

REPLY

How Deep Do We Have to Go to Rehabilitate Evolutionary Psychology?
Reply to Bjorklund et al. (2022)David S. Moore¹, David C. Witherington², Darcia Narvaez³, Timothy I. Vandiver², and
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Disciplines like evolutionary developmental psychology admirably focus on trying to rehabilitate narrow evolutionary psychology (NEP) from within, by adding a developmental focus to NEP's tenets of adaptationism and computationalism. We argue, however, that these tenets are fundamentally incompatible with taking psychology and its development seriously, and that the kinds of modifications introduced by evolutionary developmental psychologists do not go deep enough to qualitatively change the nondevelopmental outlook of NEP.

Keywords: adaptationism, functional adaptation, plasticity, development, natural selection

Bjorklund et al. (2022) argue that the faults we (Narvaez et al., 2022) identified in narrow evolutionary psychology (NEP) do not reflect contemporary positions in evolutionary psychology. We recognize and appreciate that some writers (e.g., Bjorklund et al., 2007, 2022) acknowledge that developmental processes play crucial roles in phenotype emergence; we never argued that *all* versions of evolutionary psychology ignore development.

People are products of their contemporary situations and evolutionary and developmental histories, a view we share with Bjorklund et al. (2022). Nonetheless, NEP remains dominant in psychology (Buss, 2020; Lewis et al., 2017), continuing to devalue development's role in shaping phenotypes. The persistence of nondevelopmental theories like NEP is problematic.

Although we agree with Bjorklund et al. (2022) that development is central to evolutionary explication, we take issue with other points in their thoughtful commentary. Specifically, we disagree that NEP's neglect of development is remediable by softening deterministic language and/or focusing on how naturally selected competencies are "expressed" in development; these moves do not address NEP's weak conceptual foundations.

For example, Bjorklund et al. (2022) are committed to adaptationism, whereas we consider adaptationism incompatible with psychological theories that take development seriously. The distinction between "hard" and "soft" developmental systems theories—which they employ to salvage adaptationism—is conceptually problematic (if not fatally flawed; see Witherington & Lickliter, 2017). Actually, we never question the legitimacy of viewing individuals as units of natural selection. Instead, we question what it means for selection to shape individuals. We specifically contest the adaptationist idea that selection creates *anything* in individuals. Natural selection changes how individuals (and their characteristics) are *distributed* in a population; it does not change individuals themselves. Furthermore, adaptationism conflates functional consequences and antecedent mechanisms. A phenotype may promote survival and reproductive fitness, but that says nothing about *how* the phenotype is built. Yet, evolutionary developmental psychologists appear comfortable theorizing about mechanisms for

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individual behavior and development that rely precisely on this conflation.

Finally, we reject the view that plasticity reflects “directed responses to recurring environmental conditions encountered over evolutionary history,” in part because this view engenders statements like “adversity does not so much impair biobehavioral systems as direct or regulate them toward patterns of functioning that, even if costly, are adaptive under stressful conditions” (Bjorklund et al., 2022, p. 785). Despite Belsky et al.’s (1991) arguments, we think this attitude risks normalizing child maltreatment. Functional adaptation (within a lifespan) exhibited by children who experience a harsh environment is distinct from evolutionary adaptation by natural selection (occurring across generations). For family lines to succeed across generations, well-functioning biological contexts are required. Our species has extended inheritances that include a developmental niche evolved for raising healthy children (Narvaez et al., 2016). Adverse childhood experiences (ACEs) can lead to illnesses and early death, so reduced parental investment related to war or famine—let alone child abuse by dysregulated adults—should be understood as detrimental, notwithstanding any functional adaptation exhibited by children exposed to such experiences. Unlike NEP, our developmental evolutionary psychology theory (DEPTH) enables mitigation of ACE-induced psychopathologies.

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