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Social Hierarchies

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Synonyms

Social Rank, Social Structure, Group organization, Social Status, Status Hierarchy

Definition

Social groups often are organized hierarchically, such that higher-ranking group members have greater control over valued group resources than other group members. Higher-ranking individuals also enjoy relatively more freedom to act in accordance with their own goals and desires and have greater capacity to exert their will over lower-ranking group members. Ultimately, these proximate advantages yield fitness benefits for high-ranking individuals and their offspring and help lower-ranking group members by allowing them to benefit from the increased overall prosperity of the group.

Introduction

Across many group-living species, to include primates, social hierarchies exist in which high-ranking individuals control a disproportionate amount of resources and influence in the group (Maner & Case, 2016). The ubiquity of hierarchy among social species is likely due to its evolutionary benefits for both the individual and, potentially, the group (Maner & Case, 2016; van Vugt, 2006). These individual- and group-level benefits are theorized to have perpetuated the existence of hierarchically arranged groups throughout evolutionary history. The study of humans and non-human animals has revealed some functionally specific behavioral and psychological capacities that facilitate individuals’ ability to navigate social hierarchies (Cheng,
Tracy, Foulsham, Kingstone, & Henrich, 2013). Other work has identified some of the key fitness benefits experienced by groups with hierarchical structures (Powers & Lehmann, 2014; van Vugt, 2006). Together, these complimentary streams of research provide compelling evidence for the evolutionary advantage of social hierarchy.

**Individual-level Fitness Benefits of Social Hierarchy**

Social hierarchies provide ample opportunities for individuals to accrue both direct and indirect fitness benefits. Regarding direct benefits, high-ranking individuals tend to receive specific perks unavailable to those lower in the hierarchy, such as a disproportionately large share of a group-produced good (von Rueden & van Vugt, 2015). Importantly, these benefits come to high-ranking individuals without resistance from lower-ranking group members. That is, high-ranking individuals do not have to continuously achieve their rank on a case-by-case basis, but rather, their reputation remains stable over time within the group thus affording the accumulation of fitness benefits (Henrich & Gil-White, 2001).

Beyond receiving additional benefits, high-ranking individuals also are subject to fewer constraints than low-ranking group members. For example, high-ranking members in certain small-scale societies sometimes have rights to polygyny that low-ranking members do not (von Rueden & van Vugt, 2015). This combination of increased access to fitness-enhancing resources and decreased social constraints provide high-ranking individuals with easier routes to evolutionary success than their low-ranking counterparts.

In addition to the direct benefits awarded to high-ranking individuals, they are awarded indirect benefits as well. Specifically, high-ranking individuals receive higher social status, represented by things such as deference from lower-ranking group members and increased mate value, ultimately leading to tangible fitness advantages. Specifically, von Rueden & van Vugt
(2015) found that social status in small-scale societies was positively associated with reproductive success. Notably, this association remains when material resources are equal between high- and low-ranking individuals. For example, among the Tsimane of Bolivia, leaders of fishing excursions do not take more fish than others, but they do enjoy greater reproductive success and social support than lower-ranking individuals (Glowacki & von Rueden, 2015).

**Dominance and Prestige: Two Evolved Mechanisms to Navigate Social Hierarchies**

Because social hierarchies have been a prominent feature of many social groups throughout evolutionary history and provide immense opportunity for fitness benefits, many species possess behavioral repertoires designed to successfully navigate social hierarchies. Scholars have classified these behavioral repertoires into two categories: a socially coercive strategy in which higher rank is acquired through actual or threatened aggression – the dominance strategy – and a more pro-social strategy – the prestige strategy – in which elevated social standing is achieved by demonstrating group-valued skills and expertise.

One key difference between the dominance- and prestige-based strategies is the route through which deference is conferred. Individuals who employ the dominance strategy use aggression and intimidation to demand deference from subordinates (Cheng, Tracy, Foulsham, Kingstone, & Henrich, 2013). Importantly, their tactics can often be more subtle than direct physical aggression, such as manipulating control of a valuable resource. For example, dominant leaders have been observed to monopolize control over resources such as useful information and access to valuable social partners (Maner & Case, 2016). Through anti-social means such as these, dominant individuals are able to establish and protect their high-ranking positions and, as such, are able to reap the fitness benefits associated with those positions.
In contrast to the dominance strategy is the prestige strategy – another viable route through which individuals can navigate their group’s hierarchy. The prestige strategy involves receiving freely conferred deference from subordinates by demonstrating one’s worth to the group (Henrich & Gil-White, 2001; Maner & Case, 2016). In essence, subordinates trade their deference for access to the prestigious individual with the goal of learning his or her valuable skills. Prestige is a strategy primarily observed in humans that requires advanced cognitive abilities such as ranking the skills of others and preferentially copying those who rank highest. These learning capacities allow prestigious individuals to maintain high social rank well past their physical primes, as evidenced by the high status of the elderly that is much more common in humans than in other species. Crucially, it is not enough to have valuable skills and abilities; leaders must also be willing to share their expertise with the group to garner prestige (Sugiyama & Sugiyama, 2003). Thus, prestigious leaders help the group by acting as a model for others to follow.

Furthermore, prestigious individuals differ from dominants in how they obtain and maintain influence over others. Prestigious individuals’ opinions are given great consideration and typically are followed, but deference is not required as it is for dominants. For instance, among the Nyangatom, a nomadic group in East Africa, unresolved conflicts can be presented to the council of elders for mediation. Although their word is not binding, to not follow it would likely result in social consequences from other group members, such as exclusion from group activities (Glowacki & von Rueden, 2015). By garnering rewards through prosocial behaviors that benefit the group, prestigious individuals procure a fitness advantage over lower-ranking individuals.
Group-Level Fitness Benefits

Given the numerous fitness advantages enjoyed by those with high social rank, why do some group members choose to follow? Throughout phylogenetic history, between-group selection pressures, such as intergroup conflict, were sometimes stronger than within-group selection pressures. As such, groups that could collectively work together to produce the best outcomes for the entire group had an advantage over groups that were unable to coordinate their actions (van Vugt, 2006).

Hierarchically structured groups are best able to act collectively to reach a common goal that benefits everyone (Glowacki & von Rueden, 2015). Indeed, even in egalitarian groups, task-based hierarchies sometimes emerge to facilitate collective action for a common good (e.g., Powers & Lehmann, 2014). One of the key reasons collective action can fail is because group members known as “free-riders” enjoy the common good without themselves contributing to its production. Because punishing and deterring free-riding is one of the primary functions served by high-ranking group members (Lukaszewski, Simmons, Anderson, & Roney, 2016), hierarchically arranged groups historically were more efficient than egalitarian groups at carrying out the types of collective action required to outcompete intergroup rivals.

Because hierarchically structured groups can outcompete groups with more egalitarian structures, individual members of those hierarchical groups tend to personally prosper – they enjoy elevated resource potential and reproductive success. This is one reason social hierarchy can become cemented into a group (Powers & Lehmann, 2014). Moreover, because members of groups become dependent on the common good produced by hierarchical groups, they tend to remain in those groups, even when they themselves hold a lower-ranking (and less desirable) position within the group’s hierarchy (Powers & Lehmann, 2014). Thus, by increasing the
productivity of the group as well as group members’ dependence on the group, social hierarchy can create powerful, cohesive groups that are better equipped to survive than egalitarian groups.

As well as being better equipped to survive at their current size, groups that are organized hierarchically also are better equipped to expand in number compared to egalitarian groups. After the advent of agriculture, human groups grew in size in response to the increase in available resources but, simultaneously, those resources became more easily monopolized than ever before, leading to increased intragroup competition and free-riding. Because egalitarian groups are less equipped than hierarchically arranged groups to discourage free-riding, groups without social hierarchy had an especially difficult time maintaining their prosperity. In contrast, groups with stringent social hierarchies experienced unprecedented levels of cooperation and coordination, allowing them to expand even further in size (Richerson & Boyd, 1999).

Conclusion

Compared to more egalitarian social structures, social hierarchies provide greater opportunities for group-level fitness advantages through leader-follower dynamics that promote collective action and conflict resolution. Nonetheless, not all group members benefit equally from social hierarchy due to the stark contrast in individual-level fitness advantages at different levels of the hierarchy. To capitalize on hierarchically arranged groups, humans and other social organisms employ functional strategies, namely dominance and prestige, to help them successfully navigate those hierarchies, ultimately maximizing their ability to survive and reproduce. Due to the evolutionary benefits available to members of hierarchically structured groups, it is no surprise that social hierarchy has pervaded almost every human society.
Cross-References

Polygyny and Male Risk-Taking for Status

Primate Dominance Hierarchies

Service-for-Prestige Theory of Leader-Follower Relations

Status and Reproductive Success

Living in Groups

Examples of Group Selection

Humans: Between-group Conflicts

Humans: Within-group Conflicts

Nonhuman Primates: Between-group Conflicts

Nonhuman Primates: Within-group Conflicts
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