Personality and Individual Differences

Bere Mahoney

Series Editor: Dominic Upton
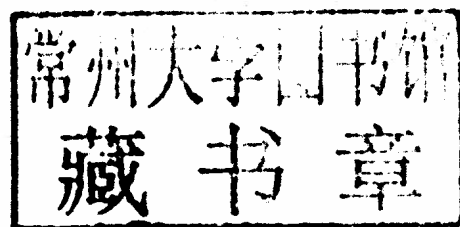
critical thinking in psychology

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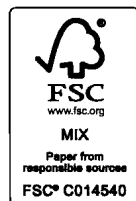
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Critical Thinking in Psychology – titles in the series

Acknowledgements

Series editor's introduction

Studying psychology at degree level

Being a student of psychology is an exciting experience – the study of mind and behaviour is a fascinating and sprawling journey of discovery. Yet studying psychology at degree level brings with it new experiences, new skills and new knowledge. This book, one in a comprehensive new series, brings you this psychological knowledge but importantly brings with it directions and guidance on the skills and experiences you should also be developing during your studies.

Psychology is a growing discipline – in scope, in breadth and in numbers. It is one of the fastest growing subjects studied at GCSE and A level, and the number of students studying the subject at university has grown considerably over the past decade. Indeed, psychology is now one of the most popular subjects in UK higher education, with the most recent data suggesting that there are some 45,000 full-time students currently enrolled on such programmes (compiled from Higher Education Statistics Agency (HESA) statistics available at www.hesa.ac.uk), and it is likely that this number has not yet peaked.

The popularity of psychology is related to a number of reasons, not the least of which is its scope and its breadth – psychology is a sprawling discipline that seeks to analyse the human mind and behaviour, which is fascinating in its own right. Furthermore, psychology aims to develop other skills – numeracy, communication and critical analysis, to name but a few. For these reasons, many employers seek out psychology graduates – they bring a whole host of skills to the workplace and to any activities they may be involved in. This book brings together the knowledge base associated with psychology along with these critical skills. By reading this book, and engaging with the exercises, you will develop these skills and in this way you will do two things: excel in your studies and your assessments, and put yourself at the front of the queue of psychology graduates when it comes to demonstrating these skills to potential employers.

Developing higher level skills

Only about 15–20 per cent of psychology graduates end up working as professional psychologists. The subject is a useful platform for many other careers because of the skills it helps you to develop. It is useful to employers because of its subject-specific skills – knowing how people act is pertinent in almost any job and particularly relevant to those that involve working directly with people. But psychology also develops a number of generic and transferable skills that are both essential to effective undergraduate study and valuable to employers. These include higher-level intellectual skills, such as critical and creative thinking, reflection, evaluation and analysis, and other skills, such as communication, problem solving, understanding and using data, decision making, organisational skills, teamworking, and IT skills.

The Quality Assurance Agency for Higher Education (QAA) subject benchmarks for psychology (www.qaa.ac.uk/academicinfrastructure/benchmark/honours/psychology.asp), which set out the expectations of a psychology degree programme, highlight the sorts of skills that your degree should equip you with. The British Psychological Society (BPS), which accredits your degree course, acknowledges that graduate employability is an important area of focus for universities and expects that opportunities for skills development should be well embedded within your programme of study. Indeed, this is a major focus of your study – interesting as psychology is, you will need and want employment at the end of your degree.

The activities in this book have been designed to help you build the underpinning skills that you need in order to become independent and lifelong learners, and to meet the relevant requirements of your programme of study, the QAA benchmarks and the needs of you and your potential employer.

Many students find it a challenge to develop these skills, often learning them out of the context of their study of the core knowledge domains of psychology. The activities in this book aim to help you to learn these skills *at the same time* as developing your core psychology knowledge, giving you opportunities to continuously practise skills so that they become second nature to you. The tasks provide guidance on what the skill is, how to develop basic competence in it and how to progress to further expertise.

At the same time, development of these skills will enable you to better understand and retain the core content of your course. Being able to evaluate, analyse and interpret content is the key to deepening understanding.

The skills that the activities in this book will help you to develop are presented in Table 0.1.

Table 0.1: Skills developed in this book

Generic skills	Transferable skills
• critical and creative thinking	• communication: oral, visual and written
• reflection	• problem solving
• analysing and evaluating	• understanding and using data
	• decision making
	• organisational skills
	• teamwork
	• information technology
	• independent learning

In addition to review questions and essay questions, each chapter in this book contains novel learning activities. Your responses will be guided through these activities and you will then be able to apply these skills within the context of personality and individual differences psychology.

Features in this book

At the start of each chapter there are **learning outcomes**. These are a set of bullet points that highlight the outcomes – both skills and knowledge – that you should achieve if you read and engage with the chapter. These bullet points aim to orientate you, the reader, to the content of the chapter before you begin reading it and to demonstrate the relevance of the topic.

We have also included learning features throughout the individual chapters in order to demonstrate key points and promote your learning.

- **Bulleted lists** are used within the chapter to convey key content messages.

- **Case studies** are included as parts of critical thinking activities.

- **Tasks** are a series of short review questions on the topic that will help you assess yourself and your current level of knowledge – use these to see if you can move on or whether you need to re-read and review the material.

- **Critical thinking activities** allow for a review of the text by encouraging key critical and creative thinking of the psychology material presented, and provide for the development of generic skills. Each of these activities is followed by a **Critical thinking review** which unpicks the activity for you, showing how it should have been tackled, the main skill it develops and other skills you may have used in completing the activity.

- **Skill builder activities** use the psychology material presented in the text, but are focused on one particular transferable skill as outlined in Table 0.1. Each of these activities is followed by a **Skill builder review** which may provide further hints and which makes explicit the skills it helps to develop and the benefits of completing the activity.

At the end of the chapter there are also some pedagogic features that you will find useful in developing your abilities.

- **Assignments** in order to assess your awareness and understanding of the topic we have produced a series of questions for you to discuss and debate with your colleagues. You can also use these questions as revision materials.

- **Summary: what you have learned** at the end of each chapter we present a summary of the chapter. We hope that this will relate back to the learning outcomes presented at the outset of the chapter.

- **Further reading** we have included between two and four items that will provide additional information – some of these are in journals and some are full texts. For each we have provided the rationale for suggesting the additional reading and we hope that these will direct you accordingly.

- **Glossary** entries are highlighted in bold in the text on their first appearance in a chapter.

Finally, there is a full set of **references** to support all of the material presented in this text.

We hope you enjoy this text, which is part of a series of textbooks covering the complete knowledge base of psychology.

This book, and the other companion volumes in this series, should provide one place to cover all of your study needs. It will, obviously, need to be supplemented with further reading, and this text directs you towards suitable sources. We hope that you find this book useful and informative and a guide both for your studying now and in your future as a successful psychology graduate.

Professor Dominic Upton
June 2011

Contents

Chapter 1

Individual differences
Aims, methods and ethics

Learning outcomes

By the end of this chapter you should:

- *be able to define what is meant by individual differences psychology and to discuss, critically, its aims and fundamental principles;*

- *be able to outline and consider, critically, the main research methods and measurements, or types of data, used in the field;*

- *understand and be able to evaluate the use of the psychometric approach in the study of individual differences;*

- *be able to identify and examine, critically, why reliability, validity, test norms and standardisation are important to the methods and measurements used in individual differences psychology;*

- *through completing a critical thinking activity and a skill building activity, understand some of the ethical challenges involved in using measurements of individual differences.*

Introduction

In this chapter you will consider the scope, research methods and measurements – or types of data – along with some of the ethical challenges faced in individual differences psychology, a field of inquiry within the discipline of psychology. You will do this by attempting to answer the following questions.

- What do we mean by individual differences psychology?

- What are the aims and fundamental **principles** of this **field of psychology**?

- How do psychologists study individual differences?

- What sorts of ethical challenges do psychologists face in individual differences psychology?

- Why are the analysis and evaluation of measurements or data important to the use and study of individual differences?

We need to ensure we have a clear understanding of what the term *individual differences psychology* means before attempting to answer these questions. However, as is often the case in psychology, the terminology we use, and on occasions its misuse and abuse, are important in shaping the discipline. The field of individual differences psychology is no exception to this tendency. For example, some researchers use the term **differential psychology** to denote the field of individual differences psychology (Lubinski, 2000; Revelle et al., 2010). Other researchers focus on specific aspects or domains of individual differences in their terminology. For example, in the USA and to some extent Europe (e.g. Caprara and Cervone, 2000) the terms *personality psychology* and even *intelligence* are sometimes used to describe the field. Indeed, terms such as personality psychology, intelligence, differential psychology and individual differences psychology are related, and are used interchangeably by some researchers (Lubinski, 2000). However, some researchers use these terms in ways that have more distinct meanings. For example, these different terms can indicate the phenomena researchers focus on, or their theoretical and methodological approach to the field.

In this book, a broad and inclusive approach to the field is taken – what has been described as **whole person psychology** (Caprara and Cervone, 2000). This approach assumes that a necessary aim of individual differences psychology should be the identification of *what individual differences look like*, for example by describing their apparent structure. However, this approach also assumes that such a focus on describing individual differences – referred to here as the *what* of individual differences – is insufficient for achieving whole person psychology. What is also necessary is the study of *determinants* – referred to here as the *why* of individual differences – and *functions* – referred to here as the *how* of individual differences. In other words, individual differences psychology should study the what, why and how of individual differences phenomena. We refer to them here as the *3-dimensions* or *3-ds*, and the approach taken here is one that attempts to consider the field as one that needs to be *3-dimensional*. Achieving an understanding of these *3-ds* means focusing not merely on describing individual differences but also on understanding the processes and functions of individual differences phenomena. Therefore, in Chapter 9, once we have examined the main topic areas of the field in Chapters 2 to 8, we will return to this issue and you will be asked to consider, critically, how 3-dimensional individual differences psychology is. It is important that we clarify what we mean by the terminology we use here. The term individual differences psychology and the related term *individual differences* are used here to capture the assumptions about the aims of the field used in this book. The use of these terms is also both *pragmatic* and *descriptive*. These terms have a pragmatic usefulness because they are readily identifiable in the content of the British Psychological Society's syllabi for undergraduate and postgraduate courses it accredits. Furthermore, the terms also feature heavily in undergraduate and graduate level textbooks, journal articles and journal titles, and are therefore useful search terms. Finally, the terms have descriptive value as researchers often refer to *individual differences* within domains considered in the field, such as individual differences in personality, intelligence and motivation.

The overall goal of this chapter is to set the scene for the remainder of this book by developing your understanding of some of the fundamental conceptual and methodological issues that shape individual differences psychology and, to some extent, give it characteristics distinct from other fields. These are the starting points for the fundamental purpose of this book – which is to encourage you to think critically about the field generally and about the topics we will consider. This book attempts to take a broad, inclusive and whole person psychology approach to the study of individual differences, and this is a challenging position to take. For example, this book is inevitably selective in its content. Exhaustive coverage of the vast domain of research in individual differences psychology is beyond its scope. It could be argued that using selective content actually makes it impossible to consider the field using a *3-d* approach. However, it is important to understand that the particular broad, inclusive and whole person psychology approach to the field used here is not fundamentally quantitative – in other words, it is not simply achieved by exhaustive coverage of the greatest number of topics within the field (Caprara and Cervone, 2000). Rather, it is fundamentally *qualitative* – it is about a particular perspective or way of thinking about individual differences psychology that entails recognising the value of considering how *3-d* the field actually is, based on the premise that such an approach could ultimately provide the fullest understanding of individual differences (Lubinski, 2000). Furthermore, judging the actual 3-dimensionality of the field is an intellectual activity that involves thinking critically about a range of 'taken for granted' assumptions used in the field (Yanchar and Slife, 2004). Exhaustive coverage of individual differences topics is therefore not necessary to achieve the fundamental purpose of this book – which is to encourage you to think critically about key topics and issues in individual differences psychology.

Nevertheless, it is impossible to avoid both the complex range of psychological phenomena that characterises individual differences psychology and the sheer breadth of psychological phenomena it encompasses. This alone presents students of the field (and, indeed, those writing textbooks in the field) with a challenge. In this book, students are presented with the additional challenge of trying to approach the field of individual differences psychology by considering critically how *3-d* it is. This whole person psychology approach requires the holistic and integrated study of the full range of psychological phenomena – affects, behaviours, cognitions and desires (Caprara and Cervone, 2000) – but without exhaustive coverage of topics in the field. To help you meet this challenge we will spend some time considering what makes individual differences psychology distinct from other fields in the discipline. The affects, behaviours, cognitions and desires it considers are, of course, of interest to psychologists in general. However, what makes individual differences psychology distinct from other fields when studying these phenomena emerges partly from how the field typically goes about studying these phenomena – its predominant aims, and the principles and methods it uses. These give the field a distinct identity or approach, albeit a controversial one, as the field is far from unified in its approach to individual differences. In particular, not all of those working in the field support the predominant methods it uses, and specifically the approach of choice by the majority – the *psychometric* approach. This

means that researchers are also reflecting on the very fundamentals of the field in terms of the **theory, research paradigms**, methods and measures currently synonymous with individual differences psychology. For example, some researchers are considering critically how psychometrics – so prototypical of the methods used in the field – are faring as the approach of choice in individual differences psychology (Boorsboom, 2006; Lamiell, 2007), along with the consequences of the dominance of psychometrics for the psychological landscape of the field. This also means that researchers are questioning which aspects of individual differences the field actually focuses on. Despite discussions about these issues, the focus of the field remains fixed strongly on describing the nature and structure of individual differences in the domains of personality and intelligence, along with the predictive usefulness of these structures – the *what* of the *3-dimensions*. There is still rather less attention focused on the determinants – the *why* – and even less attention focused on the functions – the *how* – of individual differences in the field. Determinants and functions of individual differences can be referred to as the process mechanisms (Revelle et al., 2010) of individual differences or what can also be described as **inter-** and **intra-individual processes** (Cervone, 2005). This relatively narrow focus has, to some extent, been aggravated by the effects of specialisation – or separatism – in the field, a trend that some regard as problematic because:

> *a much richer picture of humanity and psychological diversity is brought into focus when constellations of individual-differences variables are assembled for research and practice.*
>
> (Lubinski, 2000, p407)

In Chapter 2 you will therefore consider how the relationship between individual differences psychology and other fields in psychology is increasingly being questioned (Sternberg et al., 2001). Nevertheless, the psychometric approach remains dominant in the field, meaning that the integrity of individual differences psychology continues to depend on the soundness of this approach.

The term *psychometrics* literally means the measurement of psychological phenomena or mental processes (Bartram and Lindley, 2005), and in individual differences psychology this means the measurement of psychological phenomena we refer to as individual differences. Measurements or measures of individual differences we collect in the field are therefore central to the psychometric approach. Measures of individual differences, or individual differences data, are used in real contexts to make important decisions about individuals or groups of individuals (Lubinski, 2000; Revelle et al., 2010). Consequently, the measurements we use in individual differences psychology, along with the methods we use to collect the data that form these measures, have social significance. This is because they are used in real contexts to make important decisions about individuals or social groups (Lubinski, 2000; Revelle et al., 2010). The field's contribution to such high-stakes decision making about individuals and groups in the domains of education, work, mental health and the criminal justice system remains unabated and substantial (Revelle et al., 2010). Thus the theoretical and empirical findings of the field have both academic and real world significance. The reality is that the access of individuals and social groups to certain resources and opportunities in

the domains of education, training, work and within the criminal justice system involve the collection and interpretation of individual differences measures and data. This means that when working in the field – whether as academics, practitioners or students – our conduct is of *ethical* and *professional* importance. In this chapter we will therefore also consider some of the ethical and professional responsibilities we have in the field. Our overarching responsibility is to ensure that we competently and respectfully uphold the highest possible standards of quality in the methods of data collection we use, the data we collect and our interpretation of such data, or its analysis and evaluation. The importance of these issues means we will return repeatedly to these issues throughout this book. Ethics and professional conduct are also issues that are an important part of your **reflective critical thinking** about the field.

Finally, you are studying individual differences psychology at an interesting time in its development. The tasks and activities in this chapter are designed to encourage you to think critically about such issues. At the end of the twentieth century researchers reflected on the so-called *vision of the future* of individual differences in the twenty-first century in light of over 100 years of activity. Currently, we are seeing the resurgence of old debates about what the scope and aims of the field should actually look like. Indeed, Lubinski's (2000) view cited earlier was far from new at the start of the twenty-first century. Such a broad and inclusive approach to individual differences psychology can be found in the earlier writings of classic researchers in the field such as Thorndike and Cronbach in the 1940s and 1950s (Ackerman, 1997). Currently, debates about the apparent narrowness of the focus and methods of much of contemporary individual differences psychology are not necessarily creating intellectual tidal waves through the field – there is a quality of déjà vu about some of the current controversies. Indeed, there have been many apparent intellectual tidal waves in the field, and they tend to come and go with some degree of cyclical regularity. In fact, it is difficult to find a topic or domain in individual differences psychology that has not witnessed the boom and bust of a major theory or empirical finding. Rather, it appears that current debates are presently sending gentle ripples of controversy through the field. However, these more controversial issues can often be overlooked (e.g. Boorsboom et al., 2004), as undergraduates are often encouraged, quite rightly, to focus on key studies and general trends in the discipline and in its various fields of inquiry. Nevertheless, in this chapter you will be encouraged to consider both general, or mainstream, trends *and* more controversial issues in individual differences psychology. Considering the more controversial issues in the field should also help to develop your critical thinking skills.

The scope of individual differences psychology

Identifying the scope of individual differences psychology – how we define the field and its aims – is important because it will help you understand the particular characteristics of the field, and this is, therefore, the first task we will attempt. We will then examine how research on individual

differences is conducted – by considering the **concepts** and fundamental principles of the field. Remember that the issues covered have been selected because of their importance rather than to provide comprehensive coverage.

Defining individual differences psychology

What is meant by *individual differences psychology* and what are *individual differences?* Defining these terms is an important task because it will help clarify the scope of the field, and the range of psychological phenomena that is studied. One way of understanding this scope is to try to identify the sorts of questions that might be asked in individual differences psychology about different psychological phenomena.

Task ——— Below is a scenario (Norton, n.d.) that describes the situation of a fictional character called Justine. Your task is to read this scenario and then, either individually or in groups, to identify the sorts of comments, issues and questions you think might be asked in individual differences psychology about the scenario. Remember, at this stage all you need to do is to base your answers on what you believe or already know about individual differences psychology. There are no right or wrong answers in this task and it is acceptable to include your personal beliefs and experiences here – do not feel compelled to make your responses appear 'academic' at this point unless they actually are.

Justine is a bright, attractive and likeable 19-year-old in her first year at university and studying for a degree in psychology. She has been advised to see a student counsellor by her personal tutor, who is very worried about her. Apparently, after a good start Justine has been missing lectures, seminars and workshops and is now falling behind in her coursework. When she went to see her personal tutor she said she had been feeling 'down' and 'miserable', and then broke down and appeared extremely distressed. She could not stop crying and shaking but refused to say what was wrong. In her first meeting with the student counsellor, Justine looks unwell and finds it hard to speak. After a long silence, she eventually blurts out that she is terrified of public speaking and simply cannot face the psychology workshops. She says she has been completely thrown by an essay that she is supposed to be writing on phobias because every time she tries to read up on the subject, she is reminded of her own fear, which now seems to be generalising to a fear of going out to public places. In the last few weeks this has become so bad that she has practically stopped going out altogether unless it is absolutely