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Attitudes toward heroic and nonheroic physical risk takers as mates and as friends

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Abstract

Several hypotheses about attitudes toward risk takers, derived from costly signaling theory (CST), were tested. Male and female participants evaluated the attractiveness of risk takers compared with risk avoiders as potential mates, and as potential same-sex friends, in 21 different scenarios. Both females and males preferred heroic physical risk takers as mates, with the preference being stronger for females. Contrary to predictions, for nonheroic physical risks (such as risky sports), both males and females preferred risk avoiders over risk takers as mates. However, for same-sex friends, males significantly preferred nonheroic physical risk takers, whereas females preferred risk avoiders. It was concluded that insofar as nonheroic risk taking by males is a costly signal, the signal is directed more toward fellow males than toward females. Preferences for risk takers were positively correlated with reported self risk-taking tendencies, but the correlation was significantly higher for friends than for mates for both heroic and nonheroic physical risks. In a second study, both males and females accurately predicted the opposite sex's preferences for heroic risk takers as mates. However, males failed to predict females' preferences for nonheroic physical risk avoiders. Both males and females underestimated the opposite sex's preferences for drug risk avoiders.

Keywords: Mate selection; Friend selection; Costly signaling; Showoff hypothesis; Risk-taking behavior; Heroes

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1. Introduction

Why do people take unnecessary physical risks? The first steps in answering this question should be to explain the two most dramatic facts about physical risk taking: (1) It is done more by males than by females; and (2) among males, it is done more by young adults (about 18 to 21 years old) than by any other age group (Arnett, 1995; Byrnes, Miller, & Schafer, 1999; Irwin, 1993; Nell, 2002). Wilson and Daly (1985) coined the phrase "young male syndrome" in reference to the high level of physical aggression and homicide in young males, and the phrase also applies aptly to their high levels of nonaggressive risk taking.

The fact that the peak age of males' physical risk taking corresponds to their peak reproductive years suggests that an evolutionary approach to this issue would be worthwhile. Is there an adaptive function of a tendency to take physical risks? Of course, physical risk taking for its own sake would be maladaptive. But under certain conditions, it may be adaptive to take risks as a means to important ends or goals, for example, hunting big game animals in the pursuit of food for oneself and one's family. While there are many cases where physical risk taking has obvious net benefits for one's own survival or inclusive fitness, we are particularly concerned here with cases where physical risk taking has no obvious, direct practical or adaptive function. Instances of such nonpractical or apparently maladaptive risk taking are abundant in the modern world, for example, in risky sports, high-speed driving, and avoidable aggression.

The costly signaling theory (CST; Bliege Bird, Smith, & Bird, 2001; McAndrew, 2002; Smith & Bird, 2000) suggests that some cases of apparently frivolous risk taking by males may, in fact, serve the function of signaling the male's health and vigor to potential mates. Presumably, a male who has the skill, strength, and vigor to take unnecessary risks would also have the traits necessary for more practical risky activities involved in provisioning and protecting females and their offspring. In addition, such a male presumably has "good genes," which would make him a desirable mating partner.

CST is similar to the showoff hypothesis, both of which are descendants of the handicap principle of Zahavi (1975). Hawkes (1991) suggested the showoff hypothesis to explain the persistence of hunting by human males, despite the fact that hunting often is not the most efficient way to obtain food. She argued that hunting promotes males' fitness by attracting the favorable attention of potential mates. CST adds that, in some cases, attending to the signal may benefit the audience merely by providing useful information about the signaler, even if that information does not lead to any immediate practical benefit. Furthermore, CST allows that the primary audience for males' costly signals may sometimes be other males, instead of females. For example, a male who shows strength and skill and courage at hunting or warfare may impress other males that he is a good person to have as a friend and coalition partner. The benefit to the signaler is increased status, which may have future benefits of directly or indirectly promoting his survival and inclusive fitness.

CST suggests that displays of physical skill may be effective signals, particularly when the display is honest, by being truly costly or truly physically risky. Furthermore, CST suggests that costly signals will be more effective the greater the real or potential practical benefits