



Comment

Evolutionary perspectives on human personality  
Comment on “Personality from a cognitive-biological perspective”  
by Y. Neuman

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Received 13 October 2014; accepted 14 October 2014

Available online 22 October 2014

Communicated by L. Perlovsky

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*Keywords:* Personality; Evolutionary psychology; Sperm competition

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Yair Neuman [6] presents many provocative ideas in his interdisciplinary approach to human personality. In this commentary, we focus on his ideas regarding (1) the evolutionary basis of personality and (2) human sperm competition.

Evolutionary psychology has generated insights into a range of behaviors (e.g., sexual behavior, parenting, cooperation, aggression) with most of these insights concerning species-typical or sex-differentiated adaptations [1]. In contrast, evolutionary psychology has only recently been applied to understanding the considerable variability in human personality features. For example, some individuals frequently deploy deception when dealing with conspecifics, whereas others are more reluctant to deploy deception. Several promising evolutionary approaches have recently been applied to understanding personality, including life-history theory, costly signaling theory, mutation load, flexibly contingent shifts in strategy according to environmental conditions, and frequency-dependent selection [1].

Evolutionary approaches to understanding personality often attempt to take into account the ecological circumstances of the individual (e.g., access to material resources, alliances with conspecifics, environmental demands). Competition for resources that enhanced ancestral reproductive success (e.g., access to mates) may result in intraspecific (within-species) niche-splitting which, in turn, generates personality variation such as the tendency for some individuals to rely more heavily on deception [2]. Further, this personality variation may be largely accounted for by genetic variation (which results in relatively little variability within a particular genotype) or it may reflect substantial developmental plasticity (which permits more behavioral flexibility).

An example of an evolutionary approach to understanding personality variation is frequency-dependent selection which suggests that the ancestral reproductive success of a specific phenotype depends on its frequency relative to

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DOI of original article: <http://dx.doi.org/10.1016/j.plrev.2014.09.002>.

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other phenotypes in the environment. For example, if the majority of individuals in a population are trusting and honest, then an individual who is deceitful may benefit by taking advantage of the trusting nature of others e.g., [5]. However, if the population includes many deceitful individuals, then the benefits associated with this particular behavior would be greatly diminished because others in the social environment would be more vigilant for cues to deception.

Neuman [6] addresses the concept of sperm competition in his model of personality to highlight the relevance of specific fears and anxieties in predicting the behavior of individuals with particular personality features. In addition to the findings cited in the target article, recent studies concerning sperm competition have found that men who perceive their long-term female partners as likely to be unfaithful report being more sexually coercive toward her [3,4]. Further, among men convicted of physically assaulting their long-term partner, those who reported forcing sexual intercourse were more concerned about the fidelity of their partners prior to the assault [2]. These findings support Neuman's [6] contention that personality models must account for environmental circumstances (e.g., sperm competition risk).

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