

Hierarchy navigation emotion networks as a function of fitness interdependence

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Background

- Status hierarchies pose many adaptive challenges (Kyl-Heiku & Buss, 1996; Henrich & Gil-White, 2001)
- Changes in others' status bring new potential costs and benefits (Durkee et al., 2020)
- Costs and benefits depend on fitness interdependence of the other (Aktipis et al., 2019; Sznycer et al., 2020)
- Emotions solve adaptive problems (Tooby & Cosmides, 1990; Sznycer et al., 2017)
- Coactivation of emotions can reveal higher-order adaptive structure (Gervais & Fessler, 2016)
- What emotions are activated by others' status changes and does their pattern of coactivation differ depending on the fitness interdependence of the other?

Method

- 329 Ps randomly assigned to think about a friend, rival, or acquaintance
- Forecasted how much admiration, contempt, envy, and pity they would feel towards the target for 100 status-affecting acts, characteristics, or events were true of them (e.g., was beaten up by someone, was brave in the face of danger, was a great dancer, was being lazy, had a one-night stand)
- 1 = none at all; 5 = a great deal
- Status impacts from Buss et al., 2020

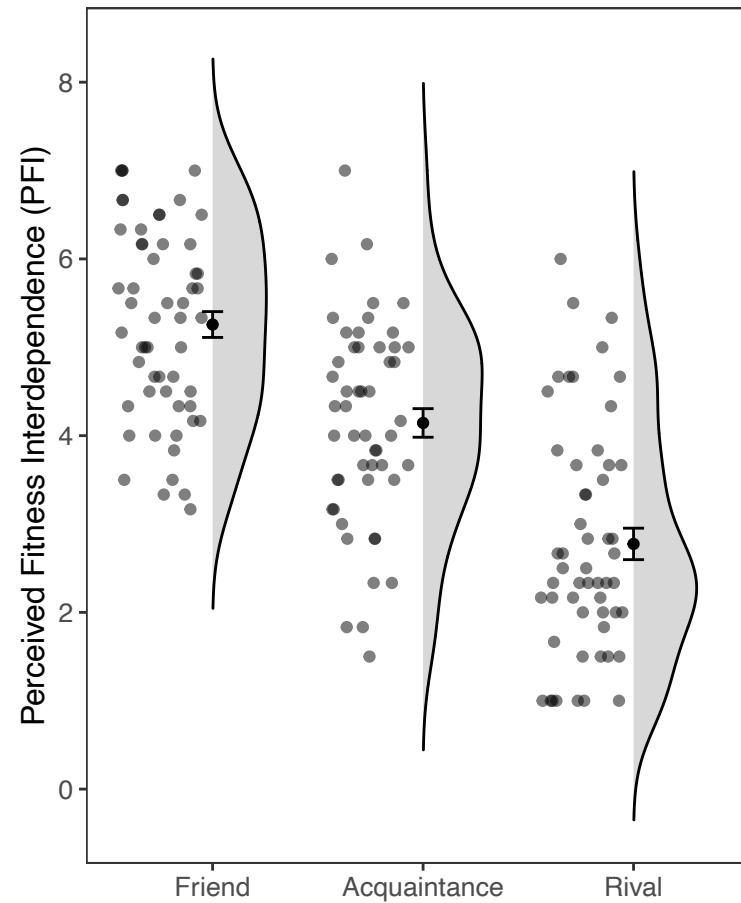


Figure 1. Perceived fitness interdependence as a function of target relationship.

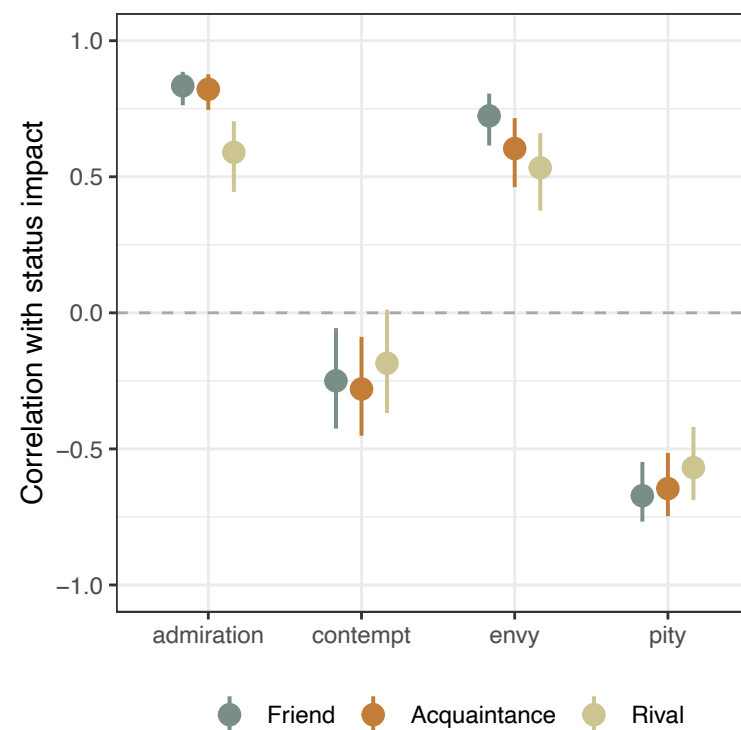


Figure 2. Correlations between status impacts and emotions as a function of target relationship.

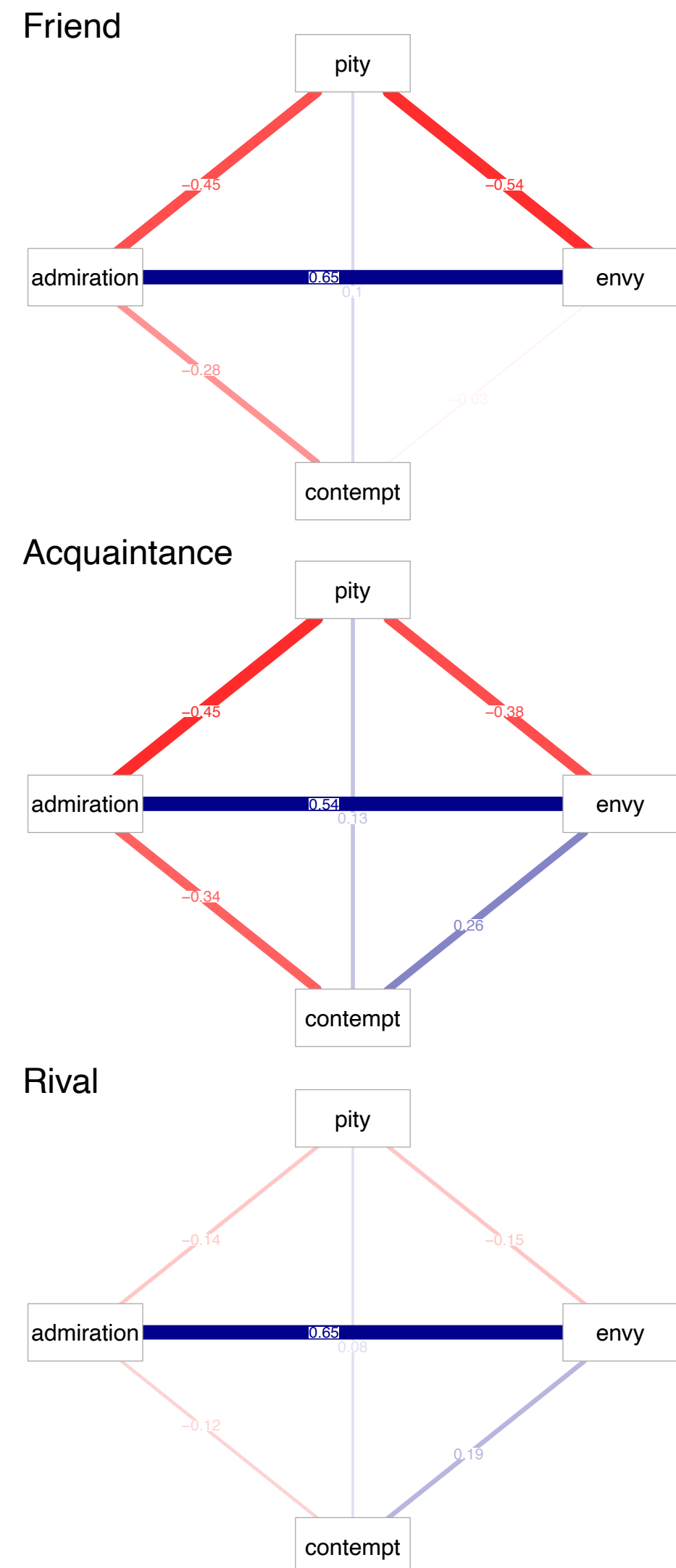


Figure 3. Correlations between emotion forecasts as a function of target relationship. Blue and red lines are positive and negative correlations, respectively. Thickness and transparency depict association strength