Introduction

Revisiting Classic Studies in Personality and Individual Differences

Philip J. Corr

Personality psychology and related individual differences have become more prominent in scientific psychology over the past few decades, and their utility in applied fields (e.g., occupational selection) has remained undiminished – of course, these aspects of psychology have long fascinated wider society. As evidence of the vitality of the field, there are now quite a few dedicated journals as well as national and international societies and conferences. Reflecting the age of sophisticated genetics and brain imaging technology, it is no surprise that personality and individual differences are increasingly being studied within a neurophysiological framework, informed by evolutionary considerations, and aided by major computational advances which were unknown even a few years ago. The research field is now underpinned by some very impressive empirical studies entailing, in the case of the molecular genetics of personality, hundreds of thousands of participants. In recognition of these developments, there is now a journal, *Personality Neuroscience*, published by Cambridge University Press, devoted specifically to the field – founded and edited by the present author.

Yet, despite its prominence, the student of personality and individual differences – whether starting out or established in the profession – struggles to make sense of the vast and disparate literature that confronts them. It is often seen as far too multifaceted and complex to play effectively the central role it deserves in general psychology – this is its Achilles' heel. (It also reflects the 'two schools' of psychology – experimental/cognitive and correlational/differential – that have long militated against a unified psychology; see Corr, 2016, pp. 42–43.) This impression is unfortunate because the field has the potential to serve as a major unifying force to fuse theoretical, empirical and applied psychology – indeed, the field may well be said to be the principal bulwark against the fragmentation of psychology that, if anything, is worsening. Given this state of affairs, it seems appropriate to stand back and take historical account of the classic studies that have contributed so much to defining the field – they help to uncover the major themes that characterize personality and individual differences today.

ABOUT THIS VOLUME

The 14 classic studies revisited in this volume are ones that have, over many years, echoed down university research corridors, as well as informing and influencing applied (e.g., occupational) studies and practices. Few experts would look back on them and say that they have not been highly influential in shaping the field, especially as to how people *think* about the central issues that inform their own research and practice. A distinguishing feature of these classic studies is how far ahead of their time they were – beating a path through dense conceptual, theoretical and empirical undergrowth, enabling others to follow with greater ease, and sometimes greater acclaim – the studies that followed may well be more sophisticated in methodology and statistics (how could they not be?) but typically they have been less ground-breaking and much more incremental in their contribution. In this respect, classic studies are prescient, if not perfect.

CRITERIA FOR A CLASSIC STUDY

The choice of which classic studies to include in this volume was made no easier by the existence of two facts.

First, the field of personality and individual differences touches on so many other areas of psychology; and it goes from (distal) evolution, DNA, neurophysiology, through (proximal) developmental, cognitive and social processes, all the way up to the collective behaviour of society (e.g., political attitudes) – and in doing this it is required to encapsulate both individual and societal features. (In addition, the wide-ranging implications of the field means that it connects with some big societal issues; for example how organizations, both commercial and political, should use social media data to target the consumer and voter with specific persuasive campaign messages based on personality, 'psychographic', profiling.) Of course, no single volume can possibly do justice to this vast expanse of research; this needs something else, which has already been provided in the form of *The Cambridge Handbook of Personality Psychology*, edited by Philip Corr and Gerald Matthews (Cambridge University Press, 2008, 2nd edition, 2019).

The second fact relates to what the prominent personality psychologist Charles Carver noted to me when I was enquiring about the classic studies in the field: 'I think of shaping of the field in terms of bundles of literature, rather than specific studies.' This comment is an accurate reflection and it is, indeed, appropriate to acknowledge that personality psychology is characterized by the *accumulation* of research findings and, typically, it is difficult, if not outright invidious, to point to any single study as being the crucial one responsible for notable scientific progress. However, to conclude that there are no such seminal studies is itself a partisan position to adopt, and a vexatious one to defend. With the above caveats in mind, there clearly are classic studies that characterize the development of the field.

The final selection of 14 classic studies in this volume – which was arrived at only after a number of iterations, informed by experts – span the very diverse

topics that define the field of personality and individual differences. (Although sometimes intelligence and cognitive abilities are included under the rubric of 'personality', this volume focuses on the non-cognitive literature – there are many classic studies from intelligence research that deserve their own volume.) However, it quickly became all-too-evident that many more studies could have been selected, but a decision had to be made: many were called, but few were chosen. This decision was guided by a number of inclusion criteria.

First, the focus was on those studies within mainstream personality psychology, as recognized by university researchers and teachers. This focus excluded those studies that may popularly be regarded as belonging to personality psychology but which have not shown sufficient evidence of 'progressive science'; that is, stimulation of empirical progress (psychodynamic notions fall into this category). Related to this first point, secondly, the studies chosen either report empirical data or set the theoretical stage for empirical research. An example of the latter is Jeffrey Gray's (1970) theoretical paper, which summarized extant empirical findings to recast Hans Eysenck's then-dominant biological theory of personality in a new scientific light (Chapter 7). Much the same may be said of David Buss's (1991) paper on evolutionary considerations which stimulated considerable empirical research and much debate (see Chapter 10). Even negative accounts of personality psychology – in this case, Mischel's (1968) critique of the entire field – provided the impetus that led to much-needed theoretical and empirical advances that served the field very well in the years that followed its publication (see Chapter 6). A third criterion laid emphasis on the degree of consensus among current personality researchers. Many of them were asked to nominate what they considered to be classic studies, and all came back with a long list – fortunately, many contained the same studies – that after some toing-and-froing resulted in the long list being whittled down to the 14 chapters that comprise this volume.

CLASSIC STUDIES NOT INCLUDED IN THIS VOLUME

The relatively small number of classic studies chosen meant the exclusion of purely theoretical contributions, as well as some highly influential books and monographs. Examples that readily spring to mind include: Hartshorne and May's (1928) *Studies in the Nature of Character (Vol. 1), Studies in Deceit*; Gordon Allport's (1937) *Personality: A Psychological Interpretation*; Henry Murray's (1938) *Explorations in Personality*; Murray and colleagues' (1948) *The OSS Assessment Staff, Assessment of Men: Selection of Personnel for the Office of Strategic Services*; and Jack Block's (1971) *Lives Through Time*. Also omitted are some influential papers, such as Cronbach and Meehl's (1955) paper on construct validity, and Guion and Gottier's (1965) influential occupational testing review that had a demonstrable impact on applied psychological research (e.g., personality and occupational selection/performance; e.g., Barrick & Mount, 1991).

REVISITING THE CLASSIC STUDIES

History has value in its own right: it is interesting to know the various ways in which the current psychological landscape has been shaped by past thinking and research. But, more importantly for a scientific perspective, it is essential that we *learn* from the past – learn in the sense of getting an insight into what constitutes the types of *thinking* that are destined to have long-term impact. What we really need to know is how classic studies broke new ground given the *conditions of their time*. This is the real value of any reconsideration of classic studies.

OVERVIEW OF CHAPTERS

The classic studies chosen are all different, in content and form, but also intention and impact. This fact presents a challenge to any volume that aims to achieve a modicum of coherence – and reader convenience – while at the same time being sympathetic to the varied nature of the studies. To help overcome this obstacle, contributors were asked to adhere to the following structure, as best they could, and to modify it where necessary: (1) background to the classic study; (2) detailed description of the classic study, including theory, methodology and findings; (3) impact of the classic study; (4) critique; (5) conclusions; and (6) further readings. Contributors rose to their task admirably.

Chapter 1 (**Webb, 1915**) presents the first major attempt to study personality in a way that is easily recognized today – it may be said to have empirically wrenched personality away from theoretical philosophy. It is arguably where modern personality psychology started. As Ian Deary notes, researchers in the psychology of individual differences take for granted that people can sensibly be described in terms of a limited number of personality traits. However, before Webb's time, the study of personality was little more than descriptions of how people differ – more literature than science. Webb's (1915) paper is specifically important because it was the first study to identify a personality trait by the use of methods now in widespread research use. Following a very rigorous data collection phase – itself served to inform future research – and in addition to a factor of intelligence, Webb extracted a non-cognitive personality factor which comprised 'persistence of motives', meaning consistency of action resulting from deliberate volition, or *will* – this Webb labelled *w*. This factor has much in common with the Big Five factor of Conscientiousness (see Chapter 5) but maybe others too.

Chapter 2 (**Allport & Odbert, 1936**) provides the first major classification of (17,953) English 'trait-name' words – previously non-comprehensive examinations were attempted (e.g., by the Victorian polymath and cousin of Darwin, Sir Francis Galton). As Gerard Saucier observes, this study made a number of significant contributions (e.g., highlighting that normal human life seems to depend on notions of personality and, thus, deserve serious scientific attention). As Allport and Odbert reflected, even psychologists hostile to the very idea of personality would not hesitate to write a reference letter in support of a student which is

sprinkled with trait-like adjectives such as 'diligent', 'honest', 'friendly', and so on. This classic study formed the foundations for all subsequent lexical and factor analytical work in personality psychology, and like no other delineated the questions that personality psychologists should be answering.

The influence of Allport and Odbert's work is seen in Chapter 3 (**Cattell, 1943**), where the sophisticated statistical analysis of trait-names began in earnest. As highlighted by John Gillis and Gregory Boyle, Cattell set out to provide a comprehensive map of human personality, in both the normal and abnormal spheres – his tool of choice was the newly developed advanced statistical technique of factor analysis. This was not only a great personal undertaking but a major scientific achievement, and the enormous proliferation of factor analytical studies of personality that followed can trace their origins, and many of their techniques, directly to Cattell's early work.

Chapter 4 (**Eysenck, 1944**) takes a different approach to understanding the structure, and by inference causation, of personality. As discussed by Kieron O'Connor and Philip Corr, Hans Eysenck adopted that idea that normal and abnormal personality are located on the same (statistically described) dimensions – defined in factor analytical terms. Eysenck reasoned that by studying a clinical population (in his case, 700 'war neurotics' during World War II), normal traits of personality would be 'writ large' and, thus, could be identified and defined. From an analysis of a medical checklist, Eysenck identified the personality factors of Introversion–Extraversion and Stability–Neuroticism – we would be hard-pressed today to find a descriptive model of personality that does not contain these two factors in some form! (In 1952, Eysenck isolated a third factor, Psychoticism, which is similarly found, in some form, in modern-day descriptive models of personality.) Attendant with Eysenck's statistical work was a deeper understanding of the true dimensional nature of mental illness, and it is this very idea that increasingly is being applied to research and clinical psychology/psychiatry. In addition, in 1944 Eysenck was beginning to think about the biological nature of these personality dimensions – he discusses the work of Freud, Jung and Pavlov – which later he would transform into a fully-fledged neurophysiological model, which was to inspire others to follow in his footsteps (e.g., Jeffrey Gray; see Chapter 7).

Building on the earlier statistical work, Chapter 5 (**Tupes & Christal, 1961**) discusses the first major articulation of what was to become the, so-called, consensual model of personality: the Big Five. As John Johnson makes clear, Tupes and Christal wanted to find out why Donald Fiske (1949), when factor-analysing scores from a personality rating form very similar to the one used by Cattell, repeatedly found five broad personality factors rather than the 11 or 12 personality factors that Cattell led us to believe existed. Using real-world military samples, Tupes and Christal found, as they put it, 'five strong and recurrent personality factors'. In addition to Introversion–Extraversion and Stability–Neuroticism, the three other factors are: Conscientiousness and Agreeableness (seemingly opposite poles to Eysenck's Psychoticism), and Openness to Experience.

But trait psychology was never going to have it all its own way, and it did not, especially in the heyday of behaviourism and, related, social constructivism.

As presented in Chapter 6 (**Mischel, 1968**), this fact manifested itself in the form of a full-frontal critique from social (situationist) psychology which opposed the very notion that stable traits exist, let alone are responsible for driving behaviour. As Michael Eysenck (Hans Eysenck's son) discusses, Mischel's critique highlighted some very real methodological limitations of the empirical personality psychology literature. Mischel also highlighted what he saw as quite a few theoretical weaknesses; however, as discussed by Michael Eysenck, there was always something of a Straw (Wo)Man argument around this issue. Nonetheless, along with better designed and conducted personality studies, theoretical clarification came and, ironically perhaps, Mischel's main impact was to lead to improvements in research that considerably strengthened the field of personality psychology.

Now, a major problem of personality psychology has always been its very descriptive, correlational-statistical, nature. In comparison with the emerging experimental and computational advances of cognitive psychology, personality psychology seemed too vague, lacking *causal-process* models. Although Hans Eysenck promulgated the idea of 'experiments in personality' (e.g., by the use of drugs to move the individual along personality dimensions; e.g., caffeine leading to over-arousal and making, typically under-aroused, extraverts more like introverts), it was not really until Jeffrey Gray's work that a proper neuropsychological approach was advanced. Chapter 7 (**Gray, 1970**) traces his critique of Hans Eysenck's then-dominant biological model of personality. As a former student of Eysenck and highly versed in his work, Gray introduced the idea that underlying the major dimensions of Introversion–Extraversion and Stability–Neuroticism are individual differences in sensitivities to reward and punishment. Gray's early work was a wholesale importation of learning/behavioural theory into personality psychology, which included findings from elegant experiments in rodents (using drugs and neuroscience techniques to dissect behaviours into various classes that reflected the operation of separate reward and punishment systems in the brain), as well as evidence from human patients. This work led to the Reinforcement Sensitivity Theory (RST) of personality, which today is one of the major neuroscience theories of personality. But, as Neil McNaughton and Philip Corr show in their chapter, one major resistance to Gray's approach is its complexity, entailing unfamiliar and (sometimes exotic) behavioural phenomena (e.g., frustrative non-reward and the fear=frustration in the case of depression). To this day, Gray's work is not appreciated fully in personality psychology – this chapter explains why.

Chapter 8 (**Deci, 1971**) takes a very different view to the psychological consequences of reinforcement. As discussed by Richard Ryan and colleagues, Deci made a clear distinction between intrinsic and extrinsic motivation, and by so doing challenged the prevailing notions of behaviourist-based reinforcement theories – as well as neoclassically-inclined economic notions of the power of financial incentive. Specifically, Deci's theory challenged the view that external sources of reward lead to motivation. Among other things, this conventional view fails to account for spontaneous play and exploration occurring without *obvious* external reinforcement – the 'weasel' idea in behaviourism is that there *must* always be an influence of prior reinforcement, however difficult it is to identify

(for an example of this reasoning malady, see Skinner, 1974). Deci's seminal study revealed the counter-intuitive finding that increasing external reward may lead only to short-lived (extrinsic) motivation and a decrease in longer-lasting (intrinsic) motivation. Deci argued for the importance of the satisfaction of the *basic psychological needs*: competence, autonomy, and relatedness. This early work flowered into an enormous research literature, leading initially to self-determination theory (SDT) and then to a number of related sub-theories.

Chapter 9 (**Bouchard et al., 1990**) moves us into a different area of personality psychology, namely the roles played by genes and the environment, and how these processes can be understood within an evolutionary framework. As detailed by Wendy Johnson, although genetic influences on behaviour and psychological characteristics are now widely accepted – they are supported by a wealth of empirical research – this was very far from being the case for most of the 20th century. With a few exceptions (e.g., Hans Eysenck), most psychologists held firm to the belief that our personalities are shaped by experience – this was the mantra of behaviourism, *for everything*. Bouchard's classic study revealed to us that the world does not conform to this tenaciously held belief – many psychologists were proved plain wrong. There is little doubt that this classic study represents a major turning point in psychological science. It encouraged subsequent research which has opened the scientific floodgates to both behavioural/statistical and molecular studies of psychological phenotypes, including personality and individual differences.

A related issue to psychogenetics are the roles played by evolution in shaping the human mind. As discussed by Aurelio Jose Figueredo ('AJ') and colleagues, Chapter 10 (**Buss, 1991**) shows the fundamental significance of evolution in personality psychology. Buss sets about dispelling many myths surrounding this topic and makes the positive case for taking evolutionary theories seriously. Specifically, Buss asked: 'Why does personality psychology need evolutionary theory?' The answers he gave proved highly influential and propelled the field forward. In particular, Buss saw their value as a way to address one of the less appealing features of personality psychology, namely to 'circumvent the plethora of seemingly arbitrary personality theories' (p. 3) – a problem facing the field to this day.

But, personality psychology is interested not only in theoretical matters and, what some might see as ivory-tower research, but also very real-world applications, as shown in Chapter 11 (**Friedman et al., 1993**). Margaret ('Peggy') Kern summarizes the results and implications of a seminal study that highlights the long-term effects of personality on health outcomes. At a time when many wondered if there was such a thing as 'personality', the Friedman et al. (1993) study looks beyond cross-sectional and short-term associations to consider long-term effects. The study examines child personality traits as predictors of mortality risk across seven decades. The resulting effects are small and correlational, but the findings suggest that traits are more important than previously thought. It triggered numerous longitudinal studies using archival data, which together have led to a greater understanding of life course processes. It has since been found that individual differences influence multiple mechanisms, which accumulate

and interact across the lifespan ultimately to impact, in both positive and negative ways, meaningful life outcomes. A large literature in personality and health psychology now suggests that personality is not only of theoretical significance, but of considerable practical utility in terms of the length and quality of life.

Chapter 12 (**Funder, 1995**) addresses a major problem in personality research that has perplexed researchers, namely how to measure constructs accurately, especially as they tend to be abstract, 'theoretical', and often hard to pin down. Scientific research requires the operationalization of these constructs, and some form of measurement system is needed. Jeremy Biesanz discusses how Funder's work refreshed this field and reignited interest, even among those psychologists who were losing hope that much more advance was possible. In particular, in this theoretical paper, after a detailed review of history of accuracy research and the intensifying focus on error and bias, Funder outlines the Realistic Accuracy Model (RAM). As discussed by Biesanz, this model has a wide range of practical applications.

Now, another of the major challenges facing the field is how to account for *inter*-individual (between people) differences, as measured by personality *traits*, and *intra*-individual (within-individual) variations that characterize the *state* fluctuation of a person's behaviour (and thoughts, feelings, desires and so on) over time (ranging from minutes to years) – and, importantly, how states and traits relate to one another. This is an important issue because state variations are large, and, in fact, can be larger than the trait differences observed between people. John Rauthmann and Manfred Schmitt in Chapter 13 (**Fleeson, 2001**) summarize how traits and states can be reconciled in terms of 'density distributions': these summarize *individual* within-person trait-expressions in states (several intra-individual density distributions from single individuals can be aggregated to form an inter-individual density, trait-like, distribution). In this way, inter-individual traits may be seen to come from the density of intra-individual states. One positive outcome of this view is the widescale adoption of experience sampling, which is made easier and more sophisticated by mobile technology. Fleeson's work made us think about, and then research, the fundamental connection between these very different levels of abstraction and measurement, which hitherto seemed, if not irreconcilable, very difficult to unify within a common theoretical and measurement system. As a direct consequence of Fleeson's work, it is possible to resolve a number of long-standing debates (e.g., consistency/stability vs. variation, and structure vs. processes).

Finally, Chapter 14 (**Paulhus & Williams, 2002**), concerns itself with the 'dark' side of personality which has had a major impact on how we think about and research the opposite of the 'bright' side of personality. As discussed by Virgil Zeigler-Hill and David Marcus, this classic study focuses on the, so-called, 'Dark Triad: narcissism (grandiosity, unjustified entitlement and undeserved superiority); psychopathy (callousness, impulsivity and interpersonal antagonism); and Machiavellianism (devious, harm inflicting and manipulativeness). Zeigler-Hill and Marcus note that these dark aspects of personality have attracted a tremendous degree of empirical attention since the early 2000s and this owes much to the pioneering work of Paulhus and Williams. It is perhaps surprising that the importance

of these dark aspects was not appreciated sufficiently before – although they have long been in the literature (most notably, Cleckley, 1941) – especially as their negative effects are played out in every quarter of life, often to a degree that is hard to ignore (see Babiak & Hare, 2007).

ORDER OF CHAPTERS: HOW TO READ THIS VOLUME

Chapters are presented in chronological order. This is more than mere convenience; it affords a temporal perspective that goes to show just how studies, even seminal ones, are built upon the foundations of previous work – this reflects Isaac Newton's own views on science as expressed in a letter to Robert Hooke (5 February, 1676): 'If I have seen a little further it is by standing on the sholders of Giants [*sic*]' (Some people think this was an insult to Hooke who was both diminutive in stature and physically deformed – if true, then a reflection on Newton's own, it must be admitted, peculiar, personality!).

However, chronology can be misleading with regard to the true course of scientific progress. For example, Webb's (1915; Chapter 1) study of personality had relatively little impact during the early years, but today it is seen as a major achievement; Allport and Odbert's (1936; Chapter 2) work clearly influenced R. B. Cattell's sophisticated factor analytical work (1943; Chapter 3), but neither seems to have had much of an impact on Hans Eysenck's own factor analytical work (1944; Chapter 4). What we now see as Tupes and Christal's (1961; Chapter 5) 'Big Five' personality description had much less traction at the time than Norman's (1963) work, which was along the same lines but which enjoyed the advantage of being published in the mainstream psychology literature rather than being buried in an inaccessible US Air Force report. In contrast, chronological progression can more readily be seen in Jeffrey Gray's (1970) classic paper which could not have been conceived without the prior work of Hans Eysenck. When viewing this history, we must be wary of falling into the trap of what might be coined *hindsight consistency bias*: looking back and seeing purpose and order in how things unfolded over time– the true nature of scientific progress is rarely so neat, almost always messier, and all the more interesting.

INTENDED READERSHIP

Before agreeing to the commission of a new book, the publishing company will ask, 'What is the readership?', by which they mean, 'Who will buy it?' This is a fair question. *This* volume will be of value to psychology undergraduate and A-level students, who want a deeper understanding of the classic studies that underpin the field of personality and individual differences – such in-depth coverage is simply not permissible in standard textbooks. In addition, it will be of value to graduate students, researchers and those with applied psychological interests.

But it is not only for these target markets. As the book progressed, it became clear that classic studies are not well understood even by professors in the field. This was brought home by Chapter 7, in which Neil McNaughton and Philip Corr discuss Jeffrey Gray's (1970) seminal paper. Despite McNaughton being a long-standing research colleague of Gray's and Corr's PhD having been supervised by Gray on the very topic of his personality theory, it soon became apparent that the implications of Gray's (1970) paper were far from obvious. This was unexpected: we thought we knew the paper inside-out! This realization attests to the importance of revisiting classic studies in order to understand them fully in the light of current understanding. As world-leading experts have contributed to this book and have clarified the true significance of these classic studies, even seasoned professionals in the psychology business will gain new insights from revisiting them.

Any published book requires a dedicated editorial and production team. I gratefully acknowledge Luke Block, the commissioning editor who saw the value of this volume, and Lucy Dang, Becky Taylor and Katie Rabot – they have great personalities!

REFERENCES

Babiak, P., & Hare, R. D. (2007). *Snakes in suits: When psychopaths go to work*. London: HarperBusiness.

Barrick, M. R., & Mount, M. K. (1991). The big five personality dimensions and job performance: A meta-analysis. *Personality Psychology*, *44*, 1–26.

Cleckley, H. (1941). *The mask of sanity: An attempt to clarify some issues about the so-called psychopathic personality*. Oxford: Mosby *[www.cix.co.uk/~klockstone/sanity_1.pdf].*

Corr, P. J. (2016). *Hans Eysenck: A contradictory psychology*. London: Palgrave.

Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, *52*, 281–302.

Eysenck, H. J. (1952). *Scientific study of personality*. London: Routledge & Kegan Paul.

Fiske, D. W. (1949). Consistency of the factorial structures of personality ratings from different sources. *Journal of Abnormal and Social Psychology*, *44*, 329–344.

Guion, R. M., & Gottier, R. F. (1965). Validity of personality measures in personnel selection. *Personnel Psychology*, *18*, 135–164.

Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *Journal of Abnormal and Social Psychology*, *66*, 574–583.

Skinner, B. F. (1974). *About behaviorism*. London: Cape.