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Running head: A THEORY OF EVERYTHING

The Elusive Theory of Everything:

Comment on Baumert et al.'s (2017) target article "Integrating Personality Structure, Personality Process, and Personality Development"

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Abstract

We applaud Baumert et al.'s ambitious idea to integrate personality processes, structure, and development into a single general theory with the aim of fully explaining people's behavior across situations. However, we argue that building a general theory of human behavior, similarly to a Theory of Everything, may not only be less feasible, but also less meaningful, than it appears at first sight.

The Elusive Theory of Everything:

Comment on Baumert et al.'s (2017) target article "Integrating Personality Structure,

Personality Process, and Personality Development"

Without doubt, the target article by Baumert et al. (this issue) is an ambitious attempt to integrate personality processes, structure, and development into a single general theory with the aim of fully understanding personality and people's "concrete behavior in concrete situations" (p. 3). Because personality processes, structure, and development are all inherently intertwined, the overarching conclusion of the paper is that we must "identify the intra-individual psychological processes that explain variation of behavior across situations as well as the systematic inter-individual differences in those processes that explain variation in behavior across individuals" (p. 40). Even in physics, building a single and coherent theoretical framework that fully explains and links together all physical aspects of the universe –Theory of Everything – has not been very successful so far. Similarly, a general theory of personality is not an easy, or perhaps even entirely meaningful, task.

Several decades ago, Endel Tulving wrote about building general theories of memory (Tulving, 1983, p. 7) and compared these attempts to a general theory of locomotion. There are many different forms of locomotion, Tulving argued, such as swimming, crawling, walking, running, flying, jumping, wiggling, gliding, and so forth, but what do all these nearly endless forms of locomotion have in common, except for the fact that locomotion transfers a living creature from one location to another? Analogously, one may ask if it is really necessary, or even feasible, to develop an elaborated theory of behavior, which, according to the working definition given at the end of the target article, is just "everything an organism does?" (p. 78). Just as in Tulving's (1983) example of locomotion, an organism (or at least a human organism) can and does do a lot of different things, such as growing, moving, eating, hiccupping, dying, etc., but many of these behaviors have nothing to do with

what we usually call personality, that is, "enduring tendencies to think, feel, and behave in consistent ways" (Allik & McCrae, 2002, p. 304). For example, it would be neither possible nor meaningful to explain a patellar reflex (also known as a knee jerk) as a complex interplay of cognitive, affective, and motivational processes.

Upon closer reading of the target article, it becomes clear that, despite the authors' best intentions, a new general theory of personality did not materialize. Instead of offering a body of plausible or scientifically acceptable general principles to explain how an integrated personality system functions, the article mostly provides descriptions of how different personality processes can be responsible for variation in behavior. Laws of science are often understood as fundamental limits that nature cannot surpass. For example, the Law of Conservation tells us that something cannot occur from nothing. The meaning of Special Relativity is that no material particle can move faster than the speed of light. Very little, however, seems to be prohibited in the integrated framework of personality, except for one principle: that is, that people's personality and behavior can be characterized by qualities that are relatively invariant across situations and time (Shoda & Mischel, 2000). This is a strange prohibition, because it contradicts the authors' intention to build a general theory of behavior. In other words, if Galileo dropped objects of different materials and weight from the Leaning Tower of Pisa and looked for a property that is common to all matter (cf.; Allik & Realo, 2017), then social-cognitive theorists, along with the authors of this paper, only believe in contextualized laws. Instead of the unified Law of Gravitation, physicists like to talk about specialized mechanisms for different materials, shapes, and weights. For example, when discussing possible explanations for changes in personality structure, Baumert et al. (this issue) argue that these changes may be due to changes in reward structures. Namely, that if different kinds of conscientious behavior are intra-individually differently rewarded, e.g., "some being rewarded for conscientiousness only at home, others only at work, others both at work and at home, others neither at work nor at home" (pp. 39-40), inter-individual correlation between behaviors will decline over time, and alas, the personality structure will change. This may well be how the change happens, but it fails to explain *why* some people are sensitive to reward only at home, others both at work and home, and yet others only at work or in some other context. In other words, we would have to dig deeper and come up with a yet another theory of personality in order to explain the intra-individual differences in reward structures.

In sum, Baumert et al. (this issue) touch upon a number of important issues related to how to improve our current understanding of human personality. Nonetheless, we remain skeptical of the underlying assumption of the target article that there are no independent factors that can operate unconditionally outside of the given context and that a person's behavior cannot be consistent across diverse situations and time (Mendoza-Denton, Ayduk, Mischel, Shoda, & Testa, 2001; Shoda & Mischel, 2000). From a technical point of view, this idea presumes that moderator effects and interactions are always more powerful than the main effects themselves. However, the relevant literature demonstrates exactly the opposite –moderator and interaction effects are extremely difficult to establish, and even more difficult to replicate (Allik, de Vries, & Realo, 2016; Baron & Kenny, 1986; Chaplin, 1991; McClelland & Judd, 1993). This is probably the reason why a generalized approach has produced many important results for consequential outcomes (e.g., educational attainment, health, life expectancy, or a tendency to be involved in accidents) of personality (Ozer & Benet-Martinez, 2006), while contextualized or "If ... then ..." approaches have produced very few. The core assumption that individuals are characterized by qualities that are relatively invariant across situations and time is not only the most plausible, but also one that has been very productive so far.

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