Abstract

Boldness is a key element of behavioral variation in animals. Many studies have shown variation between individuals in their propensity to take risks across a wide range of taxa, yet surprisingly few studies have investigated the importance of social context in influencing an animal’s boldness. Here, we focus on the role that the sex composition of a social group plays in individual boldness in a sexually dimorphic species, the Trinidadian guppy (*Poecilia reticulata*). We predict that after exposure to a simulated aerial predator, male guppies should be bolder in the presence of females compared with males to maximize their mating opportunities. Furthermore, we predict that female guppies will adopt riskier behavior when shoaling with males in an effort to avoid sexual harassment. Using a model avian predator, we tested these hypotheses and found evidence to support our second prediction but not our first. Specifically, we found that male guppies returned to movement more rapidly after a fright response when shoaling with males than with females. Female focal fish in contrast returned to movement significantly quicker when shoaling with males than females. Also, we found a significant correlation in boldness across social contexts (a behavioral syndrome) in male but not female fish. This study highlights the importance of social context for individual boldness and suggests that for risk-averse behavior in social, sexually dimorphic species, sex matters.