

TALK

A MULTIMETHOD INVESTIGATION OF THE EVOLUTIONARY ORIGINS OF GAMING

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ABSTRACT

Research tends to explain gaming as either a fitness-enhancing tactic for competitions (distal mechanisms) or as a social bonding tactic (proximal mechanisms). This experimental study integrates both views by examining these roles in same-sex strangers engaging in gaming and role-playing interactions. Twenty dyads (ages 18–40) met three times, either playing a strategic board game (*Nine Men's Morris*) or participating in a role-play scenario requiring consensus-building. Before their first interaction and after each session, participants evaluated their partner's desirable traits (peer's value) and reported perceived closeness (relational proximity). A causal mediation analysis tested whether relational proximity was influenced by peer's value, considering sex, activity type, time, competitiveness, and cooperativeness. No significant support for either hypothesis emerged, likely due to methodological constraints, such as sample size and limited interaction time. To determine conditions under which gaming would evolve to foster relationship formation free from those methodological constraints, we developed an agent-based mathematical model. Agent-based simulations (3000 runs over 50 generations) revealed that individual skills and activity costs were key selective pressures. Findings suggest that evolution of gaming depends on players' skill levels, familiarity with the game, and the costs associated with participation. Future studies should focus on longer-term observations, costs, and familiarity of gaming.