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Trait models going forward

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Abstract

Broad personality domain models such as the Big Five and HEXACO have been a good value and will remain useful for many purposes. Understanding their overlaps and differences will benefit from a usefully comprehensive pool of narrower traits, for the domains are nothing more but these narrower traits assembled in different ways. Besides helping the broad domains, such a pool will allow us study personality development and links with life outcomes with greater accuracy.

Ashton and Lee have written a skilfully structured, well argued and generally fun to read paper. Even if I wanted to, I would find it hard to criticise its general spirit or disagree with many specific arguments therein. But even though the question of how to represent personality variation surely is among the central ones in personality science, choosing between any number broad domains (three? five? six?) will always be an arbitrary decision. We should not be trapped into assuming that there is the Right Model that we should all go with, no matter what. Moreover, choosing between a Big Five or Big Six is currently not the most pressing problem in my view. For usefully describing personality variation, a more immediate problem may be to figure out the full *content* of major personality domains, not their number, and whether there are important characteristics beyond these broad domains that were are missing out on.

Do the five domains of the Big Five carve nature at its joints in the sense of comprising a finite and exhaustive set of underlying personality traits? Few would argue this, and I surely wouldn't. Instead, many researchers think that the Big Five usefully *summarise* the many ways in which people differ in their thinking feeling and behaviour. Now, do the six HEXACO domains represent the infinite and exclusive set of underlying personality traits? Most researchers would likely stop short of arguing this either, and nor do Ashton and Lee claim this.

As long as personality models are based on questionnaires, they are what their items are, no more, no less. Demonstrably, there are many dozens of non-redundant personality items in the Big Five and HEXACO measures, each containing a chunk of unique variance that is stable over time and agreed upon by different raters, and that often develops and tracks with life outcomes in distinct ways. McCrae (2015) has estimated that more than half of valid item variance is unique to it. And there is personality variance beyond both the Big Five and HEXACO; decades of factor analysis has done a good job at filtering it out (Booth & Murray, 2018). So, there are many partly overlapping, partly unique narrow personality traits -- far more than five or six. They can be combined into broader traits in various ways. Personality traits constitute and hierarchy, as Ashton and Lee say; elsewhere, the numerous trait collection has also been called *persome* (Mõttus et al., 2017 Revelle et al., 2020).

Trouble is, we know that these narrower traits exist, but we have not done a good job yet delineating them. There have been several attempts to carve out facets for the Big Five and HEXACO domains, but there is not much of a thorough research programme yet. I argue that *this* is a pressing problem. Lexical and questionnaire-based research to figure out the *major* traits of personality aimed at filtering out variance and aggregating as much as possible -- a race to the lowest common denominator. It made sense, at the time when even the most basic questions were not robustly answered (how stable are people over time or across situations? do people know each other? is personality correlated with genetic variance? are partners alike?). But now we know far more and the lowest common denominator alone is no longer enough. In addition to figuring out major traits, we now need a program to figure out the *many* traits of personality and how to efficiently measure them.

To be fair, there may not be a finite set of narrower traits either. But we may be able to delineate and routinely measure a usefully comprehensive pool of them. For example, I can imagine a personality model, and an associated personality questionnaire, that describes personality variation along 100 narrow dimensions, each measured with say 2 carefully selected items. Some may think it impossible to reliably measure a trait with two items. Indeed, this would not work for a broad trait domain, but not because items are inherently unreliable (many have re-test reliabilities over .70 and most over .60) but because items contain mostly unique variance. But you can measure a narrow trait perfectly fine with two good items (e.g., two items with a reliability of .65 combine to a scale with a reliability over .75). Actually, HEXACO does it already. And if a 200-item test sounds like too long, surely not all studies have to cover all traits: to study mechanisms of personality development, there is little value in measuring traits that do not change much with age.

Besides allowing us to study personality development or links with life outcomes in greater detail, delineating a usefully comprehensive pool of narrower traits will also arm us better to address the questions of Asthon and Lee: which broad personality traits can be distinguished and how they relate to one another? Any broader domains overlap when they aggregate overlapping narrower traits; they are distinct, when they aggregate distinct narrower traits. Having the comprehensive trait pool, we could pinpoint exactly where, why and how much different broad trait models overlap or contribute useful unique variance, and researchers could choose between them accordingly and given their purpose at hand. The Big Five and HEXACO domains could also sample their theoretically relevant constituents more broadly, becoming better measured and more predictive as a result.

Ashton and Lee write that often narrower traits are more useful then broader ones, so that sometimes one does not even need to bother with the latter. But they also point out that sometimes broad traits provide us with better value -- for weaving easy-to-grasp narratives, for example. Having a usefully comprehensive pool of narrower traits and being able to sample from them or combine them will not take any of this away. Instead, it will give us the better of both worlds -- broad sketches and the detail. I suspect Ashton and Lee would not disagree.

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