipate the maturation of a trait-based personality science, but we also perceive a need for clarifying the scope of this science. We hope that this text continues to assist both students and working psychologists in grasping the basic principles and findings of research on personality traits.

Preface to the first edition

The stimuli for writing this book were private and public. In our conversations with colleagues in other areas of psychology we have noticed a lack of awareness of recent advances and retreats in personality psychology. In parallel with these conversations, we noticed that textbooks on personality and sections on personality in general psychology texts frequently failed to reflect what was happening in the research journals and at personality conferences. Many psychologists, we found, were under the impression either that traits had perished under Mischel's broadsword in 1968, or that trait theorists were still discussing how many angels were perched on their particular pinhead. Personality texts, more surprisingly, seemed stuck in an arcane formula, variously described as a Dutch Auction or a Hall of Fame. Thus, the typical book on personality has a number of more or less free-standing chapters on 'approaches to personality' handed down largely by great names: Freud, Jung, Maslow, Erikson, Horney, Sullivan, May, Kelly, Rogers. What many of these approaches shared was a lack of current, and often past, academic interest and a lack of empirical evidence or even testability. Within the Hall of Fame, traits appeared as one or two dusty portraits, neither more nor less distinguished than the other works on offer, though perhaps with a little less depth.

The typical book reviewing personality does not adequately represent current personality research. It offers a parallel world where knowledge does not progress and where stories pertaining to human personality are collected irrespective of their validity. The version of traits offered is frequently a straw man that entails a rigidity and narrowness not seen among living trait researchers. One still sees situationism and interactionism portrayed as alternatives to trait models, whereas the truth is that there are no credible situationists who deny the existence of traits and no trait theorists who deny the power of the situation. Situationism and trait theories are complementary, not alternatives, and interactionism is the description of the emergent approach consequent on recognising these truths. This does not deny that some researchers will devote their careers more to studying traits or situations, and there is more than one way to become an interactionist. It is a truism verging on cliché to say that behaviour is multifactorially determined and that there is a reciprocity between the person and the environment. However, this richness may only be captured by systematic empirical research that stakes out the lawful personological and situational (and interactional) factors influencing behaviour.

An accurate exposition of scientific research on personality must break the common mould from which many personality texts have been cast; it must explain to the reader why some personality theories and constructs should be dropped from our consideration, and others need to be recognised as having become married. This book is about contemporary personality research, one which is aware of the historical roots of the field but focuses on constructs with a future as well as a past. Although the treatment of personality is centred on traits, it recognises other empirical approaches. The book makes no expansionist claims for traits, but does assert that other aspects of research on personality may be seen from the vantage point of the trait theorist and may be used in tandem with traits.

The book is not wholly or even largely concerned with the narrow psychometrics of personality traits. As is the case with cognitive abilities, psychometric studies provide a possible classificatory scheme for personality traits that has to look elsewhere for validation. Therefore, whereas some attention must be given to the dimensionality of personality traits, most of the evidence for the validity of traits will come from what we call horizontal and vertical validation. Horizontal validation includes such efforts as finding the same factorial structure for a trait scheme in different groups (sexes, cultures, ages), and finding convergent and discriminant validity when the traits are compared with other related and unrelated psychometric constructs. Vertical validity may look up or down. Upward vertical validation involves finding real-life correlates of trait differences, such as occupational and other life successes and failures, social behaviours, and susceptibility to clinical conditions. Downward vertical validity concerns finding the psychological and biological underpinnings of traits, and involves a variety of approaches from cognitive to psychobiological. Therefore, the richness of psychological research involving traits includes differential, biological, cognitive and social techniques. Thus, whereas the sine qua non of the personality researcher must be a minimum level of psychometric knowledge, the personality researcher must be eclectic in validating traits.

The structure of the book reflects the validation structure outlined above. Part 1 of the book charts the trait domain and attempts to clarify the boundaries between the most agreed upon dimensions. It also examines the relationship between trait theory and its supposed alternatives in the domain of personality. Part 2 deals with the causes of traits, both biological and social. Part 3 concerns some of the consequences of trait differences. Again, it is important to emphasise that, whereas a replicable and generalisable psychometric structure for personality traits is necessary for a theory of personality, it is not sufficient. Sufficiency arises when the origins of traits have been established in valid constructs that lie outside the trait domain, and where there are replicable, significant and objective real-life outcomes of traits in terms of human behaviour. The book gives an idea of the empirical mass of trait theories of personality; compared with other psychological constructs we think that trait theory has come near to the status of a paradigm

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in psychological research. Not the least impressive fact about traits is that their influence may be carried in the genetic material.

The book builds an eclectic picture of human personality around traits. It is a call to those interested in human individuality to come and stand on some 'solid ground on the wetlands of personality' (Costa and McCrae, 1995b); as such it welcomes all other empirical approaches to personality. Therefore, the reader will see an attempt to reconcile trait theory with the often-neglected work on abnormal personality, with state research, with social psychology, with situationism, and so forth. Because we have adopted an eclectic approach, some chapters or sections will begin with a description of the explanatory principles of an area of psychological research, and only then move on to the association of that area with trait theory. We contend that all empirical research on personality must ultimately be woven into a comprehensive account of the person, and that perhaps trait theory is a reasonable platform from which to begin. In the treatment of individual topics, the book, because of its breadth, is frequently selective, though never intentionally unrepresentative. Our aim has been to offer the general flavour of an area as well as a dip into some specific noteworthy studies. We have attempted to provide a comprehensive scientific account of contemporary personality research with traits centre stage, and with a strong supporting cast. This has been successfully accomplished in part elsewhere, though usually such books have been written at the level of the research monograph or have had a focus on a narrower range of traits (Eysenck, 1982; Eysenck and Eysenck, 1985; Brody, 1989; Zuckerman, 1991; Costa and McCrae, 1993). The level of the material has been pitched to appeal to interested senior undergraduates, postgraduate students, and career psychologists who wish to catch up on the contemporary scientific study of personality.