

Communication Increases Collaborative Corruption

Mathilde H. Tønnesen<sup>1</sup>, Christian T. Elbæk<sup>1</sup>, Stefan Pfattheicher<sup>2</sup>, Panagiotis Mitkidis<sup>1</sup>

Department of Management, Aarhus BSS, Aarhus University

Department of Psychology and Behavioral Sciences, Aarhus BSS, Aarhus University



Through two well-powered experimental studies, we find that verbal communication is not only essential for facilitating everyday partnerships, coordinating goals and actions, but also facilitates unethical conduct in collaborative settings, and that even the seemingly innocuous nature of everyday conversations can contribute to an escalation of dishonesty.

Here's what we did:

# Introduction

Large-scale corporate fraud often evolves from the intricate, coordinated actions of several individuals. Although communication is a pivotal aspect of human cooperation, experimental paradigms employed to study collaborative dishonesty rarely allow for communication. In addition, while collaborative dishonesty have been defined as "joint unethical acts" (Shalvi et al., 2016, *p*. 134), these paradigms therefore frequently only allow minimal opportunities for joint decisions. This raises a central question:

Does an inclusion of communication lead to an increase in dishonest behavior, and if so, what are the underlying mechanisms?

Answering to this, we replicated and extended the seminal study of Weisel and Shalvi (2015), by including communication as a manipulated variable:

- 1) We compared the dishonesty in a non-communicative context as in the original study to a setting where participants were allowed to communicate (<u>Study 1</u>).
- 2) To get insight into different mechanisms we further manipulated the content of the participants' conversation by restricting the communication to social exchanges with no task-related communication (Study 2)

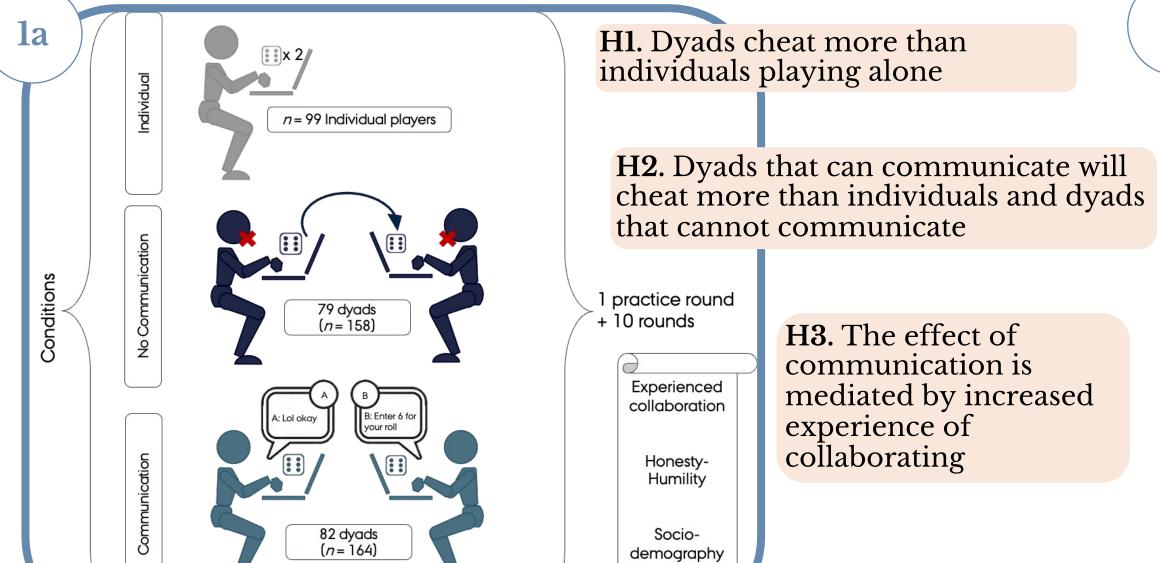
# Methods

# STUDY 1

A total of 421 Prolific participants completed an on online experiment replicating and extending Weisel and Shalvi (2015).

Participants were assigned to one of three conditions (see Fig 1a). Participants played 10 rounds of the dyadic die-roll game

- > Reported double = payoff
- 1 round was randomly chosen for payoff at the end of trials
   Dishonesty = Number reported doubles > expected (= 16.7 %)
- > Dyads in the Communication condition chatted before each
- round and could exchange information of their choice
- Measured experienced collaboration, Honesty Humility (Lee & Ashton, 2004) and socio-demographics (gender, age, income etc.)

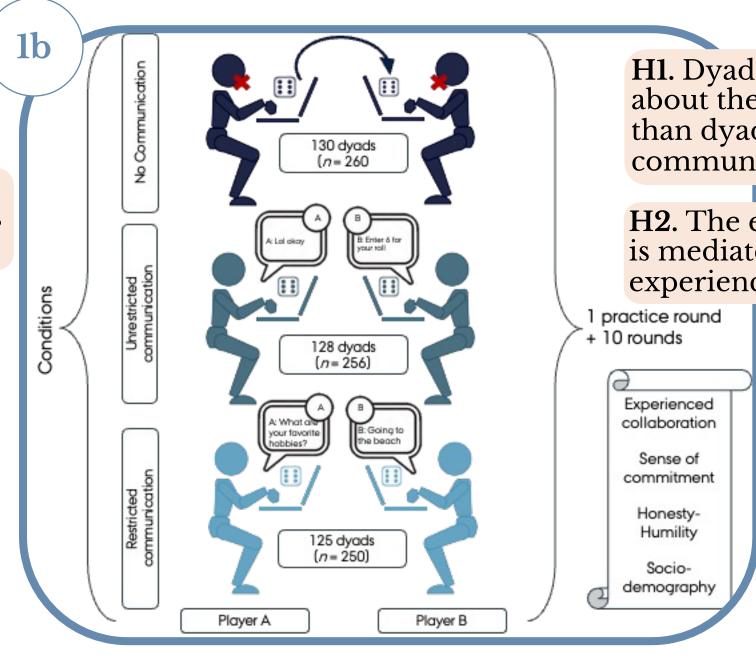


### STUDY 2

A total of 766 participants completed an online experiment replicating and extending Study 1.

Participants were randomly assigned to one of three conditions. Conditions were the same as Study 1 except for Restricted condition, see Fig. 1b).

- Participants in the Restricted condition, were not allowed to discuss the task, but were given specific topics to talk about.
- Used the same measures as Study 1 + sense of commitment to the other player (inspired by Michael et al., 2016)
   Chatlogs were checked for non-compliance in restricted con.
- ➤ Word frequency analysis was used to check for differences in communicative content between communication conditions



H1. Dyads that can communicate about the task will cheat more than dyads that can't communicate at all

H2. The effect of communication is mediated by an increased experience of collaboration

H3. Dyads in the restricted condition will cheat more than dyads that cannot communicate at all

PREREGISTERED

OPEN DATA

OPEN MATERIALS

### Acknowledgement

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#### References

Lee, K., & Ashton, M. C. (2004). Psychometric Properties of the HEXACO Personality Inventory. *Multivariate Behav Res*, 39(2), 329-358. <a href="https://doi.org/10.1207/s15327906mbr3902">https://doi.org/10.1207/s15327906mbr3902</a> 8
Michael, J., Sebanz, N., & Knoblich, G. (2016b). The Sense of Commitment: A Minimal Approach [Hypothesis and Theory]. *Frontiers in Psychology*, 6. <a href="https://doi.org/10.3389/fpsyg.2015.01968">https://doi.org/10.3389/fpsyg.2015.01968</a> Shalvi, S., Weisel, O., Kochavi-Gamliel, S., & Leib, M. (2016). Corrupt collaboration: A behavioral ethics approach. In J.-W. v. Prooijen & P. A. M. v. Lange (Eds.), *Cheating, Corruption, and Concealment: The Roots of Dishonesty* (pp. 134-148).

Weisel, O., & Shalvi, S. (2015). The collaborative roots of corruption. *Proceedings of the National Academy of Sciences*, 112(34), 10651-10656. <a href="https://doi.org/10.1073/pnas.1423035112">https://doi.org/10.1073/pnas.1423035112</a>

# 3 Results

Replicated Weisel and Shalvi (2015), see Fig. 2a.

Dyads reported significantly more doubles than players in the individual condition, Individual (M = v3.28, SD = 2.70) vs. Nocommunication (M = 4.46, SD = 3.01), d = 0.41.  $\Rightarrow$  Individual vs. Communication (M = 6.05, SD = 3.50), d = 0.88.

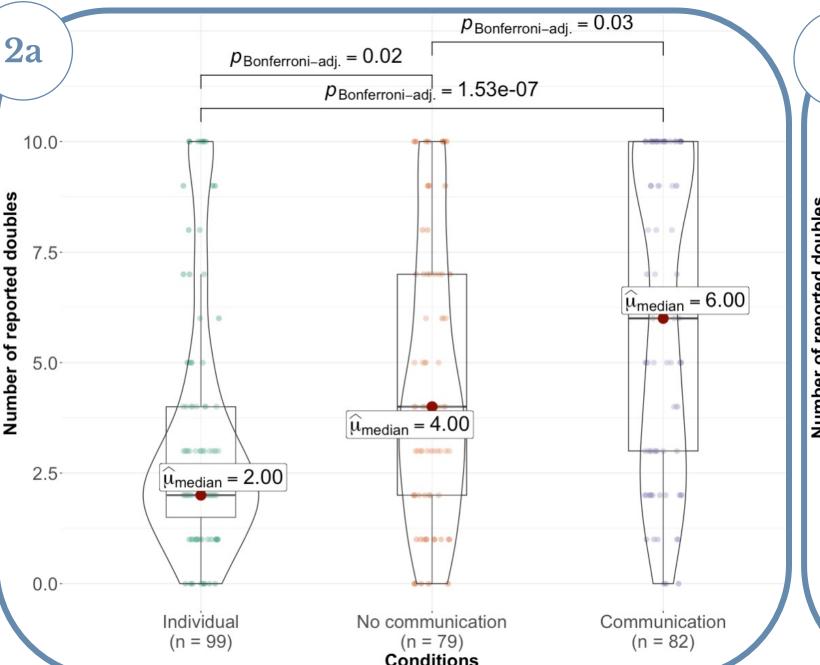
Dyads with the possibility to communicate reported significantly more doubles than non-communicative dyads, d = 0.49.

# 2 STUDY 2

2.1 Replicated Study 1, see Fig. 2b.

Dyads that could chat and coordinate reported significantly more doubles (M = 5.16, SD = 3.27) than non-communicative dyads (M = 3.38, SD = 2.62), d = 0.59.

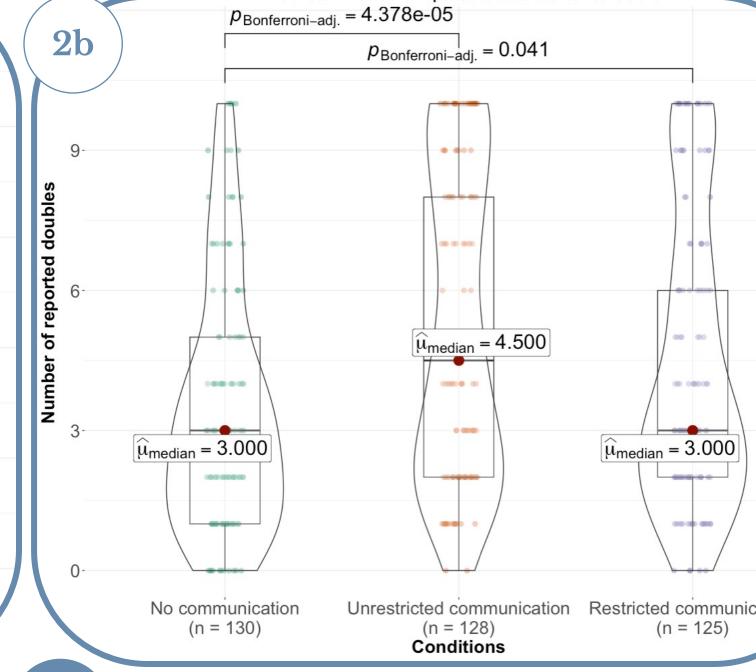
Dyads who could chat, but not coordinate on the task, reported significantly more doubles (M = 4.36, SD = 3.06) than dyads who could not communicate, d = 0.34.



2.2 Experienced collaboration significantly mediated the effect of both restricted and unrestricted communication on number of reported doubles.

> Unrestricted: ACME = 0.477, 95 % CI [0.30 - 0.70], p < 0.001

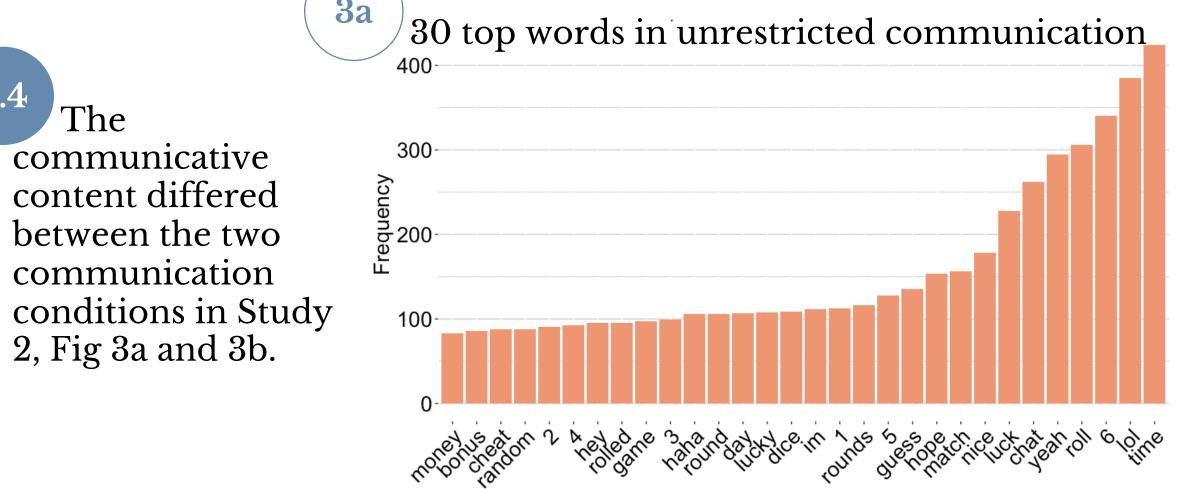
> Restricted: ACME = 0.091, 95 % CI [0.02 - 0.20], p = 0.018



Commitment significantly mediated the effect of unrestricted communication on number of reported doubles, but not in the restricted communication condition

> Unrestricted: ACME = 0.4348, 95 % CI [0.18; 0.55], p < 0.001 > Restricted: ACME = 0.068, 95 % CI [-0.02: 0.16], p =

> Restricted: ACME = 0.068, 95 % CI [-0.02; 0.16], p = 0.11



# Conclusion

Experienced

compared to the No-

1.07], p < 0.001,

collaboration

significantly mediated the

effect of communication and

number of reported doubles

communication condition:

> ACME = 0.704, 95 % CI [0.401 -

Overall, the studies replicate the original study and provides compelling evidence indicating that communication increases the magnitude of cheating beyond non-communicative settings. Importantly, this effect was linked to a stronger experienced collaboration among the communicating dyads, highlighting that communication is not only key to everyday ethical collaborations, but also to corrupt collaborations.

Study 2 replicated this finding, showing that communication significantly increases collaborative cheating compared to non-communicative contexts, even when coordination was restricted. While commitment and experience of collaboration mediated the effect of unrestricted communication on dishonesty, only the experience of collaborating was related to increased cheating, when coordination was not allowed. More research on the into the various mechanisms of communication on collaborative corruption is needed.