### **ARTICLE IN PRESS**

Journal of Research in Personality xxx (2014) xxx-xxx



Contents lists available at ScienceDirect

# Journal of Research in Personality

journal homepage: www.elsevier.com/locate/jrp



# Thinking bigger: The Cronbachian paradigm & personality theory integration

Arthur E. Poropat a,\*, Philip J. Corr b

- <sup>a</sup> School of Applied Psychology, Griffith University, Australia
- <sup>b</sup> Department of Psychology, City University London, United Kingdom

#### ARTICLE INFO

Article history:
Available online xxxx

Keywords: Personality theory Generalisability theory Intra-individual models Inter-individual models Theoretical paradigms

#### ABSTRACT

Personality theories largely mirror disparities between fundamental paradigms that guide most psychology: one based upon Galton's emphasis on inter-individual differences and the lexical hypothesis; the other inspired by Wundt is focused upon intra-individual processes, such as temperament and Reinforcement Sensitivity Theory. Previous integrations of personality models using these paradigms failed to account for observed variance, suggesting model incommensurability. We propose that a broader conception—developed from Cronbach and colleagues' generalisability theory—provides an effective integrating framework, and show how Galtonian and Wundtian models may be assimilated within Cronbachian approaches. Additionally, Cronbachian models have novel practical implications. Application of the Cronbachian paradigm to personality will be challenging, but provides an opportunity to achieve genuine coherence in personality research.

Crown Copyright  $\ensuremath{@}$  2014 Published by Elsevier Inc. All rights reserved.

#### 1. Introduction

The plethora of theories of personality have long shown remarkable variety, from pre-scientific thought (e.g., Galen's humours, Hindu types, astrological signs) to more recent approaches based upon systematic, empirical investigation. Currently, trait models of individual differences predominate, although more idiographic (e.g., Grice, 2004; Molenaar, 2004) and dynamic conceptualisations (Caprara & Cervone, 2000) have well-argued advocates.

A range of attempts have been made to integrate these various models and theories, several of which are reviewed in this paper. However, we will be arguing that these attempts at harmonisation are inherently limited by failure to consider issues associated with the underlying theoretical-epistemological paradigms that guided the development of the various personality models. Specifically, we will argue that underlying paradigmatic conceptual issues have produced models that are not readily commensurable in that they do not refer to the same phenomena, and attempting to measure these phenomena using tools appropriate for alternative paradigms will be indeterminate at best and likely to be actively misleading. Instead, a broader paradigm is essential for understanding the nature of personality and should be central to any attempts at

E-mail address: Arthur.Poropat@Griffith.edu.au (A.E. Poropat).

http://dx.doi.org/10.1016/j.jrp.2014.10.006

0092-6566/Crown Copyright © 2014 Published by Elsevier Inc. All rights reserved.

integrating personality models. That broader paradigm is already available, and enables the synthesis of existing elements of personality theories and models, thereby providing a firmer basis for future theoretical and methodological developments in personality research and application.

The idea that conceptual elements have a major influence on the development of personality models is hardly a novel notion, but this tends to get overlooked in considerations of personality theory. Yet, the potency of paradigms in personality research is easily recognised, as exemplified by the manner in which various personality models were initially developed and subsequently assessed. For example, the dominant model of personality is the 'Big 5' (B5), which is largely defined by descriptive markers (Goldberg, 1992) and was developed by empirically identifying factors within common-language descriptors of persons (Goldberg, 1993; Saucier & Goldberg, 2001). Consequently, the components of the B5 have largely been assessed on the basis of the extent to which they have been confirmed in subsequent factor analyses (Saucier, 2009), or by testing the efficacy of B5-based personality inventories for statistical predictions of criterion variables (Roberts, Kuncel, Shiner, Caspi, & Goldberg, 2007). This approach contrasts with models of personality which were derived from psychological theories based on biological understanding or neuropsychological functioning, such as reinforcement sensitivity theory (RST) (Gray & McNaughton, 2000). Likewise, personality models based upon theories of human or evolutionary development, often referred to as temperament theories (e.g., Buss & Plomin, 1975;

<sup>\*</sup> Corresponding author at: School of Applied Psychology, Griffith University, Mount Gravatt, Queensland 4122, Australia.

Shiner et al., 2012), typically rely on theoretical bases for identification of key dimensions of personality. Unlike the empirically-based models, questionnaires and scales are not the only, and not necessarily the best, measurements of the underlying constructs associated with these theoretically-based personality models, and validity tests of these models may not involve standard personality inventories at all (e.g., consider Matthews & Gilliland, 1999 and their discussion of the measurement of RST).

#### 1.1. Wundtian and Galtonian personality paradigms

These issues in personality research reflect many of the basic assumptions adopted within psychology since its inception as a scientific discipline. When considering the history of perception research, Popple and Levi (2000) argued that two paradigms have dominated psychological endeavours, reflecting the guiding assumptions advocated by Wundt and Galton, respectively. In the Wundtian paradigm, understanding intra-individual dynamics has been emphasised, with the assumption that this will lead to knowledge of general principles and hence generalisability (Popple & Levi, 2000). Among personality models, RST and Posner and Rothbart's (2007) theorising about temperament on the basis of attentional processes reflect this intra-individual, Wundtian approach. The contrasting Galtonian paradigm starts from a focus upon inter-individual differences, effectively using these as the basis for development and understanding of principles with the intention of subsequent application back to individuals (Popple & Levi, 2000), as clearly reflected by the methodologies that supported the identification of the B5 and comparable models. This difference is seen between Eysenck's (1947, 1967) inter-individual differences approach based on statistical variations between people, which were then extended to intra-individual difference via the constructs of arousal and activation; and Gray's (1975, 1982) primary focus on intra-individual differences in reinforcement sensitivity, which were then extended to inter-individual differences in personality traits. The difficulty of integrating even these two theoretical approaches, despite their apparent overlaps, attests to the nature of this conceptual problem.

In short, the Wundtian approach to personality is about attempting to explain personality, while the Galtonian approach to personality has been more focused on describing personality. This distinction underlies much of the debate about models surrounding the B5, which has long been most heavily criticised for its lack of explanatory value (Block, 2001; Revelle, 1987), despite its substantial utility for describing aspects of personality relevant to differences in life outcomes observed between people. Failure to recognise the disparate paradigmatic bases of these approaches is likely to result in confused and misleading efforts when researchers attempt to integrate models across paradigms. These shortcomings are a direct consequence of the failure to consider that both Wundtian and Galtonian models operate at different levels of analysis, thereby running afoul of the well-recognised observation from systems theory that conclusions that are valid at one level of analysis are not necessarily applicable at other levels (for a personality-based demonstration of this, see Molenaar & Campbell, 2009). Failure to recognise these limitations has been recognised as a hindrance to effective integration within cognitive psychology (Popple & Levi, 2000); similar problems should be respected within personality psychology.

Yet, personality research (and psychological research more generally) is further complicated by the fact that both personality as a phenomenon (Andersen & Chen, 2002) and every assessment of personality (Kenny & West, 2008) are inherently social, thereby creating effects linked with both judges of personality and the targets of their assessments. Seriously acknowledging these issues of conflicting levels of analysis and the inherently social nature of

personality expression and assessment militates against the types of integration that have previously been proposed.

#### 1.2. A Cronbachian integrative paradigm

Despite the range and longevity of these problems, there are ideas based on measurement theory that speak directly to the issues outlined above, which have been discussed under the label of generalisability theory. Although many others have been involved, the name that appears to have dominated the initial development of generalisability theory is that of Lee Cronbach (e.g., Cronbach, Gleser, Nanda, & Rajaratnam, 1972; Cronbach, Rajaratnam, & Gleser, 1963) and much of this was conceptually anticipated in earlier work by Cronbach (e.g., Cronbach, 1957); hence, we suggest that a third approach to personality theory - a Cronbachian paradigm in contrast with the Wundtian and Galtonian paradigms. To appreciate this alternative, it is necessary to consider the basics of generalisability theory, which was developed as a means for modelling the range of systematic influences on psychological measurements. These influences include elements linked with specific traits, targets and judges of ratings, contexts, measurement tools, temporal factors, etc. As such, the Cronbachian paradigm goes beyond the consideration of causes of behaviour outlined in interactionist models of personality (see Reynolds et al., 2010 for a recent consideration of this approach), to also consider the interpretation of behaviour, making personality judgement as important as personality expression. Later in this paper we argue that although often used to better comprehend psychometrical features, these ideas also imply a theoretical framework that will enable researchers to conceptually integrate elements of both intra- and inter-individual models. Thus, the Cronbachian paradigm contrasts with the Galtonian paradigm, which requires intra-individual elements to be viewed from an inter-individual basis, or the Wundtian paradigm which demands the reverse. This Cronbachian approach to integration of personality theories therefore has important implications for the ontological status of constructs included within existing personality models.

In the next sections, we outline the consequences of the methodological bases of Galtonian and Wundtian models of personality, before critiquing previous attempts at integration. We then outline the alternative Cronbachian approach for integrating personality models, before providing recommendations for future research.

#### 1.3. Galtonian (inter-individual) personality models

One of the most successful hunches in psychology has been the lexical hypothesis, which is based on the idea that there should be a relationship between individual differences and natural languages. Preliminary thoughts that led to the lexical hypothesis were presented by Galton (1884) himself, developed greatly by Allport and Odbert (1936), before later researchers, notably Tupes and Christal (1958), Norman (1963) and Goldberg (1981), used it as the basis for identifying the B5. At heart, the lexical hypothesis is the proposition that natural languages develop in such a way that they enable identification of important psychological features by providing more descriptors for these, because social and evolutionary advantages will accrue to individuals who can use words that accurately identify important individual differences: this allows individuals greater facility for description and, importantly, prediction of behaviour. A series of exploratory factor analyses of English adjectives in the middle of the twentieth century converged on what came to be the known as the B5, which is probably the most-cited and most-used model of personality.

Consistent with the lexical hypothesis, the components of the B5 have been clearly demonstrated to be important, having reliable associations with a range of socially-valuable outcomes including

## Download English Version:

# https://daneshyari.com/en/article/7326833

Download Persian Version:

https://daneshyari.com/article/7326833

<u>Daneshyari.com</u>