

Honesty and Trust in Virtual Communication*

Petra Nieken[°] and Sven Walther^{°, *}

[°]Institute of Management, Karlsruhe Institute of Technology

*Corresponding author: sven.walther@kit.edu

Abstract

The Covid-19 pandemic led to a trend toward remote work and increased virtual communication. Particularly in organizations, virtual communication has become an essential tool for people to interact with one another. These communication channels provide a different level of social presence, which is known to affect moral behavior, than face-to-face communication. This raises the question of whether people prefer more anonymous communication channels when intending to be dishonest. To investigate this question, we conducted a controlled experiment using a sender-receiver deception game. In this experiment, the sender has the option of using either a text or video communication channel to send an honest or dishonest message to the receiver. In our setup, the sender and the receiver did not know each other, and the likelihood that they would meet after the experiment was negligible. Our results show a tendency for senders to prefer the more anonymous text communication channel when they chose to lie to the receiver. Our findings have important implications for various contexts and for strategies to prevent dishonest behavior. For instance, if certain communication channels tend to facilitate dishonesty, organizations can prioritize the usage of specific communication channels in situations where honest behavior is crucial.

Keywords: digitization; virtual communication; communication channel; honesty; human presence; social image concerns

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Extended Abstract

The Covid-19 pandemic, together with technological progress and digitization, led to a trend toward remote work and increased virtual communication. Today, many employees in institutions and organizations work in fully remote or hybrid work arrangements, and the share of job postings offering hybrid or remote work has sharply increased since the beginning of 2020 (Barrero et al., 2021). Due to this trend, virtual or technology-mediated communication has become an essential tool for people to interact with each other using text messages or audio and video channels. These communication channels vary, among other things, in their capacity to transmit information (see, e.g., Daft and Lengel, 1986, for media richness theory) and in their degree of allowing social presence (see, e.g., Short et al., 1976, for social presence theory). Previous research has shown that different communication channels lead to differences in economic behavior. Performance is affected because some communication channels do not allow people to send nonverbal and paraverbal signals (Nieken, 2022). In addition, collaborative creativity can decrease if virtual teams use text messages compared to a video conference for communication (Grözinger et al., 2020), and cooperative behavior changes when using different communication channels (Brosig and Weimann, 2003). These findings together with the growing use of technology to communicate show that it is of paramount importance to further investigate the impact of using different communication channels in virtual environments on economic decision-making. Of particular importance are moral decisions, which, similar to cooperate behavior, can have a significant impact on individuals and groups. In the context of these concerns, it is key to understand which communication channels are conducive to honesty and which are preferred by people in general.

Especially in the realm of honest behavior, virtual communication might reduce the feeling of human presence compared to face-to-face communication. A recent study by Cohn et al. (2022) suggests that human presence is crucial to mitigate dishonest behavior by revealing that subjects were more likely to behave dishonestly when interacting with a machine rather than a human. Richer communication channels, such as video messages or calls, might be able to close the gap between virtual and face-to-face communication regarding human presence and thus influence dishonest behavior in virtual environments. Conrads and Lotz (2015) and Pascual-Ezama et al. (2015) studied the impact of different communication channels when interacting with the experimenter. In their setups subjects reported their outcome in a coin-flip task to the experimenter via different forms of face-to-face and virtual communication. Conrads and Lotz (2015) focused on face-to-face communication, as well as text and audio communication, and did not investigate a video communication channel. They showed that extreme dishonesty (subjects reported outcomes that maximized their payoff) increased with anonymity in the communication channel. Pairwise comparisons between the different channels did not reveal significant differences except for the two channels with the highest gap in anonymity (face-to-face vs. text communication from home). The results of Pascual-Ezama et al. (2015) did not include virtual communication but revealed that written reports to the exper-

imenter tend to facilitate dishonest behavior compared to verbal (spoken) reports. What is yet unknown is the role of video communication channels. These channels further decrease anonymity in virtual environments and may be able to compensate for the absence of face-to-face interaction. Both studies mentioned above focused on interaction with experimenters and did not investigate the choice of the communication channel by subjects. The current study focuses on comparing text to video messages. We are interested in (i) the active choice of the communication channel, (ii) the interaction between the chosen communication channel and the content (honest/lie) of the message, and (iii) the signaling value of the chosen communication channels for the receivers.

To investigate these aspects, we conducted a controlled experiment using a modified sender-receiver deception game (Gneezy et al., 2013), which consists of two parts. The experimental setup is as follows. Part 1 is for the senders and was conducted in the Karlsruhe Decision and Design Lab (KD²Lab)¹. Senders are hired from the subject pool of the lab using hroot (Bock et al., 2014). Part 2 is for the receivers and is conducted online via Prolific (www.prolific.co). We hire Prolific subjects located in Germany, Austria, or Switzerland. As we use different subject pools to hire senders and receivers, in our setup, the sender and the receiver do not know each other, and the likelihood that they will meet after the experiment is negligible. For both parts, we only hire male subjects to exclude gender effects. In part 1, the experimental software (Chen et al., 2016) randomly assigns an integer between 1 and 6 to each group, consisting of one sender and one receiver, and each number 1, 2, 3, 4, 5, or 6 is equally likely. Only the sender is informed about the assigned number. Afterwards, the sender has to send a pre-written message (“The assigned number is ...”) about the assigned number to the receiver. The higher the number in the message is, the higher is the payoff for the sender. The sender’s payoff does not depend on the receiver’s actions. In our modified deception game, the sender has the option of using either a text or video communication channel to send the message to the receiver and can freely decide between these channels. In part 2, the receiver sees the text or video message from the sender and decides whether or not to follow the message. We conduct two treatments. In the *Honesty* treatment, the sender has to send an honest message to the receiver. It is common knowledge that the sender has to be honest. In the *Lying* treatment, the sender can decide whether to send an honest or dishonest message to the receiver. Both subjects know that the receiver has no information about whether the message is honest or not. If the receivers follow the message and it contains the actual number drawn, they receive 10 experimental currency units (ECU). If they follow and the message is a lie, they receive 0 ECU. In case they do not follow the message, their payoff is 3 ECU. The receivers also know, that the sender’s payoff is higher, if they report a higher number.

Prior to the experiment, a pre-survey without incentives revealed that male senders preferred the more anonymous text communication channel when they intended to lie to receivers. Our controlled experiment allows us to better understand the under-

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lying mechanisms using an incentive-compatible setup and observing actual behavior. Our analysis shows a tendency for senders in the *Lying* treatment to prefer the more anonymous text communication channel when they sent a dishonest message compared to an honest one. Looking only at honest messages, a comparison between treatments reveals that senders in the *Lying* treatment chose the video communication channel relatively more often than in the *Honesty* treatment. Recall that receivers in the *Lying* treatment, compared to receivers in the *Honesty* treatment, get no information about whether the message contains a lie. Senders are informed about this in the instructions in both treatments and thus know whether information asymmetries exist or not between themselves and the receivers. Both results, stated above, indicate that, especially in the *Lying* treatment when information asymmetries exist, the channel decision can be a signal. This signal might have changed the channel preferences between treatments.

Our findings contribute to the literature studying moral behavior in economic decision-making and will help to better understand the cognitive and behavioral factors that drive dishonest behavior. Research in this field has shown that social image concerns increase honest behavior even if subjects cannot get caught (Dufwenberg and Dufwenberg, 2018; Gneezy et al., 2018; Khalmetski and Sliwka, 2019; Abeler et al., 2019). Our paper contributes to the analysis of the causes of social image concerns in virtual settings without face-to-face interaction. In addition, we will contribute to the literature on virtual communication by examining how different communication channels affect dishonest behavior and trust. Our insights will contribute to the development of more effective communication strategies for organizations and individual usage. For instance, if certain communication channels tend to facilitate dishonesty, organizations can prioritize the usage of specific communication channels in situations where honest behavior is important. Furthermore, if certain communication channels are perceived as more trustworthy and credible, people should use these channels in situations where uncertainty exists due to information asymmetries.

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