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Biosociology of Dominance and Deference



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Synonyms

[Biosocial model of social status](#); [Biosociology of social dominance hierarchy](#); [Biosociology of social status hierarchy](#)

Definition

The Biosociology of Dominance and Deference is a biology-inspired sociological approach analyzing evolutionarily evolved neurobiological mechanisms of different dimensions of human social ranking in terms of power, influence, prestige, and access to different resources which contribute to the development of traditional sociological conceptions on social stratification and social inequality.

Introduction

Dominance hierarchy is currently widely recognized as universal in the animal kingdom. It is not coincidental that this problem came to the

attention of researchers from different disciplines, including neuroscience, social and cultural neuroscience, and evolutionary psychology. As a result, in the last decades many findings concerning the biological nature of hierarchical relations among animals (including humans) were obtained that are potentially helpful for the sociological understanding of human interactions based on social rankings.

Evolved Adaptations to Hierarchical Social Relations

In the perspective of evolutionary sociology, stable forms of behavioral and other traits associated with producing and maintaining hierarchical social relations are considered as evolved adaptations that promote our ancestors' survival. Adaptations to hierarchical social relations have become part of human biological nature (including structure of the brain). Individuals, who possessed ability to navigate in socially differentiated society, correctly identified rank signals, and behaved in accordance with their own position in the social hierarchy, survived more frequently in comparison with those who lacked such abilities.

Emotions (Ten Houten 2017), communication signs (Mazur 2005, 2015), and sexual behavior strategies (Hopcroft 2016) as such adaptations have recently been studied from the perspective of sociology. Thus, it has been demonstrated that

secondary emotions of “pride” (formed from angry and joy) and “shame” (which comprises fear and sadness) appear as adaptive reactions to high and low status in social dominance hierarchy. Pride allows a person to achieve and demonstrate his/her dominant position, while shame provides subdominants a means to express a deferent low-status position and avoid punishment, negative evaluation, or the help to receive necessary resources. As a result, an ability to transmit, express, and recognize emotions as a signal about dominant or subordinate status is useful for everyone, regardless of place in the social hierarchy (Ten Houten 2017).

Mazur (2005, 2015) divides all status signals according to constant and controllable signs. The first are almost unchangeable (e.g., sex, ethnic markers, age, reputation), while the last can change for representation of domination or submission in accord with the actual situation and human purposes (e.g., gestures, tone of voice, semantic content, items of dress, and accessories).

The differences in male and female behavioral strategies reflect the differences in the adaptive problems that they solved – to increase the probability of more offspring, invest only in own offspring, and get support from men during the period of childbearing and raising children (Hopcroft 2016). Such biological predispositions are expressed in the deference of young females to males (but not other young females), and the absence of the reverse (only deference of males to other males is observed), which are supposed to help females guarantee their support, material and otherwise, from males. On the other hand, such inherently discriminatory attitudes of men at puberty toward young women in many cultures increases men’s social status, which is favorable for finding mates; in accord with that is the finding in recent studies (e.g., Hopcroft 2015) of the association between the socioeconomic status of males, but not females, and the number of offspring. This also explains the status parity between adult men and women of

nonreproductive age or even higher status (Hopcroft 2009). A greater biological determinacy of female behavior toward children (childbearing, lactation, nursing), as well as existing hormonal differences between the sexes make women more attuned to children’s upbringing; this is one of the reasons why the majority of positions of power, privilege, and influence in society belong to men (Huber 2007).

Biosocial Mechanisms of Social Dominance

In biosociological studies of dominance, findings concerning the homogeneity of the basic biological mechanisms among all social primates are taken as a starting point. Thus, the neurohormonal mechanisms of the human system of reporting about high or low status are considered the same as for nonhuman primates, as are the basic signals themselves (apart from language).

As a neurohormonal mechanism, the influence of testosterone on the dominant orientated behavior as well as the reciprocal effect are tested in the context of differently mediated social factors, including anticipation of a contest, the perceived importance of the outcome, the outcome of the contest, and some others (Mazur 2005, 2015). Along with the testosterone factor relevant to the biosocial model of dominance and deference, the associations between the neurophysiology of stress and high/low human status are discussed, in particular, the biosocial mechanisms whereby high ranking persons experience stress less frequently and can intentionally impose stress on those below them on the hierarchy to maintain their dominant position (Mazur 2015). Stress, together with other neurophysiological differences reflected in human health, is now studied as a new dimension of social stratification (Groosby et al. 2018). Finally, the first attempts have been made to incorporate genetic factors in considering traditional sociological issues; these concern the intergenerational transmission of

socioeconomic status in terms of educational attainment (Liu 2018).

Conclusion

Striving for high status and material well-being is rooted in human biology although it is culturally elaborated. However, no matter how sophisticated this refinement is, the biological nature of people formed in the process of long evolution has not disappeared. Understanding it allows (bio)sociologists to analyze the underlying causes of social behavior associated with the social dominance hierarchy that were formed as a result of the interaction between biological factors and the environment. Such research complements current sociological conceptions on social status and social inequality by biological factors and, potentially, makes them more complete and exact.

Cross-References

- ▶ [Adaptations for Navigating Social Hierarchies](#)
- ▶ [Biosocial Perspective](#)
- ▶ [Biosociology](#)
- ▶ [Mazur Allan](#)
- ▶ [Serotonin, Testosterone, and Dominance](#)

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