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### Surviving Two Critiques by Block? The Resilient Big Five Have Emerged as the Paradigm for Personality Trait Psychology

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## Surviving Two Critiques by Block? The Resilient Big Five Have Emerged as the Paradigm for Personality Trait Psychology

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In a career spanning more than 50 years, Jack Block has made numerous important contributions, especially in the fields of personality assessment, development, and structure. Block also spent a surprising amount of time and effort criticizing the work of others. In all, he has published more than 25 critiques, including some directed at colleagues in his own department (e.g., Block, 1989, 1995).

### Personality Is Stable: Yet Another Critique of the Big Five

In his 1971 book *Lives Through Time*, Block reported that personality is highly stable over the adult life span. Thus we should not have been surprised that Block's (this issue) last article, submitted just weeks before his death, is yet another critique. Still, we had hoped that the last article by one of the most eminent researchers in the field would be a generative gesture, uplifting and an inspiration for generations to come, maybe a constructive agenda for the future, or a unifying perspective on the goals and aspirations we all share as personality psychologists. We are saddened that this was not to be and that, instead of paying tribute and celebrating his lifelong contributions, we have been called to the awkward task of rebutting Block's final offering to the field.

We were also surprised because the particular target Block chose for this last critique is *again* the taxonomy of personality traits that has become known as the Big Five or Five-Factor Model (e.g., John, Naumann, & Soto, 2008). After all, in 1995, Block had already unleashed an all-out, no-punches-held attack on the Big Five that should have readily dispensed with this fledgling upstart in the world of personality structure, a model that at that time McCrae and John (1992) had described as a promising "working hypothesis" (p. 176).

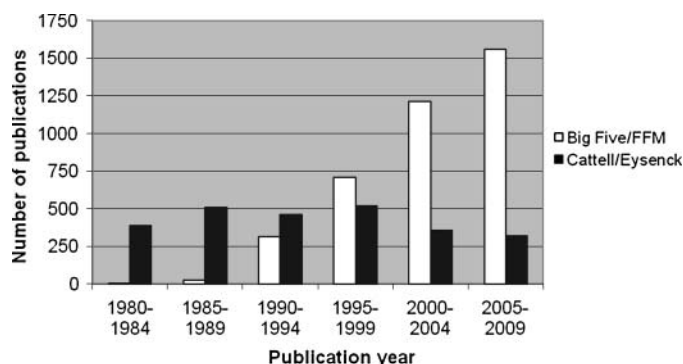
Astonishingly, Block (this issue) admits readily that much of his present article repeats the claims and arguments he had already levied against the Big Five in 1995. However, unlike good red wine, neither the substance nor the tone has mellowed with age. Thus,

one might ask how compelling and influential those same arguments have been since they were first articulated 15 years earlier. What happened since 1995? Consider the publication data in Figure 1, which shows the publication trends in personality trait psychology over the past 30 years. To illustrate how fundamentally the field has changed, we show the number of publications related to the Big Five personality traits for each 5-year interval, beginning in the early 1980s before the emergence of what we know today as the Big Five. Using keyword searches in PsycINFO, we identified the number of publications related to either the Big Five personality traits, and for comparison, the number of total publications for the two most influential earlier models, namely, Eysenck's (e.g., 1986) three-dimensional PEN model and Cattell's 16 Personality Factors model (e.g., Cattell, Eber, & Tatsuoka, 1970).

Note that Block's (1995) critique did not serve to kill off, derail, or slow down the research effort devoted to the Big Five. On the contrary. The publications focused directly on the Big Five numbered barely 100 in 1995 when Block's critique appeared, but the number of publications doubled over the next 5 years. In the 15 years since, almost 3,000 new publications on the Big Five have appeared. In contrast, during that period, the number of publications focused on Eysenck's and Cattell's influential trait models began to decline.

Note that these 3,000 new studies on the Big Five were carried out not by a small band of Big Five co-conspirators (those singled out by Block) but by ever greater numbers of independent and often younger scientists. Still, Block (this issue) now wants us to believe that this large body of work has produced "repetitive, unsurprising (and, in a sense, tautological) slight, nonchance findings within large samples" (p. 5). That characterization of the efforts of hundreds of independent-minded personality psychologists strikes us as remarkably negativistic and, frankly, out of touch with reality.

In hindsight, then, Block's 1995 critique did not spell the end of the Big Five but seems to have served as a signal that the Big Five "had arrived" and was finally taken seriously as a serious challenger for the scientific competition for the dominant model of personality



*Figure 1.* Number of publications related to either the Big Five personality traits or to the influential models developed earlier by Cattell and by Eysenck (in 5-year intervals) identified in a keyword search of the PsycINFO database. *Note.* The numbers identified in the figure as *Cattell/Eysenck* refer to the sum of all articles that used one of the measures developed by either Eysenck or Cattell as a keyword, such as “EPI,” “EPQ,” and “16PF”; those identified as *Big Five/FFM* are the sum of all articles that used as one of their keywords “Big Five,” “Five Factor Model,” “5 Factor Model,” and “+ personality” (to rule out misidentifications of articles using these keywords in other literatures, such as the “big five game animals in Africa”). In contrast to the version in John, Naumann, and Soto (2008), the data in this figure have been updated to extend to 2009.

structure. In 1995, we would have hardly predicted that some 15 years later the challenger had so far distanced the competition that the chapter on personality structure in the *Handbook of Personality* (John, Robins, & Pervin, 2008) would be titled “Paradigm Shift to the Integrative Big-Five Trait Taxonomy.”

Tellingly, Block (this issue) omits any reference to that chapter (John et al., 2008)—one of numerous surprising omissions in his uneven and highly selective review of the literature. The omission of that chapter is particularly unfortunate because it addresses many of the issues raised by Block, including the need for an empirical (and thus atheoretical) derivation of the Big Five factors, the naming and interpretation of such broad dimensions, the use of verbal labels and lay nomenclature versus scientific terms, the breadth and hierarchical nature of the taxonomy, the degree to which different measures of the Big Five agree with each other, and so on. In short, Block’s arguments and complaints are not new, and many of them have been considered by researchers who take seriously the need for a taxonomic structure in personality. Most of Block’s criticisms apply to any realistic taxonomic effort in personality psychology—whether by Cattell, Eysenck, Tellegen, or indeed Block himself, as he was still able to observe wistfully in 1995—commenting on his preferred taxonomic variables, he noted, “I do not offer this set of variables as definitive or as without problems similar to those that beset the FFA” (Block, 1995, p. 204). The limited space here does not allow for a serious and measured response to the large num-

ber of arguments and claims compiled by Block in his target article. For an alternative view of reality, and at least a partial rebuttal, we therefore refer the reader to the chapter in the 2008 *Handbook*.

### What Is Block’s Alternative? Evidence for Block’s (1995) Taxonomy Featuring Ego-Resiliency and Ego-Control

Without a crystal ball, it is hard to predict which concepts, models, and theories “stick” and have staying power in the field and which ones wither away. Natural selection in science is a harsh competition and success ultimately means that the model has proven useful—models that do not work, or do not work well enough, fall into disuse. Block, of course, was not a dispassionate observer of the long-lasting battles about the “right” number of personality dimensions and the most useful dimensional system for personality description. Many personality researchers in his now-retired generation of pioneers were hoping to be the one who would discover the “right” structure that all others would then adopt, thus transforming the fragmented field into a community speaking a common language. Block had staked his own claim in the field of personality structure on two broad personality dimensions that he and his wife Jeanne Block (see Block & Block, 1980) had derived in the 1950s from various psychodynamic propositions. Labeled ego-resiliency and ego-control, these

“Big Two” dimensions were measured with a 100-item Q-sort developed by the Blocks.<sup>1</sup>

Beyond ego-resiliency and ego-control, Block has long resisted committing himself to a particular taxonomic proposal. Of course, it is much easier to attack the inherent shortcomings of other people’s models than defending one’s own, and Block (this issue) has again resorted to that tactic: The Big Five is impugned but no realistic alternative is in sight. In his 1995 critique, prompted by the independent reviewers required by the peer-review system in place at *Psychological Bulletin*, Block tentatively proposed a six-factor model, fronted by his two favorite dimensions: “a taxonomy consisting, perhaps, of measures of ego control (overcontrol versus undercontrol), ego resiliency, agency-communion, introspectiveness, energy level, and liberalism-conservatism” (Block, 1995, p. 204).<sup>2</sup>

One might expect that over the past 15 years, a vigorous program of research has amassed support for this taxonomy and proven its vast superiority over the Big Five taxonomy, whose limitations were so plainly in sight in 1995. For example, what about the dimensional structure of the Q-sort, Block’s own instrument for personality assessment? Given Block’s reputation as a master psychometrician, and his detailed discussions of factor analysis in both the 1995 and the 2010 critiques, one would think that he had published numerous factor analyses of his Q-sort, all of which carefully documented and unambiguously supporting his model. Far from it. Block (1995) simply declared: “However, in my own many factor analyses of this Q set, more than 20 reliable factors, many of them small because they are not redundantly represented, are regularly found” (p. 205). The (unstated) implication, of course, is that his own factor analyses of the Q-sort did *not* support the Big Five. Yet, Block never published any of those “many factor analyses” himself, nor did he allow others to do so.

This is particularly surprising because a number of other investigators, using independent data, failed to report any evidence whatsoever for those “20 reliable factors.” In Block’s (this issue) discussion of the factor structure of the Q-sort, the claim for the 20 factors has, notably, been dropped. Moreover, it does not seem to trouble Block at all to conclude from his review of two studies published by others, “There is no question that the repeatedly observed, famed five-factors indeed can be found within the CAQ” (p. 14). Are we miss-

<sup>1</sup>Among its many uses, the California Adult Q-Sort (CAQ) has been proven useful to describe three major types of people: undercontrollers, overcontrollers, and resilient (York & John, 1991; for a review, see Robins, John, Caspi, Moffitt, & Stouthamer-Loeber, 1996).

<sup>2</sup>Of course, Block (1995) could not truly commit himself to any one taxonomic proposal and immediately backtracked in his footnote 7: “I do not offer this set of variables as definitive or as without problems similar to those that beset the FFA” (p. 204).

**Table 1.** *Q-Sort Items Defining the “Little Five” Personality Factors in a Sample of 12-Year Olds.*

Extraversion
84. Talks a lot.
58. Openly shows his/her feelings, both good and bad.
98. Is shy; has a hard time getting to know others (R).
8. Likes to keep feelings and thoughts to him/herself (R).
Agreeableness
3. Is warm; responds with kindness to others.
4. Gets along well with other people.
6. Is helpful and cooperates with others.
93. Is bossy and likes to dominate other people (R).
Conscientiousness
66. Pays attention well; can concentrate on things.
47. Has high standards for him/herself.
41. Doesn’t give up easily; persistent.
36. Makes things happen and gets things done.
Neuroticism
23. Is nervous and fearful.
24. Worries about things.
46. Goes to pieces under stress; gets rattled.
43. Can bounce back, recover after a bad experience (R).
Openness
40. Is curious and exploring; likes learning new things.
97. Has a good imagination.
96. Is creative in the way s/he thinks, plays, or works.
70. Daydreams; often lost in thoughts, fantasy world.

*Note.* Data are from John et al. (1994). Q-sort item text shown here is abbreviated and paraphrased.

ing something here? Hasn’t Block (1995, this issue) repeatedly suggested that the many demonstrations of five broad factors could not be trusted? That the results were preordained by the selection and prestructuring of the trait variables the lexical researchers had chosen to analyze, and the factors had been bent by the prejudiced choices and preferences of the factor-analysts? After all, “the factor analytic method can generate a variety of ‘truths,’ according to the bent or desires or avoidances of the particular factor analyst” (Block, this issue, p. 6).

If that is so easy, surely the factor analyses rotating more than the dubious five factors would generate empirical support for Block’s (1995) favorite taxonomy? Not so. When more than five factors were rotated, the Big Five dimensions continued to be found and the additional factors did not resemble ego-resiliency, introspectiveness, energy level, liberalism-conservatism, or any others from Block’s (1995) list; in his own words: “When an *eight*-factor CAQ solution was tried, three additional factors emerged, reflecting *Physical Attractiveness* (including heterosexual interest and charm), *Insight*, and *Ambition*” (Block, this issue, p. 13). How Block managed to interpret these findings as yet another compelling disconfirmation of the Big Five is beyond us. It certainly deflects from the fact that neither of the two studies he reviewed provides even a shroud of evidence for his favored dimensions of ego-resiliency and ego-control.

### The Big Five and Personality Development

More distressing is Block's (this issue) omission of several publications that factor-analyzed the child version of his Q-sort, one of which he had reviewed (quite negatively, of course) for *Child Development*. In this study, parents provided Q-sorts of their adolescent boys (John, Caspi, Robins, Moffitt, & Stouthamer-Loeber, 1994). Table 1 shows the top loading Q-sort items for five of the factors identified. We invite the reader to review these factor definitions, obtained in 12-year-olds. They are surprisingly similar to those known in the adult literature as the Big Five and were thus labeled the "Little Five" (John et al., 1994). Moreover, these five factors were replicated in two further data sets collected outside the United States and in languages other than in English, one in the Netherlands (van Lieshout & Haselager, 1994) and the other in Sweden (Lamb, Chuang, Wessels, Broberg, & Hwang, 2002), by two independent teams of developmental psychologists *not previously interested in the Big Five*. These three studies also examined factors beyond the Big Five and again found no evidence in favor of the dimensions expressly favored by Block (1995) even when more than five factors were rotated. Thus, these three studies of the structure of the Q-sort in children and adolescents can hardly be ignored, as Block (this issue) does, even if they provide inconvenient evidence for the Big Five and fail to provide evidence for the dimensions favored by Block.

Indeed, this omission of relevant research puts a different light on Block's (this issue) assertion that extending the Big Five into developmental psychology is "as yet empirically unwarranted" (p. 4). Block continues,

To support their suggestion for considering the FFA as intimated in the earlier years, Caspi and Shiner focus on one study, the statistical reprocessing (Measelle, John, Ablow, Cowan, & Cowan, 2005) of a previously reported puppet-based interview of a sample of children aged 5 to 7 (Measelle, Ablow, Cowan, & Cowan, 1998). In their Table 6.1, Caspi and Shiner display selected puppet-interview responses of these children as corresponding in their organization to the adult-oriented five-factor structure. (p. 4)

This quote would seem to suggest to a reasonable reader that Caspi and Shiner (2006) reviewed only a single relevant study of the Big Five in childhood (the one by Measelle et al., 2005) and that their Table 6.1 includes a *single* column of puppet interview example items. This is not true, as we found when we checked Table 6.1 in Caspi and Shiner. Their table included not one but *three* columns of example items from *multiple* previous studies—one of trait adjectives in teachers' rating of children 8 to 10, another of Q-sort items taken

from the afore-mentioned reports by John et al. (1994) and van Lieshout and Haselager (1994), and a third reprinting items from the Measelle et al. (2005) report of the Big Five in the Berkeley Puppet Interview. In fact, their table is very similar to the one presented by Measelle et al. (2005), and we invite interested readers to read that article, to verify that it does not represent a mere "statistical reprocessing." If Block had bothered to report on the entire article, he would have had to admit that adopting the Big Five perspective offered novel developmental insights. These include the discovery an orderly emergence of personality dimensions in children's self-reports, beginning with the interpersonal dimensions of Agreeableness and Extraversion before first grade, followed by the task-oriented dimension of Conscientiousness when the structure and strictures of school are encountered in first grade, and finally by Neuroticism and Openness, both of which assess particular aspects of the child's inner experience. We do not understand why Block (this issue) tried to further discredit the Berkeley Puppet Interview by suggesting, based on a 37-year-old study, that children do not know and use personality trait descriptors. People who spend time with children are well aware that preschool children as young as 3 and 4 years of age can use trait-like terms related to Agreeableness–Disagreeableness (e.g., is mean, pushes, hits), and Extraversion–Introversion (e.g., is shy), as well as the basic emotions related to Neuroticism (scared/afraid; sad/cries). Given Block's description, it is hard to imagine that the literature on personality structure in childhood and adolescence is a hotbed of exciting research activity, in large part stimulated by the availability of the Big Five in adulthood, which offers an explicit model against which the findings for kids can be compared (e.g., Soto, John, Gosling, & Potter, 2008).

### Waiting for the Perfect Taxonomy—or Getting on With the Research?

In 1995, Block concluded that the field of personality be best served by halting research on what he called the Big Five "bandwagon": "The field requires time for wider reflection on its conceptual and empirical requirements and on its past attainments and deficiencies" (p. 209). We are glad that researchers did not follow his advice. Sitting on our hands, in deep reflection, will not solve the important issues that personality psychologists need to address. Quite the contrary, we think that personality psychologists have been preoccupied, for too long, with questions about the "right" number and nature of the basic dimensions of personality, and it has taken us much too long to reach even this preliminary consensus on the Big Five. Now that we have achieved that, we have had the freedom and energy to go back to generating and accumulating

basic knowledge about personality—about the genetic and environmental origins of personality traits (e.g., Loehlin, McCrae, Costa, & John, 1998), about their stability and change (Helson, Kwan, John, & Jones, 2002; Roberts, Walton, & Viechtbauer, 2006; Srivastava, John, Gosling, & Potter, 2003), about their links to socially important behavioral and life outcomes (e.g., Ozer & Benet-Martinez, 2006), about interjudge agreement and accuracy in personality judgments (e.g., Funder, 1995; John & Robins, 1993; Naumann, Vazire, Rentfrow, & Gosling, 2009), and so on. The end of the squabbling among us has freed up time for more useful and productive generation of knowledge.

John et al. (2008) have argued that from a historical vantage point, the emergence of the Big Five structure, and the fact that multiple groups of researchers worked on it jointly, brought about a major change in the field of personality that is akin to a paradigm shift. Personality trait research is moving away from a stage of early individualistic pioneers in Block's generation to a more mature stage of normal scientific inquiry: What Block describes as an unseemly "five-factorization" means that researchers interested in studying the effects of personality traits on important theoretical or applied phenomena can now use a commonly understood framework to conceptualize their research, and the same Big Five framework is used for literature reviews and meta-analyses that can now serve to organize and accumulate relevant findings (e.g., Roberts et al., 2006). This is indeed a paradigm shift in a field long dominated by seemingly incompatible systems that fragmented the field and competed with each other, rather than establish commonalities and convergences. We suggest that the Big Five structure captures, at a broad level of abstraction, the commonalities among the existing systems of personality description, and thus provides an integrative descriptive taxonomy for personality research.

One of Block's (this issue) fears seems to be, as it was in 1995, that somehow the ascension of a single taxonomic framework to paradigm status will inhibit, disallow, or even extinguish research on other constructs, those that do not neatly fit into the taxonomy. That is not our view, nor is supported by the historical evidence over the past 15 years. In our view, the broad Big Five dimensions and their more specific, lower order facet traits provide a useful organizing framework, but they do not eliminate other concepts from consideration. Instead, the Big Five serve to integrate many previous systems of personality description into an integrative personality taxonomy that offers a common nomenclature for scientists working in the field of personality.

Block (this issue) mentions examples of constructs that cross-cut multiple Big Five dimensions, such as narcissism and self-esteem. Has the existence of the Big Five kept research on these two constructs out

of the pages of personality journals? Not likely. Research on narcissism has been booming over the past 15 years; even Big Five researchers are known to have published papers on narcissism (e.g., John & Robins, 1994; Kwan, John, Kuang, & Robins, 2008). Similarly, self-esteem is and remains one of the most commonly studied individual difference variables (see Robins, Tracy, & Trzesniewski, 2008).

In 2010, Block still wants us to wait and delay before "prematurely" fixing a system in place. But that is not how science works. Like any other systems in science, taxonomies are not fixed, as shown by the remarkable development of the animal taxonomy, from its beginning in the vernacular language to its current evolutionary elaboration. Paradigms have a limited lifetime. They flourish while they are productive and useful for organizing the phenomena under study. They stimulate vigorous work. As that work accumulates, however, the results (not some armchair pronouncements) will show where the model or taxonomy works well and where it is fatally deficient. We fully expect that, like all productive paradigms in science, the Big Five taxonomy is not the last word in personality description. In fact, we expect that in the not-so-distant future the Big Five taxonomy will have been replaced by an even better, more useful, theoretically elaborated structure for research on personality traits.

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### Note

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