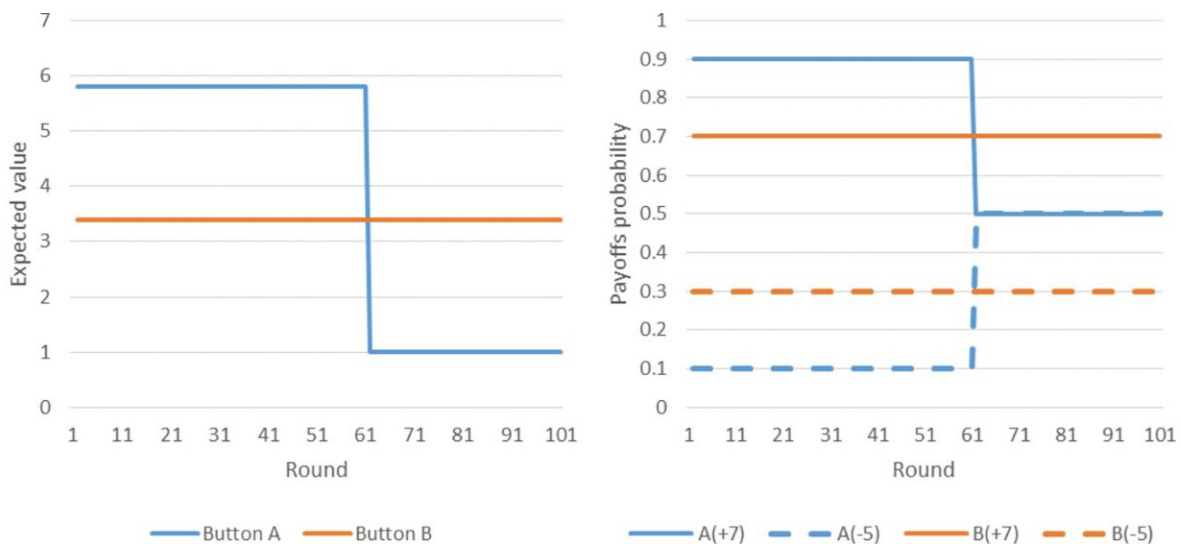


# Conformity hinders group performance in variable environment: Study

September 13 2023



The experience-based task. The left panel presents the expected value of the two buttons throughout the game. Up to round 60 the higher paying button is A (blue), whereas from round 61 onward, the dominant button is B (orange). The right panel presents the probability of obtaining a positive (+ 7; solid lines) and a negative (– 5; dashed lines) payoff, in each of the two buttons across the 100 rounds. Credit: *Human Nature* (2023). DOI: 10.1007/s12110-023-09454-2

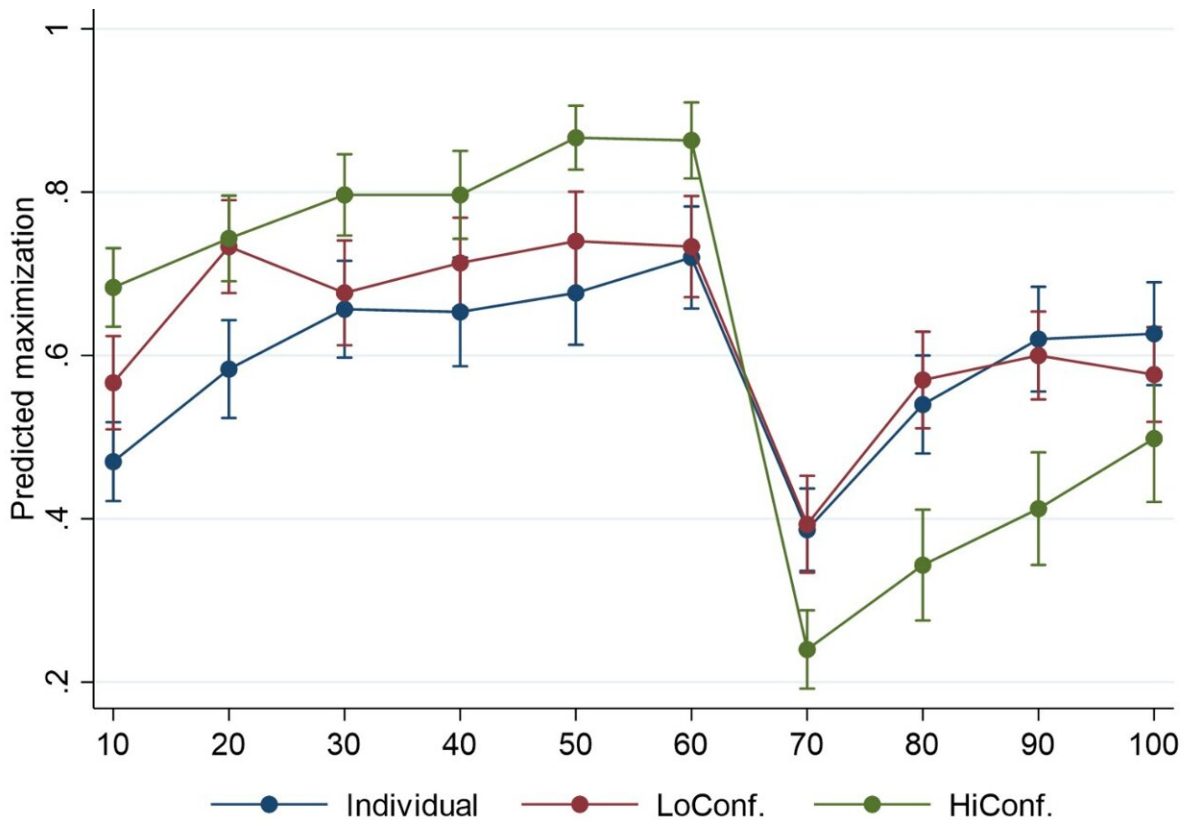
In a new study conducted by Prof. Raanan Sulitzeanu-Kenan from Hebrew University and Dr. Taher Abofol and Prof. Ido Erev from the Technion, evidence has emerged regarding the profound influence of group conformity on task performance in different environments. The

researchers delved into the causal effect of group conformity, shedding light on its implications in stable and variable environments.

The study drew on insights from [cultural evolution](#), [social learning](#), and [social psychology](#) to experimentally test two fundamental hypotheses. The first hypothesis posited that conformity improves group performance in a stable environment, while the second hypothesis suggested that it hinders adaptability and, consequently, decreases performance in a temporally variable environment.

To test these hypotheses, the researchers conducted a four-arm randomized lab experiment involving 240 participants. The study introduces a novel method for manipulating the level of conformity within groups by rewarding agreement with the group's majority while imposing a cost on disagreement. The results are published in the journal [\*Human Nature\*](#).

The results of the study revealed intriguing findings. While conformity did not significantly impact performance in a stable environment, it impaired performance in a variable environment. This suggests that conformity, while potentially beneficial in certain contexts, may hinder adaptability when circumstances are subject to change.



Mean performance across conditions throughout the game. GEE estimates for 10 sets of 10 rounds (CI = 1SE). Credit: *Human Nature* (2023). DOI: 10.1007/s12110-023-09454-2

Prof. Raanan Sulitzeanu-Kenan, shared his insights on the research, stating, "Our study provides valuable insights into the interplay between conformity and group performance. It highlights the nuanced relationship between conformity and adaptability in [different environments](#), shedding light on the factors that drive group-level and individual-level outcomes."

Intragroup individual-level analyses further illuminated the mechanisms underlying the study's results, demonstrating that lower conformity in

groups facilitated more efficient adaptability in the use of social information.

The findings from this research have significant implications for organizations, teams, and decision-making processes. Understanding the role of conformity in different contexts can inform strategies to optimize group performance and adaptability.

**More information:** Taher Abofol et al, Conformity and Group Performance, *Human Nature* (2023). [DOI: 10.1007/s12110-023-09454-2](https://doi.org/10.1007/s12110-023-09454-2)

Provided by Hebrew University of Jerusalem

Citation: Conformity hinders group performance in variable environment: Study (2023, September 13) retrieved 27 April 2024 from <https://phys.org/news/2023-09-conformity-hinders-group-variable-environment.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.