Evolutionary Perspective, The



Onurcan Yilmaz Kadir Has University, Istanbul, Turkey

Synonyms

All psychology is evolutionary psychology; The breadth of general evolutionary theory

Definition

The evolutionary perspective is a contemporary approach originating from Darwin's theory of natural selection and endorsing the interactionist paradigm by considering the roles of genes and the environment as the sources of behavior.

Introduction

All modern evolutionary approaches are based on Charles Darwin's theory of natural selection (Buss 2012). According to this view in evolutionary biology, biological properties often have adaptive functions (i.e., adaptation), while they may also emerge as a by-product of some other adaptation. It could also be that a random product came out completely by chance. For example, the umbilical cord is adaptive because it provides the exchange of nutrients between the placenta and the embryo.

The belly button is the by-product of this adaptation. The shape of the belly button varies from person to person, so it is a random product.

The evolutionary approach in behavioral sciences (i.e., evolutionary psychology) derives from the assumption that higher cognitive functions such as intelligence, analytical thinking, language, or empathy are either adaptations or by-products of other adaptations (Confer et al. 2010). In other words, evolutionary psychology claims that, like biological organs, certain mental traits are transmitted to the next generations as a result of natural selection, because many of these psychological mechanisms are adaptations that have emerged as long-term solutions to problems related to survival or reproduction. Having emerged in psychology, this perspective can be applied more generally: to all subfields of psychology and to many nearby disciplines (i.e., political sciences, economics) and to many ancient philosophical debates such as the origins of morality and religious belief, language, and intelligence. For example, there are approaches arguing that belief in God is an adaptation on its own (Johnson 2015) or a by-product of a higherlevel adaptation (i.e., the theory of mind, Boyer 2001). There are also theoretical approaches proposing that our moral sense emerged due to having adaptive features (i.e., Haidt 2012).

However, the main problem of evolutionary approaches is the lack of consensus about what to categorize as an adaptation. Particularly in the field of evolutionary psychology, this ambiguity is

[©] Springer Nature Switzerland AG 2019

extreme, because having a genetic basis is often seen to be a condition for labeling a trait as an adaptation. But this condition by itself is not sufficient since, for example, adaptations (other than gender-specific) must be prevalent across the species. Adaptations do not have to be innate, but they must at least occur during the development process. The most important feature of the adaptations is that it should solve a problem in the past environment in an efficient and economical way. For example, there is some evidence suggesting that moral sensitivity in general, religious belief in particular, serves functions in terms of promoting large-scale cooperation among humans.

In addition, there are two different levels of explanation in the evolutionary approach. The first is the ultimate explanation that reveals the evolutionary origins of behavior (explaining why and how it came about) and revealing its brain foundations. For example, it is a kind of ultimate explanation to say that the evolutionary function of the human language is to promote large-scale cooperation commonly seen in human societies. The other is the proximate explanation and is concerned with the psychological meaning of behavior. For example, stating that the reason why we help our relatives more than others is due to feeling emotional closeness to them is a kind of proximate explanation.

Evolutionary psychology relies on an interactionist paradigm. In other words, behavior and underlying mental processes cannot be explained completely either by genetics or by environmental factors. The emergence of behavior depends on a combination of these two. For example, there are approaches arguing that people have a biological potential to acquire language

(Hauser et al. 2002). Even though the capacity for language is a genetically acquired evolutionary trait, when this biological potential does not interact with environmental stimuli (i.e., speech of others), one will not develop advanced language skills. Therefore, the evolutionary approach endorses the interactionist paradigm by considering the roles of genes and the environment when explaining behavior.

Cross-References

- ► Developing Evolutionary Psychology Hypotheses
- ► Distinguishing Evolutionary Processes From Products

References

Boyer, P. (2001). Religion explained: The human instincts that fashion gods, spirits and ancestors. New York: William Heinnemann.

Buss, D. M. (2012). Evolutionary psychology: The new science of the mind. Pearson: Allyn and Bacon.

Confer, J. C., Easton, J. A., Fleischman, D. S., Goetz, C. D., Lewis, D. M. G., Perilloux, C., & Buss, D. M. (2010). Evolutionary psychology: Controversies, questions, prospects, and limitations. *American Psychologist*, 65, 110–126.

Haidt, J. (2012). The righteous mind: Why good people are divided by politics and religion. New York: Pantheon.

Hauser, M. D., Chomsky, N., & Fitch, W. T. (2002). The faculty of language: What is it, who has it, and how did it evolve? *Science*, 298(5598), 1569–1579.

Johnson, D. (2015). God is watching you: How the fear of god makes us human. New York: Oxford University Press.