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Heroic Rescue in Humans

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Synonyms

[Courageous rescue](#); [Dangerous rescue](#); [Daring rescue](#); [Heroism](#); [High-risk rescue](#)

Definition

“Heroic rescue” occurs when an individual places himself/herself at risk to save another person in a life-threatening emergency situation.

Introduction

When defining altruism, social scientists usually focus on the intentions of the altruist, and their research has traditionally attempted to isolate the situational factors that determine when people will behave altruistically. Five decades of research have identified the importance of such factors as empathy, rewards, emotional states, social norms, and the number of bystanders in influencing helping behavior. Social science models of altruism do not address the question of why basic motives such as empathy and various situational factors came to be so important. In fact, even most social

psychologists continue to study altruism and other social behaviors with little reference to the origins and ultimate functions of altruism, which have been the primary focus for evolutionary psychologists.

Altruism has always been a thorny issue for evolutionary theorists; the idea that an organism would engage in a behavior that comes at a great personal cost and seems to benefit only other individuals was difficult to explain through the basic principles of natural selection. Over time, however, several theories have been developed that may explain such behavior, with each theoretical perspective offering a more suitable explanation for some types of altruism than for others (McAndrew 2002).

Differentiating Heroic Behavior from Other Forms of Altruism

Heroic behavior is qualitatively different from other types of helping behavior. For example, there are many situations in which individuals help others who are not related to them: they loan money and personal belongings to friends, give rides to strangers who are hitchhiking, and go out of their way to do favors for acquaintances who ask for help. Such acts, however, should not be described as “heroic,” if only because they do not pose any severe risks to the altruist. On the other hand, individuals may put themselves at great risk to save their children or other relatives during

emergencies, or they may engage in long-term costly behavior that benefits family members. However, self-sacrificial acts performed for close kin are usually not described in everyday life as being “heroic” or even as “altruistic.” The word “heroism” is usually reserved for those behaviors in which the altruist puts him or herself at physical risk to rescue unrelated individuals who find themselves in a life-threatening situation.

Heroic Rescuing of Relatives

It was not until the concept of *inclusive fitness* was introduced by Hamilton (1964) that evolutionists had a satisfactory theoretical framework for discussing altruism.

Inclusive fitness is often referred to as *kin selection*, because according to this concept, natural selection favors behaviors that benefit others who share our genes, especially closely related kin. Hence, the mother who sacrifices her life so that her children survive may actually be engaging in a behavior that is genetically very adaptive, as the copies of her genes that reside in her children will in the long run lead to greater genetic fitness than if she alone had survived. Although the parent who rushes into a burning building or dives into an icy river to save one of his or her children is admired and the intense emotions driving such behavior are easily understood, the mantle of “hero” is not usually bestowed upon such individuals. The powerful impulse to rescue close kin from harm can most easily be understood through the lens of inclusive fitness and kin selection. Whether such dramatic helping of kin can properly be described as “heroic” is open to question.

The concept of kin selection is somewhat limited in that it cannot explain the whole range of altruistic behaviors observed in humans and other animals. For example, it cannot account for altruistic acts aimed at other individuals known not to be genetic kin.

Heroic Rescuing of Friends

Reciprocal altruism (Trivers 1971) is defined as cooperative behavior among unrelated individuals

that benefits everyone involved. Individual success at reciprocal altruism depends greatly on the ability to identify and cooperate with others who are good exchange partners and to identify and avoid those who are cheaters. Because humans are a supremely social species, the selection pressures faced by early humans in this regard must have been profound. It would have been evolutionary suicide to consistently behave in a selfless, altruistic manner toward unrelated individuals who took as much as they could get while offering little in return. Consequently, it should not be surprising that research has confirmed that humans are primed to recognize true altruists as well as cheaters and to deal with these individuals appropriately (Brown and Moore 2000; Mealey et al. 1996). Reciprocal altruism probably offers the best explanation for heroic rescuing among friends. Friendships are established after individuals have arrived at a mutually satisfying and reliable pattern of equitable exchange. To put one’s self at risk to rescue a friend may in fact be something of an obligation but also something that the helper may expect to be repaid in some manner during a future time of need.

Heroic Rescuing of Strangers

Inclusive fitness convincingly explains sacrifice for family members, and reciprocal altruism allows an understanding of individuals who sacrifice for the benefit of unrelated others with whom they have an ongoing relationship. However, anyone who helps others and expects payback will not be thought of as a hero, and in spectacular life-saving acts of heroism, it is clear that no adequate payback could really be possible anyway. It is in the arena of the rescuing of strangers that the term “heroism” is most aptly applied.

The best explanation for the heroic rescuing of strangers may be found in *Costly Signaling Theory* (CST) (Bliege Bird and Smith 2005; Boone 1998; Grafen 1990; McAndrew 2002; Roberts 1998; Zahavi 1977). CST suggests that conspicuous self-sacrificial heroism may be a way for individuals to advertise desirable personal traits.

This might increase the likelihood that they will be chosen as a mate or an ally and it might also position them for access to future status and resources, even from individuals who were not direct beneficiaries of the heroic act. For a costly signal to be effective, it must honestly convey valuable information about the individual sending the signal, and it must be impossible to fake.

Evolutionary psychologists believe that even apparently selfless impulses such as the heroic rescuing of strangers must provide some adaptive advantage for individuals; otherwise, such behaviors would have been strongly selected against. Many studies demonstrate that people who sacrifice for the group by engaging in costly activities do in fact achieve elevated social status, respect, and recognition as a result of their public selflessness (Berezckei et al. 2010; Hardy and Van Vugt 2006; McAndrew and Perilloux 2012a, b; Nowak and Sigmund 2005; Sylwester and Roberts 2010; Van Vugt and Hardy 2010; Willer 2009). No researchers suggest that heroes consciously sit down and calculate all of the benefits that will come their way if they survive the heroic action. Rather, it is thought that such impulses have been selected for because heroic behavior has provided competitive advantages for men throughout human history.

Sex Differences in Heroic Rescuing

There are certainly many examples of women behaving heroically, but physically risky, self-sacrificial heroism is commonly perceived as a stereotypically male behavior (Griskevicius et al. 2007; Iredale and Van Vugt 2009; Lyons 2005). If self-sacrificial altruistic behavior is in fact a “male thing,” it should be most likely to occur when males show off and compete directly with each other for status (and ultimately for mating opportunities). It has been established that altruistic male behavior is most effective if it takes the form of risky heroism, which displays courage and strength (Farthing 2005; Griskevicius et al. 2007; Kelly and Dunbar 2001; Sylwester and Pawlowski 2011). Also, males are more likely to display altruism in the

presence of an attractive member of the opposite sex; the same does not hold true for females (Farrelly et al. 2007; Iredale et al. 2008). This idea has clearly been around for quite some time, as illustrated by a quote from the Sioux warrior Rain in the Face. In describing the effect that the presence of women in a war party has on the male warriors, he said “when there is a woman in the charge, it causes the warriors to vie with one another in displaying their valor” (Philbrick 2010, p. 179).

The *Challenge Hypothesis* developed by Wingfield et al. (1990) provides a framework for predicting the circumstances under which male “showing off” via conspicuous self-sacrifice will be especially likely. According to this hypothesis, physiological changes such as a rise in testosterone occur in response to threats to a male’s status or the imminent threat of male-male competition, facilitating whatever competitive behaviors are necessary to meet the challenge. Thus, showing off may pay off best for a man when there is another man present that one can look superior to. Consistent with the aforementioned hypotheses, McAndrew and Perilloux (2012a, b) have confirmed that self-sacrificial male behavior is most likely to occur when females *and* another male are present.

War Heroism

War is a male activity. Organized fighting and killing by groups of women against other groups of women has simply not existed at any point in human history, and given the wide range of diversity to be found across human cultures, the consistency with which males are the organizers and perpetrators of group conflict has led many scholars to conclude that the male propensity for group violence is rooted in more than the learning of culturally prescribed gender roles.

Evolutionary psychologists have studied war and conflict with the assumption that a predisposition for warfare has evolved in males because it has historically enhanced their reproductive success. Hence, the origins of warfare and war

heroism can ultimately be found in the competition between males for status and access to women.

Sexual competition for mates has always been more intense among males than among females, especially in the polygamous societies that appear to have been typical in the prehistoric human world. The stakes were very high for men in this environment, as the winners of this competition would come away with the greatest number of women (and the most desirable women). The losers ran the risk of genetic annihilation by their failure to successfully win the status and resources necessary to attract mates. Historically, powerful men have always enjoyed greater sexual access to women than men lower in the pecking order, and violence, including war, can often be traced to this grim struggle for status and mates among men.

Violence committed against the right people at the right time has commonly been a ticket to social success for men. For example, among the Yanomamo of South America, men who had killed other men, especially during wars and skirmishes with other villages, acquired significantly more wives than men who had not yet killed anyone (Chagnon 2013). Because having killed someone in war was often good for one's reputation, many societies developed ceremonies for recognizing such accomplishments. In modern societies, these take the form of prestigious awards such as the Congressional Medal of Honor in the United States, and many countries have national holidays to celebrate the heroism of those who have fought and/or died in wars.

War heroes are held in such high esteem because they seem to act in a noble and virtuous manner, setting aside any thoughts of their own well-being for the good of their group or tribe, but conspicuous war heroism may also be a way for men to enhance their long-term reproductive fitness. Dutch psychologist Mark Van Vugt (2007) has proposed the *Male-Warrior Hypothesis* as a way of explaining why men show stronger group identification and more cooperation with in-group members than do women during times of threat from outside groups. His theory suggests that men have evolved a predisposition to engage in collective cooperative aggression against out-groups, a

tendency that has likely been strongly reinforced through culture traditions and socialization.

A team of European psychologists (Rusch et al. 2015) explored the proposition that war provides an arena for men to compete and impress both their male rivals and females who might be potential mates. In one study, they found that 464 American men who had won the Medal of Honor during World War II eventually had more children than other US service men who had not been so heroically distinguished. This is consistent with the idea that heroism gets rewarded with greater reproductive success. In a second study, 92 women rated the sexual attractiveness of men who had behaved heroically in war as being higher than that of soldiers who had served but not been identified as heroes. Tellingly, women did not show this increased attraction toward men who had behaved heroically in sports or business situations. A third study revealed that behaving heroically in war does not increase the attractiveness of female war heroes to men. In summary, heroism in time of war is sexier than any other kind of heroism, but only for men.

Young men are particularly concerned with status and heroic opportunities for sound evolutionary reasons. In early human societies, competitive success or failure in early adulthood determined a man's standing in a social group for the rest of his life. It wasn't possible to simply hit the "reset" button and join another group, so what happened during the teen years mattered a lot. For this reason, high-risk competition between young males provided an opportunity for "showing off" the abilities needed to acquire resources, exhibit strength, and meet any challenges to one's status. Consequently, heroic or even recklessly daredevil behavior was rewarded with status and respect – assuming, of course, that the young man survived the ordeal. Displaying heroism in time of war was a primary way of accomplishing these goals. Hence, it should not be surprising that historical data confirm that the concentration of young men in a population is one of the best predictors of when a society is most likely to go to war.

War is costly and risky, and for male psychology to have evolved a predisposition for going to

war, several essential conditions must be met. John Tooby and Leda Cosmides (2010) have identified four conditions that would be particularly important. First of all, successful soldiers must have greater sexual access to women than non-combatants. Secondly, coalitions of fighters must believe that they will be victorious. Thirdly, the rewards that each warrior receives must be proportionate to the risks he has taken and the importance of his contributions. In other words, cheaters should never prosper. And finally, men going to war must not know for sure who will live and who will die; there must be a protective “veil of ignorance.”

Conclusion

High-risk “rescuing” behavior is most appropriately described as heroic when it involves the rescuing of individuals with whom one shares neither genes nor an ongoing cooperative relationship. There is evidence that an impulse toward physically risky heroic rescuing behavior has been more strongly selected for in males than in females. These impulses serve a noble function when they result in altruistic behavior, but these same competitive status-seeking drives are also a component of war and other aggression actions.

Cross-References

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