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# Cheating to benefit others? On the relation between Honesty-Humility and prosocial lies

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#### **Abstract**

**Objective:** Among basic personality traits, Honesty-Humility yields the most consistent, negative link with dishonest behavior. The theoretical conceptualization of Honesty-Humility, however, suggests a potential boundary condition of this relation, namely, when lying is prosocial. We therefore tested the hypothesis that the association between Honesty-Humility and dishonesty weakens once lying benefits someone else, particularly so if this other is needy.

**Methods:** In two online studies (Study 1: N = 775 in Germany; Study 2: N = 737 in the UK, preregistered), we measured self-reported Honesty-Humility and dishonest behavior in incentivized cheating paradigms in which the beneficiary of participants' dishonesty was either the participants themselves, a "non-needy" other (e.g., another participant), or a "needy" other (e.g., a charity).

**Results:** We found support for the robustness of the negative association between Honesty-Humility and dishonesty, even if lying was prosocial.

**Conclusion:** Individuals high in Honesty-Humility largely prioritize honesty, even if there is a strong moral imperative to lie; those low in Honesty-Humility, by contrast, tend to lie habitually and thus even if they themselves do not directly profit monetarily. This suggests that (un)truthfulness may be an absolute rather than a relative aspect of Honesty-Humility, although further systematic tests of this proposition are needed.

#### KEYWORDS

charity, cheating, dishonesty, HEXACO Honesty-Humility, moral values, needy other, prosocial lying  $\,$ 

# 1 | INTRODUCTION

People differ in how honest they are: Whereas some individuals tend to generally tell the truth, others do not shy away from lying. Within models of basic personality structure, these individual differences in dishonest behavior are best aligned with Honesty-Humility (Heck et al., 2018; Hilbig, 2022; Zettler et al., 2020), the sixth basic trait dimension in the HEXACO Model of Personality Structure (Ashton & Lee, 2007). By definition, high levels

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of Honesty-Humility are associated with being sincere, honest, and fair-minded, whereas low levels are associated with being sly, dishonest, and greedy. In line with this conceptualization, evidence confirms a consistent, negative association between Honesty-Humility and dishonest behavior. For example, meta-studies have shown a mediumsized negative correlation between Honesty-Humility and dishonesty in incentivized probabilistic cheating paradigms (Heck et al., 2018; Zettler et al., 2020) in which individuals can misreport the outcome of a randomization device (e.g., dice, coin) to obtain a monetary gain without any risk of detection or sanctions. The relation between Honesty-Humility and dishonest behavior has further been shown to be robust across different implementations of cheating paradigms, that is, for different sizes and types of incentives (Klein et al., 2020), for different levels of anonymity of participants (Schild et al., 2020), in one-shot (Hilbig et al., 2015) and multi-round tasks (Kleinlogel et al., 2018), and in situations where lying entails exaggerating one's own performance in an ability test (Markowitz & Levine, 2020; O'Connor et al., 2021). Overall, prior research thus supports the robustness of the negative association between Honesty-Humility and dishonesty.

Crucially, however, the theoretical conceptualization of Honesty-Humility suggests that there might be a boundary condition to this trait's relation with dishonesty, namely, when lying benefits others. Lies that benefit others are usually referred to as prosocial lies (Levine & Lupoli, 2022) or white lies (Erat & Gneezy, 2012). For example, a person may help their classmate cheat on an exam, or they may lie to prevent hurting another's feelings. Such prosocial lies are usually perceived as less unethical by decision-makers than purely selfish ones (Shalvi et al., 2015), as evidenced by an increasing prevalence of lying if it profits others in addition to oneself (e.g., Gino et al., 2013; Klein et al., 2017; Wiltermuth, 2011). Outside observers even tend to evaluate others' prosocial lies as more moral than telling the truth in such situations (Levine & Schweitzer, 2014, 2015).

Honesty-Humility, in turn, subsumes both honesty and prosociality (Ashton & Lee, 2007, 2020): It "represents the tendency to be fair and genuine in dealing with others" (Ashton & Lee, 2007, p. 156; emphasis added).\(^1\) Correspondingly, Honesty-Humility has not only been consistently linked to (dis)honest behavior, but also (positively) to prosocial behavior, such as sharing, cooperation, and non-exploitation (for meta-analyses, see Thielmann, Spadaro, & Balliet, 2020; Zettler et al., 2020). Individuals high in Honesty-Humility should therefore experience a considerable conflict when faced with a situation in which honesty and prosociality are at odds, simply because they are arguably drawn to both behavioral options. The question thus arises whether the negative link between

Honesty-Humility and dishonesty remains robust when lying benefits others—or, conversely, when telling the truth has negative externalities on others. In other words, will those high in Honesty-Humility lie when lying is prosocial?

Some recent evidence offers preliminary insights into this question. In one study by Klein et al. (2017), the relation between Honesty-Humility and dishonest behavior weakened once lying was purely prosocial (i.e., benefiting only another participant; r = -.16) rather than purely selfish (i.e., benefiting only the acting individual; r = -.35).<sup>2</sup> In another study by Ścigała et al. (2019), Honesty-Humility was negatively linked to dishonest behavior in a collaborative setting in which dishonesty had a positive impact on the interaction partner's monetary outcome. However, even those high in Honesty-Humility lied to some extent when they were (allegedly) coupled with a brazen liar who cheated to the maximum extent possible. Similar results emerged in a study linking Honesty-Humility to individuals' willingness to lie to cover up another's dishonesty and, thereby, benefit the other (Thielmann, Böhm, & Hilbig, 2021). Here, again, Honesty-Humility was negatively linked to dishonest behavior, but the prevalence of dishonesty among those high in Honesty-Humility was nonetheless substantial. Overall, these findings suggest that benefits for others may indeed encourage lying even among those high in Honesty-Humility, although the negative link between Honesty-Humility and dishonest behavior still appears robust in these situations.

Other studies, in turn, suggest that those high in Honesty-Humility may even be more willing to lie prosocially than those low in Honesty-Humility, meaning that Honesty-Humility may actually be positively associated with dishonesty once lying benefits others. For example, those high in Honesty-Humility tended to engage in trustworthy dishonesty, that is, lying to reciprocate another's trust and, thereby, increase the other's monetary outcome at personal cost (Ścigała et al., 2020). This was not the case for those low in Honesty-Humility who, by contrast, only lied to increase their personal profit. In another study (Paul et al., 2022), participants were asked to provide feedback on another person's essay, with the feedback being either directed to the experimenter or the essay writer themselves. Those high in Honesty-Humility provided more positive and kinder feedback when the recipient was the essay writer than when it was the experimenter, thus arguably lying in the former situation to avoid hurting the essay writer's feelings. Of note, however, the positive relation between Honesty-Humility and the provision of overly kind feedback was only small and statistically negligible once the remaining HEXACO dimensions were controlled for (in which case only Agreeableness was a significant predictor of lying).

Taken together, evidence suggests that even those high in Honesty-Humility may sometimes lie when dishonesty is prosocial in the sense that it benefits others. As Fleeson et al. (2022) concluded in their recent review, "when the honest action was no longer the benevolent action, HH [Honesty-Humility] produced less honesty, suggesting that the honesty of high HH individuals may be only a side effect of benevolence" (p. 3). Then again, in most previous studies, the negative link between Honesty-Humility and lying remained relatively robust even when lying was prosocial (Klein et al., 2017; Ścigała et al., 2019; Thielmann, Böhm, & Hilbig, 2021). However, the comparability of these prior studies is limited given that dishonesty was elicited in different paradigms varying in multiple aspects (e.g., measuring proactive versus reactive behavior, providing versus not providing monetary incentives for lying, etc.). Thus, it remains essentially unknown whether and, if so, under which (prosocial) circumstances the negative link between Honesty-Humility and dishonesty may actually vanish or even turn positive.

The goal of the present research was to shed light on this issue by specifically testing whether the link between Honesty-Humility and prosocial lying is moderated by the neediness of the beneficiary of one's lie and, thus, by the extent to which the situation provides moral reasons to lie. In two studies, we manipulated the beneficiary of lying to be either the acting individual themselves, an unknown "non-needy" other,<sup>3</sup> or an unknown "needy" other. In the two latter conditions, lying is prosocial because another person profits from lying but not oneself. However, the two conditions also differ in the extent to which moral values favor dishonesty given that helping someone known to be in need arguably involves a stronger moral imperative than helping some (non-needy) stranger. We thus derived the following hypothesis: The negative relation between Honesty-Humility and dishonest behavior should become weaker (i.e., less negative) across the three conditions differing in who profits from one's lie: oneself, a non-needy other, or a needy other (i.e.,  $r_{\text{pro-self}} < r_{\text{non-needy}} < r_{\text{needy}}$ ). On the one hand, this should be due to those high in Honesty-Humility becoming more willing to lie if someone else benefits, particularly so if the other is needy. On the other hand, those low in Honesty-Humility may become less willing to lie if only someone else, but not they themselves, profit from their dishonest behavior, irrespective of whether this other is needy or not. Whereas Study 1 constituted a first, more exploratory test of these expectations, Study 2 was pre-registered and served to replicate and extend the Study 1 findings. All materials, data, analysis scripts, and supplementary results are available online at the Open Science Framework (OSF; https://osf. io/g8bqh/). No deception was used in any of the studies (Hilbig & Thielmann, 2021).

# 2 | STUDY 1

# 2.1 Methods

# 2.1.1 Participants

We initially planned a sample size of 265 participants, based on an a priori power analysis ( $G^*Power$ ; Faul et al., 2009) for the main effect of beneficiary condition on dishonest behavior. Correspondingly, in the first wave of data collection, we recruited N=304 participants completing the study. Of these, we excluded 37 participants because we suspected inattentive responding based on their response times (i.e., <2 s per item) and/or low variation in responses (i.e., SD<0.3) on the HEXACO-60. Finally, we excluded one participant because they indicated insufficient German language skills, resulting in a final sample of N=266 participants for this first data collection effort.

Critically, this sample size rendered the study clearly underpowered for detecting the targeted interaction effect between experimental condition (i.e., beneficiary of lying) and personality (i.e., Honesty-Humility) in predicting dishonesty. Thus, after initially relying on this sample, we ultimately decided to top up the sample size<sup>5</sup> based on our power analysis for Study 2, which was specifically tied to the experimental design and statistical approach used and which yielded a required sample size of N = 750 (see details below). We, therefore, aimed for another 500 eligible cases, recruited through the same panel agency as the first wave of data collection while explicitly excluding individuals that had participated in the study before. Of a total of 634 participants completing the study, 125 had to be excluded based on the same exclusion criteria as applied before (i.e., 121 took less than 2 s per HEXACO-60 item on average and/or showed SD < 0.3 on the HEXACO-60; another 4 participants reported insufficient German language skills), resulting in a final sample of N = 509 for this second wave of data collection.

Taken together, the final sample of Study 1 comprised N=775 participants. Recruiting participants via a professional panel provider allowed us to obtain a demographically diverse sample in terms of sex, age, and education. Correspondingly, the sample was balanced in terms of sex (51% female), covered a broad age range from 18 to 65 years (M=42.5 years, SD=12.6), and had different educational backgrounds, with almost a third each having a general certificate of secondary education (German: Realschulabschluss), a vocational diploma or university-entrance diploma (German: Fachabitur or Abitur), or a university/college degree. The majority of participants (71%) were in employment; only 4% were students.

Participants were almost equally distributed across the three beneficiary conditions, with n = 257 in the pro-self, n = 269 in the non-needy-other, and n = 249 in the needy-other condition.

# 2.1.2 | Materials and procedure

The study was conducted online via SoSci Survey (Leiner, 2019). Participants were recruited through a professional panel provider in Germany (i.e., Toluna). After providing informed consent and demographic information, participants completed the 60-item German version (Moshagen et al., 2014) of the HEXACO Personality Inventory-Revised (HEXACO-60; Ashton & Lee, 2009). The HEXACO-60 comprises 10 items to measure each of the six HEXACO dimensions, including Honesty-Humility, which is comprised of the four facets Sincerity, Fairness, Greed avoidance, and Modesty (note, however, that the HEXACO-60 items should not be analyzed at the facet level given that each facet is only covered by max. three items). Example items of the Honesty-Humility scale are "I wouldn't use flattery to get a raise or promotion at work, even if I thought it would succeed" (Sincerity), "I'd be tempted to use counterfeit money, if I were sure I could get away with it" (Fairness; reverse-keyed), "Having a lot of money is not especially important to me" (Greed avoidance), and "I think that I am entitled to more respect than the average person is" (Modesty; reverse-keyed). Of note, none of the Honesty-Humility items in the HEXACO-60 conflates honesty with prosociality; in fact, none of the items specifically taps into prosocial behavior, such as helping or cooperating. Responses were collected on a fivepoint Likert-type scale ranging from 1 = strongly disagreeto 5 = strongly agree. Honesty-Humility showed acceptable internal consistency (Cronbach's  $\alpha = .74$ ; M = 3.52, SD = 0.61). For descriptive statistics, reliabilities, and intercorrelations of the remaining HEXACO dimensions, see Table S1 in the Online Supplemental Materials.

After the personality questionnaire, the coin-toss task (Bucciol & Piovesan, 2011) was used to elicit dishonest behavior. Participants were asked to take a coin, choose a target side (heads or tails), toss the coin exactly twice, and then report whether or not they obtained the target side in both tosses. Responding "yes" generated a payoff of 5€ (in addition to a flat fee), whereas responding "no" did not generate any additional payoff. It was emphasized that only participants' responses, but not the actual outcomes of the coin tosses, were decisive in generating the payoff. In fact, given that participants tossed the coin privately, a "yes"-response was entirely non-incriminating (because it could stem from honesty and luck, with 25% probability) and thus lying remained completely anonymous.

For the coin-toss task, participants were randomly assigned to one of three conditions determining the recipient of the generated payoff (if any), that is, who was the ultimate beneficiary of a "yes"-response. In the *proself* condition, the 5€ were added to the participants' own payoffs; in the *non-needy-other* condition, the 5€ were added to the payoff of a randomly selected other participant of the study; and, in the *needy-other* condition, the 5€ were donated to a well-known charity in Germany, the Kindernothilfe e.V. (https://www.kindernothilfe.de/). Thus, in both the non-needy-other and the needy-other conditions, lying is prosocial, whereas it is purely selfish in the pro-self condition.

After completing the coin-toss task, participants were thanked and informed about the study background. All participants received a flat fee for participation in line with the panel provider's regulations. In addition, participants who responded "yes" in the pro-self condition and those who were selected as beneficiaries in the non-needy-other condition received  $5\varepsilon$  as a bonus. All incentives were paid out by the panel provider. In the needy-other condition, we donated the sum of generated payoffs (i.e.,  $650\varepsilon$ ) to the Kindernothilfe e.V.

# 2.1.3 | Statistical analyses

Analyses were conducted in a modified logistic-regression framework using the RRreg package (Heck & Moshagen, 2018) in R. Using Honesty-Humility as a covariate, the model predicts the probability of behaving dishonestly in the coin-toss task. The approach accounts for the fact that 25% of the observed "yes"-responses are expected to be due to actually obtaining the target side in both tosses (i.e., honest wins) and assumes that no one provides incorrect "no"-responses (i.e., responding "no" although having obtained the target side in both tosses). The logistic model provides an odds ratio (OR) quantifying the strength of the association between Honesty-Humility and dishonesty. Whereas OR = 1 indicates independence between variables, ORs < 1 correspond to the expected negative association (with smaller values indicating a stronger association).

To test whether the odds ratio differs across conditions, we fitted a regression including the predictors Honesty-Humility (*z*-standardized), condition (using two Helmert contrasts), and their interaction terms. Besides the overall test of the interaction, the Helmert contrasts allow for a targeted comparison of the odds ratio of Honesty-Humility and dishonesty between (a) the non-needy-other versus the pro-self condition and (b) the needy-other condition versus the mean of the other two conditions. The two contrasts thus test whether individuals high in Honesty-Humility

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already start lying if a "usual" (i.e., *non-needy*) other person profits or only if a *needy* other profits.

We further complemented these analyses by an informative Bayes factor (Hoijtink et al., 2019) assessing the strength of evidence in favor of the hypothesis that the odds ratio of Honesty-Humility and dishonesty monotonically decreases across conditions ( $OR_{pro\text{-self}} < OR_{non\text{-needy}} < OR_{needy}$ ) compared to the hypothesis that the three odds ratios are ordered in any other way. Based on the point estimates and standard errors of the regression coefficients fitted with RRreg, Bayes factors were computed with the package bain (Gu et al., 2021) assuming an objective, fractional-information prior distribution (Hoijtink et al., 2019).

# 2.2 Results and discussion

Across conditions, 49% of participants responded "yes" in the coin-toss task, suggesting that 32% of individuals behaved dishonestly. Surprisingly, the proportion of "yes"-responses was almost identical across conditions, with 52% responding "yes" in the pro-self, 48% in the non-needy-other, and 48% in the needy-other condition. Correspondingly, the prevalence of dishonesty (i.e.,  $\hat{d}_{\text{pro-self}} = .36$ , 95% CI [0.28, 0.44];  $\hat{d}_{\text{non-needy}} = .31$ , 95% CI [0.23, 0.39];  $\hat{d}_{\text{needy}} = .31$ , 95% CI [0.23, 0.39]) did not differ significantly across conditions,  $\chi^2(2) = 0.93$ , p = .627.

Next, we investigated the relation between Honesty-Humility and dishonesty in the three conditions. There was a small to medium-sized, negative association between Honesty-Humility (z-standardized) and the probability of dishonesty in the pro-self condition, OR = 0.77, 95% CI [0.54, 1.10], which, however, failed to reach a conventional level of statistical significance, p = .145. This effect was descriptively stronger—and now also statistically

significant—in the non-needy-other condition, that is, once the beneficiary of a "yes"-response was another participant of the study, OR = 0.65, 95% CI [0.41, 1.01], p = .044, whereas it was descriptively weaker (almost absent) in the needy-other condition in which the beneficiary of a "yes"-response was a charity, OR = 0.92, 95% CI [0.63, 1.35], p = .665. As is apparent in Figure 1, individuals high in Honesty-Humility were generally less willing to lie, irrespective of the beneficiary of lying. Those low in Honesty-Humility, by contrast, were generally more willing to lie, with a tendency to lie the most if they themselves or another participant profited from it rather than the charity.

To statistically test the descriptive difference in relations between Honesty-Humility and dishonest behavior across conditions, we first used a logistic regression predicting the probability of dishonesty by Honesty-Humility (z-standardized), beneficiary condition (two Helmert contrasts; see above), and their multiplicative interaction terms. We then tested the significance of the interaction using a likelihood ratio test comparing the full model including the interaction terms against a nested model without the interaction terms. The regression revealed no significant interaction of any of the two contrast variables with Honesty-Humility, OR = 1.30, 95% CI [0.81, 2.10], p = .277 (pro-self vs. non-needy other) and OR = 0.84, 95% CI [0.47, 1.48], p = .534 (needy other vs. the remaining two conditions). Correspondingly, the nonsignificant likelihood ratio test,  $\chi^2(2) = 1.44$ , p = .487, indicated that, overall, Honesty-Humility did not significantly interact with the beneficiary of a "yes"-response in predicting dishonesty, meaning that the strength of the negative relation between Honesty-Humility and dishonesty did not significantly differ between conditions.

Finally, we complemented our analysis by a Bayes Factor to quantify the strength of evidence in favor of a monotonic increase of the odds ratios expressing the (gradually

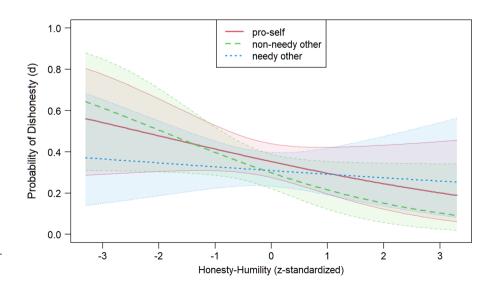


FIGURE 1 Prediction of the probability of dishonesty  $(\hat{d})$  in the three beneficiary conditions (pro-self, non-needy other, and needy other) by Honesty-Humility (z-standardized) in Study 1.

less negative) relation between Honesty-Humility and dishonesty from the pro-self over the non-needy-other to the needy-other condition, as hypothesized. Unlike expected, however, there was no evidence that the odds ratios monotonically increased across conditions,  $BF_{\rm 1c}=1.3$ . This means that the data were about equally likely under our substantive hypothesis, which predicts a specific rank order of odds ratios, as under the complementary hypothesis, which encompasses all other possible rank orders of odds ratios. Thus, in terms of the Bayes Factor, there was no evidence for the idea that the strength of the relation between Honesty-Humility and dishonesty gradually decreased across conditions, depending on who (self vs. other) and how needy the beneficiary of a "yes"-response was.

Taken together, Study 1 did not produce reliable evidence for the idea that the extent to which lying can be motivated by moral reasons may be a boundary condition of the negative link between Honesty-Humility and dishonest behavior. Although the (negative) association between Honesty-Humility and dishonest behavior was descriptively weaker once lying profited a needy other, Honesty-Humility did not interact with the beneficiary of lying in predicting dishonesty. Arguably, however, this lack of an interaction may at least in part be attributable to the slightly higher than usual prevalence of dishonesty among individuals high in Honesty-Humility (see Figure 1), thus calling for replication.

Another notable substantive limitation of Study 1 is that the two prosocial lying conditions differed not only in the neediness of the beneficiary but also in the type of the beneficiary: Whereas the beneficiary was an individual in the non-needy-other condition, it was a charity and thus a much more abstract entity—in the needy-other condition. Thus, we cannot rule out that the absence of an effect of Honesty-Humility on dishonesty in the needyother condition can be attributed to structural differences between conditions other than differences in the beneficiary's neediness. In Study 2, the beneficiary in both prosocial lying conditions thus was a single person and we manipulated the person's neediness by varying their yearly household income, which was either average (nonneedy-other condition) or below the poverty level (needyother condition) in the respective country.

# 3 STUDY 2

# 3.1 Methods

# 3.1.1 Participants

To determine the required sample size, we conducted an a priori power simulation for the likelihood ratio test of the interaction between Honesty-Humility and beneficiary condition on dishonest behavior (see Study 1 for details on the analytic procedure) using the RRreg package (Heck & Moshagen, 2018) in R. Power was estimated assuming a prevalence of dishonesty  $\hat{d}$  of .37, .40, and .37 as well as odds ratios of 0.56, 0.61, and 1.08 in the pro-self, nonneedy-other, and needy-other conditions, respectively. The power simulation yielded a required sample size of n=250 per condition, thus N=750 in total, to obtain satisfactory power (1- $\beta=80\%$ ) with a conventional  $\alpha$  level of 5%. This sample size also ensured satisfactory power (i.e., 1- $\beta=88\%$ ) for the second interaction term comparing the odds ratio between the needy-other condition and the remaining two conditions (see Study 1 for details).

As dictated by the power analysis, we recruited 750 participants who provided complete data. Of these, however, we had to exclude 13 participants based on the preregistered exclusion criteria, that is, failing the attention check (n = 7), and/or taking less than 2 s per HEXACO-60 item on average (n = 12). No participants had to be excluded due to insufficient variation (i.e., SD < 0.3) in responses on the HEXACO-60. The final sample thus comprised N = 737 participants, who were equally split across the sexes (50% female) and covered a broad age range between 18 and 79 years (M = 42.0, SD = 13.7). The majority of participants (66%) were in employment (for 12% employment status was unknown). Participants were almost equally distributed across conditions, with n = 244 in the pro-self, n = 248 in the non-needy-other, and n = 245 in the needy-other condition.

# 3.1.2 | Materials and procedure

The study was again run online via SoSci Survey (Leiner, 2019). Participants were recruited through Prolific Academic, and the sample was restricted to participants from the UK (thus, the study language was English) with an average household income (i.e., between £30,000 and £39,999 per year  $^{11}$ ). This was done to ensure that the beneficiary in the non-needy-other and the needy-other conditions were indeed perceived as such compared to the participants themselves.

Participants first provided informed consent. Next, they completed the HEXACO-60 (Ashton & Lee, 2009) to measure Honesty-Humility along with the five remaining HEXACO dimensions. Responses were collected on a five-point Likert-type scale ranging from  $1 = strongly\ disagree$  to  $5 = strongly\ agree$ . Within the HEXACO items, we embedded an instructed attention check to measure attentiveness (i.e., "To show that you are reading the statements attentively, please choose 'disagree'."). Honesty-Humility showed acceptable internal consistency (Cronbach's

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 $\alpha=.77; M=3.35, SD=0.36$ ). Following the HEXACO-60, we additionally collected self-reports on the Dark Factor of Personality (D; Moshagen et al., 2018) for exploratory reasons using the short, 16-item D questionnaire (Moshagen et al., 2020). However, given that D is beyond the scope of the current investigation, we do not consider it here further. For descriptive statistics, reliabilities, and intercorrelations of all personality measures, see Table S3 in the Online Supplemental Materials.

To elicit dishonest behavior, we used the mind game (Jiang, 2013) which is structurally (and statistically) equivalent to the coin-toss task used in Study 1, but simpler for participants. Specifically, participants were asked to think of a number (integer) between 1 and 8 and to note it down or keep it in mind. Next, they were presented with a randomly drawn number between 1 and 8 and asked to report whether the number they previously thought of matched the number displayed on the screen—the probability of which is 1/8 and thus 12.5%. If participants responded "yes", this generated a payoff of £4.00 (approx. 4.80€ at the time of data collection and thus comparable to the Study 1 payoff), which was either added to participants' own payoff (pro-self condition), allocated to another person with an average household income in the UK (i.e., between £30,000 and £39,999 per year; non-needy-other condition), or allocated to another person with a household income below the poverty level in the UK (i.e., below £15,999; needy-other condition). If participants responded "no," no bonus payment was generated. Importantly, unlike in Study 1, the beneficiaries of a "yes"-response did not participate themselves in the study, thus preventing potential reciprocity effects that might have triggered dishonesty in the non-needy-other condition in Study 1. Instead, beneficiaries were invited to another independent study via Prolific (and preselected based on their yearly household income as indicated in the Prolific base data to match the non-needy-other and needy-other conditions), which simply involved receiving the bonus payment. Participants were fully informed of this procedure in advance.

Finally, participants were thanked and received information about the study's background. They obtained their earnings (including a flat fee and the bonus payment from the mind game, if any) through Prolific. Demographic information of participants was retrieved via Prolific. All study materials as well as the data and analysis scripts are available on the OSF (https://osf.io/g8bqh/). The study was pre-registered on AsPredicted (https://aspredicted.org/6x6hy.pdf).

# 3.2 Results and discussion

As in Study 1, we observed a considerable extent of lying in Study 2. Across conditions, 47% of participants

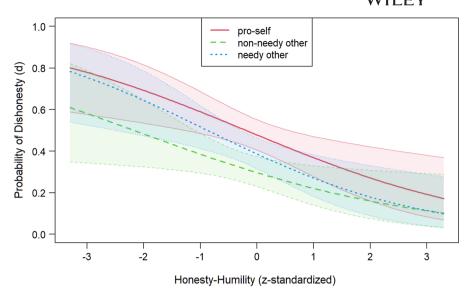
responded "yes" in the mind game, suggesting that 39% were dishonest. Unlike Study 1, however, the proportion of "yes"-responses differed across conditions,  $\chi^2(2) = 9.94$ , p = .007, with the highest proportion occurring in the proself condition (54%), followed by the needy-other condition (47%), and the non-needy-other condition (40%). The corresponding estimates of the probability of dishonesty were  $\hat{d}_{\text{pro-self}} = .47, 95\%$  CI [0.40, 0.54],  $\hat{d}_{\text{needy}} = .39, 95\%$ CI [0.32, 0.47], and  $\hat{d}_{\text{non-needy}} = .31$ , 95% CI [0.24, 0.38]. Thus, the findings were well in line with prior evidence suggesting that self-profit usually outweighs profits for others, although both influence dishonest behavior (Klein et al., 2017). At the same time, the descriptive differences in the probability of dishonesty between conditionsparticularly the higher prevalence of dishonesty in the needy-other as compared to the non-needy-other condition—indicated that our manipulation of the beneficiary's neediness was successful.

Honesty-Humility (*z*-standardized) was again negatively related to dishonesty in the pro-self condition, showing a stronger effect size as in Study 1 and thus more akin to prior research, OR = 0.64, 95% CI [0.47, 0.86], p = .002. In contrast to Study 1, however, medium-sized effects were also apparent in both the non-needy-other condition, OR = 0.67, 95% CI [0.48, 0.95], p = .019, and the needy-other condition, OR = 0.59, 95% CI [0.42, 0.83], p = .001. As Figure 2 shows, individuals low in Honesty-Humility tended to lie no matter who benefitted from lying. Individuals high in Honesty-Humility, by contrast, generally refrained from lying, even if there was a strong moral imperative to do so because someone with a low income would have benefitted from it.

To nonetheless statistically test for potential differences in the association between Honesty-Humility and dishonesty across conditions (as preregistered), we used the same logistic regression approach as in Study 1, predicting the probability of dishonesty by Honesty-Humility (z-standardized), beneficiary condition (Helmert contrasts), and their multiplicative interaction terms. Mirroring the zero-order relations, the model only showed a main effect of Honesty-Humility, OR = 0.63, 95% CI [0.52, 0.77], p < .001, but no interaction between Honesty-Humility and any of the two Helmert contrasts, OR = 1.05, 95% CI [0.67, 1.66], p = .821 and OR = 0.90, 95% CI [0.60, 1.36], p = .616, respectively. Correspondingly, as in Study 1, the likelihood ratio test comparing the full model against the nested model without interaction terms was far from significant,  $\chi^2(2) = 0.29$ , p = .866. In addition to these effects involving Honesty-Humility, only the main effect of the first Helmert contrast (pro-self vs. non-needy other) was significant, OR = 0.46, 95% CI [0.29, 0.73], p = .001, but not the second Helmert contrast (needy other vs. the

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FIGURE 2 Prediction of the probability of dishonesty  $(\hat{d})$  in the three beneficiary conditions (pro-self, non-needy other, and needy other) by Honesty-Humility (*z*-standardized) in Study 2.



remaining two conditions), OR = 1.01, 95% CI [0.69, 1.50], p = .944. The corresponding likelihood ratio test of the overall main effect of beneficiary condition on dishonesty was significant,  $\chi^2(2) = 11.74$ , p = .003 (for the full regression results, see the R Markdown file on the OSF).<sup>12</sup>

To finally test the predicted monotonic increase in odds ratios for the relation between Honesty-Humility and dishonesty from the pro-self over the non-needy-other to the needy-other condition, we again resorted to a Bayesian analysis. As indicated by a Bayes Factor of  $BF_{1c}=0.57$ , the data provided evidence neither for nor against a monotonic increase in the odds ratios as compared to all other possible rank orders of odds ratios. Thus, our hypothesis that the negative relation between Honesty-Humility and dishonesty becomes weaker (i.e., the odds ratio increases) when lying is prosocial was not supported. Overall, Study 2 thus essentially replicated Study 1 by showing that the strength of association between Honesty-Humility and dishonesty did not reliably decrease with an increasing moral imperative to lie.

# 4 | GENERAL DISCUSSION

Personality research has consistently shown that traits can account for individuals' tendency to behave in honest versus dishonest ways. Most prominently, studies support a negative relation of HEXACO Honesty-Humility with dishonest behavior (Heck et al., 2018; Zettler et al., 2020), and this link has been shown to be robust across various implementations of cheating paradigms used to measure dishonest behavior in controlled, experimental settings (for a recent review, see Hilbig, 2022). However, the theoretical

conceptualization of Honesty-Humility-along with recent evidence—suggests that there might be a boundary condition to this link, namely, once lying serves moral purposes, such as being prosocial (Fleeson et al., 2022). By definition, Honesty-Humility captures both honesty and prosociality (Ashton et al., 2014), and it is essentially unknown which of these moral principles is prioritized by individuals high in Honesty-Humility if the two are at odds. The present work aimed to shed light on this question by critically testing the robustness of the negative association between Honesty-Humility and dishonest behavior when lying exclusively benefitted a (needy) other. Specifically, we conducted two studies measuring self-reports of Honesty-Humility together with dishonest behavior in incentivized probabilistic cheating paradigms to test the hypothesis that the link between Honesty-Humility and dishonesty weakens if lying is prosocial, particularly so if the beneficiary of one's lies is needy.

In contrast to this hypothesis, however, our studies provided further support for the robustness of the negative relation between Honesty-Humility and dishonest behavior, even if lying is prosocial. Although Study 1 suggested that the predictive power of Honesty-Humility for dishonesty may (descriptively) decrease once lying benefits a needy other, the association between Honesty-Humility and dishonesty did not significantly differ between beneficiary conditions. Painting an even clearer picture, in Study 2 the negative relation between Honesty-Humility and dishonest behavior was robust and, again, largely unaffected by who the beneficiary of lying was. That is, those low in Honesty-Humility tended to lie, even if they themselves did not profit from it. By contrast, those high in Honesty-Humility tended to refrain from lying, even if lying benefitted a "needy" other. Taken together, there was thus

no conclusive evidence in favor of our hypothesis that the size of the effect of Honesty-Humility on dishonesty might monotonically decrease with an increasing moral imperative to lie.

These results are particularly interesting from a theoretical perspective. There are ongoing discussions about the conceptualization of Honesty-Humility and what this sixth basic personality dimension actually entails (Diebels et al., 2018; Fleeson, 2020; Fleeson et al., 2022). For example, Fleeson (2020) proposed that benevolence might better capture the true meaning of Honesty-Humility than the trait's original label (for similar reasoning, see Diebels et al., 2018, who proposed selfishness as an alternative label). Our findings, however, suggest that honesty or truthfulness, respectively, is indeed a key feature of Honesty-Humility that is not generally outweighed by prosociality. Arguably, in a situation where lying entails benefitting a needy other, dishonesty is the benevolent option—but those high in Honesty-Humility still tended not to lie, at least less so than those low in Honesty-Humility. As such, our results are also partially at odds with the idea that "Honesty-Humility is less an unconditional unwillingness to lie than an unwillingness to deceive or exploit for self-interest" (Lee & Ashton, 2020, p. 568). At least in the situations that participants faced in our studies, those high in Honesty-Humility were (largely) unconditionally unwilling to lie. Surprisingly, however, note that a notable portion of individuals high in Honesty-Humility lied in Study 1, irrespective of whether they themselves or someone else profited from it.

Another interesting observation is that those low in Honesty-Humility were generally inclined to lie, irrespective of whether it was to their own or another party's advantage. This finding could be interpreted in two ways. First, it is conceivable that those low in Honesty-Humility are habitual liars for whom lying is simply the default and thus the easier response that requires fewer cognitive resources (Verschuere et al., 2011). Then again, studies on prosocial behavior suggest that those low in Honesty-Humility are indeed capable of strategically adapting their prosociality to situational circumstances in order to avoid punishment (Hilbig et al., 2012; Hilbig & Zettler, 2009; Thielmann, Spadaro, & Balliet, 2020). Thus, it is at least highly unlikely that those low in Honesty-Humility will lie unconditionally, no matter the consequences. A second interpretation is that those low in Honesty-Humility might experience lower, if any, psychological costs from lying. According to the self-maintenance theory (Mazar et al., 2008), lying poses a threat to one's moral self-image. Individuals low in Honesty-Humility may, however, draw from various justifications (e.g., beliefs that others are dishonest, too, through assumed similarity; Thielmann et al., 2022; Thielmann, Hilbig, & Zettler, 2020) that allow them to maintain their moral self-image, even in the face of unethical conduct. Support for this idea comes from recent research on the Dark Factor of Personality, which has strong conceptual overlap with the low pole of Honesty-Humility (Moshagen et al., 2018). Specifically, it has been shown that those scoring high on the Dark Factor use various beliefs to justify their unethical behavior (Hilbig et al., 2022). The same arguably holds for individuals low in Honesty-Humility. In turn, given that lying even had positive consequences for others in our studies, dishonesty may have served as a vehicle for those low in Honesty-Humility to boost their moral self-image in the sense of perceiving themselves as prosocial. After all, individuals low in Honesty-Humility are those "to whom the truth is a commodity to be used to their own benefit when convenient" (Volk et al., 2020, p. 556).

Taken together, our findings support the robustness of the link between Honesty-Humility and dishonest behavior, even when honesty means to withhold a benefit from others. One might thus conclude that prosociality does not represent a boundary condition of said link. However, taking previous evidence into account, this conclusion seems premature. As summarized earlier, there is some evidence suggesting that even those high in Honesty-Humility may sometimes lie for prosocial reasons (Ścigała et al., 2019, 2020; Thielmann, Böhm, & Hilbig, 2021). Strikingly, however, in all these previous studies, the involved individuals were interdependent, that is, participants were interacting with the beneficiary of their dishonesty. For example, in one study, lying entailed covering up the dishonesty of another participant who was present in the lab at the same time (Thielmann, Böhm, & Hilbig, 2021), and in another study, it involved reciprocating the trust of a participant who had previously participated in the study (Ścigała et al., 2020). By contrast, in the studies presented here, participants were the only acting individuals, that is, there was no interaction whatsoever with the beneficiary of lying. Note that another study which produced similar findings as those presented here (Klein et al., 2017) used a comparable single-player paradigm as we did. We thus speculate that the degree of interdependence between individuals may determine whether those high in Honesty-Humility are willing to lie or not. However, given that we did not manipulate the level of interdependence in addition to the nature of the beneficiary of lying, our studies cannot provide closure on this issue. More generally, the question still remains whether certain boundary conditions of the association between Honesty-Humility and dishonest behavior exist that are related to the extent to which lying is prosocial. Future research conducting large-scale comparisons of various situations in which lying is prosocial is thus needed to provide a more systematic understanding of how those high in Honesty-Humility weigh honesty versus prosociality in different situations.

## 5 | CONCLUSION

Honesty-Humility is codefined by and indeed the most consistent predictor of both honesty and prosociality (Heck et al., 2018; Zettler, et al., 2020). However, many situations involve a conflict between these two moral values, raising the question whether either is predominant in Honesty-Humility, that is, whether Honesty-Humility continues to account for honesty if the latter is at odds with prosociality. Our findings show that those high in Honesty-Humility largely favor honesty, at least in situations where they are not directly interacting with the beneficiary of their (prosocial) lies. By implication, being truthful and honest are key characteristics of the high pole of the sixth major dimension of personality.

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## CONFLICT OF INTEREST STATEMENT

All authors declare that they have no conflicts of interest.

## **AUTHOR CONTRIBUTIONS**

Isabel Thielmann: Conceptualization, Methodology, Investigation, Writing - Original Draft, Writing - Review & Editing, Funding acquisition; Benjamin E. Hilbig: Conceptualization, Methodology, Writing - Review & Editing, Funding acquisition; Sina A. Klein: Methodology; Alicia Seidl: Investigation, Writing - Review & Editing; Daniel W. Heck: Formal analysis, Data Curation, Writing - Review & Editing.

#### **ETHICS STATEMENT**

We did not receive ethical approval because this is not required in Germany for studies that comply with ethical standards for the treatment of human subjects (which our studies did).

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## **ENDNOTES**

<sup>1</sup> Although Honesty-Humility bears similarity with Agreeableness as conceptualized within the Five-Factor Model or Big Five,

respectively (e.g., Goldberg, 1990; McCrae & Costa, 1987), it also includes unique content that is neither captured by Agreeableness, nor by any other Big Five dimension (Thielmann, Moshagen, et al., 2021). As such, also note that Agreeableness as per the HEXACO model is different from, though related to, Big Five Agreeableness. HEXACO Agreeableness specifically captures characteristics such as being tolerant, lenient, and patient versus quarrelsome, stubborn, and ill-tempered. Thus, HEXACO Agreeableness is narrower in scope than Big Five Agreeableness and also includes the anger component inherent in Big Five Neuroticism (while not including the sentimentality component of Big Five Agreeableness, which is captured by Emotionality in the HEXACO model).

- <sup>2</sup> Given that the paper by Klein et al. (2017) did not focus on the relation between personality and dishonesty, the correlations with Honesty-Humility were not reported in the original publication. We calculated them from the raw data.
- <sup>3</sup> Strictly speaking, the neediness of the beneficiary in this condition is unknown. However, we selected this terminology to clearly differentiate this condition from the needy-other condition (in which it was known that the beneficiary is needy).
- <sup>4</sup> Specifically, we aimed to find a small to medium-sized difference in the prevalence of dishonesty across conditions in a  $\chi^2$ -test (w = 0.2, with df = 2), which yielded a required sample size of N = 241. Expecting some dropout based on our exclusion criteria, we aimed to oversample by 10%, resulting in our target sample size of N = 265. Note that the panel provider oversampled even further, which is why the finally recruited sample size slightly exceeded this number.
- <sup>5</sup> We thank the editor for this suggestion.
- There were no significant differences between the samples with regard to sex,  $\chi^2(2) = 3.19$ , p = .203, Cramer's V = 0.06, 95% CI [0.00, 0.13], and age, t(773) = 1.88, p = .060, Cohen's d = .14, 95% CI [-0.01, 0.29]. However, the follow-up sample from the second wave was slightly less educated than the original sample from the first wave,  $\chi^2(2) = 8.31$ , p = .016, Cramer's V = 0.11, 95% CI [0.02, 0.18]. More crucially still, the two samples neither differed with regard to Honesty-Humility, t(773) = 1.57, p = .117, Cohen's d = .12, 95% CI [-0.03, 0.27], nor with regard to the proportion of "yes"-responses,  $\chi^2(1) < 0.01$ , p > .999, Cramer's V = 0.
- <sup>7</sup> The Kindernothilfe e.V. supports children and adolescents across the globe to fight poverty, diseases, and violence and to improve education. Note that, for legal reasons, participants in the second wave of data collection (but not in the first) had to explicitly confirm that they forgo the amount generated in the coin-toss task in order for the amount to being donated to the charity. All participants confirmed; no one revised their donation decision based on this confirmation request.
- We repeated all analyses controlling for wave of data collection (i.e., original vs. follow-up). All results remained virtually the same (see the R Markdown file on the OSF for details). Therefore, we do not consider wave of data collection any further here.
- <sup>9</sup> In addition, the regression model yielded a significant main effect of Honesty-Humility, OR = 0.77, 95% CI [0.61, 0.97], p = .023, but no significant main effect of the Helmert contrasts expressing differences in the prevalence of dishonesty between conditions, OR = 0.78, 95% CI [0.45, 1.34], p = .367 (pro-self vs. non-needy other) and OR = 0.93, 95% CI [0.58, 1.49], p = .756 (needy other

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- vs. the remaining two conditions), respectively. Correspondingly, the likelihood ratio test expressing the overall effect of beneficiary condition on dishonesty was non-significant,  $\chi^2(2)=0.92$ , p=.632. To further test the robustness of our findings, we replicated the regression analysis including main effects for the remaining five HEXACO dimensions. Again, only Honesty-Humility was a significant predictor of dishonesty, p=.015 (for details, see the R Markdown file on the OSF as well as Table S2). In addition, none of the other HEXACO dimensions yielded a significant interaction with the beneficiary condition in additional regression analyses including one specific interaction term for each HEXACO dimension at a time.
- <sup>10</sup> The specific values for the power simulation are based on a previous analysis of the initial data collection for Study 1 (wave 1, N=266), where we (incorrectly) assumed a winning probability of p=1/6 (instead of p=1/4) in the coin-toss task. Importantly, the power is higher (i.e., 88%) when assuming the correct parameter values obtained with p=1/4.
- According to the Office for National Statistics (2022), the median household income in 2021 was £31,385 whereas the mean was £37,622. Prolific Academic allows selecting one's sample based on the income that participants indicated when registering for the panel (in £10,000 steps).
- Results again remained essentially the same once adding main effects for the remaining five HEXACO dimensions to the regression model. In addition to Honesty-Humility, only Emotionality had a significant effect on dishonesty, p=.033 (see the R Markdown file on the OSF as well as Table S4 for details), which is reasonable given that Emotionally encompasses empathic concern. However, neither Emotionality nor any other HEXACO dimension interacted with the beneficiary condition in predicting dishonesty (see the OSF for details).

## REFERENCES

- Ashton, M. C., & Lee, K. (2007). Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. *Personality and Social Psychology Review*, *11*(2), 150–166. https://doi.org/10.1177/1088868306294907
- Ashton, M. C., & Lee, K. (2009). The HEXACO-60: A short measure of the major dimensions of personality. *Journal of Personality Assessment*, 91(4), 340–345. https://doi.org/10.1080/00223890902935878
- Ashton, M. C., & Lee, K. (2020). Objections to the HEXACO model of personality structure—And why those objections fail. European Journal of Personality, 34(4), 492–510. https://doi.org/10.1002/per.2242
- Ashton, M. C., Lee, K., & De Vries, R. E. (2014). The HEXACO Honesty-Humility, Agreeableness, and Emotionality factors: A review of research and theory. *Personality and Social Psychology Review*, *18*(2), 139–152. https://doi.org/10.1177/1088868314 523838
- Bucciol, A., & Piovesan, M. (2011). Luck or cheating? A field experiment on honesty with children. *Journal of Economic Psychology*, *32*(1), 73–78. https://doi.org/10.1016/j.joep.2010.12.001
- Diebels, K. J., Leary, M. R., & Chon, D. (2018). Individual differences in selfishness as a major dimension of personality: A reinterpretation of the sixth personality factor. *Review of General Psychology*, *22*(4), 367–376. https://doi.org/10.1037/gpr0000155

- Erat, S., & Gneezy, U. (2012). White lies. *Management Science*, 58(4), 723–733. https://doi.org/10.1287/mnsc.1110.1449
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41(4), 1149–1160. https://doi.org/10.3758/BRM.41.4.1149
- Fleeson, W. (2020). Live simply so that others may simply live: Trying to get clarity on the meaning of Honesty/Humility. *European Journal of Personality*, *34*, 524–526. https://doi.org/10.1002/per.2284
- Fleeson, W., Furr, R. M., Jayawickreme, E., & Hardin, B. (2022). Honesty as a trait. *Current Opinion in Psychology*, 47, 101418. https://doi.org/10.1016/j.copsyc.2022.101418
- Gino, F., Ayal, S., & Ariely, D. (2013). Self-serving altruism? The lure of unethical actions that benefit others. *Journal of Economic Behavior & Organization*, 93, 285–292. https://doi.org/10.1016/j.jebo.2013.04.005
- Goldberg, L. R. (1990). An alternative 'description of personality': The Big-Five factor structure. *Journal of Personality and Social Psychology*, 59(6), 1216–1229. https://doi.org/10.1037/002 2-3514.59.6.1216
- Gu, X., Hoijtink, H., Mulder, J., & van Lissa, C. J. (2021). bain: Bayes Factors for informative hypotheses (Version R package version 0.2.8) [Computer software]. https://CRAN.R-project.org/package=bain
- Heck, D. W., & Moshagen, M. (2018). RRreg: An R package for correlation and regression analyses of randomized response data. *Journal of Statistical Software*, 85(2), 1–29. https://doi. org/10.18637/jss.v085.i02
- Heck, D. W., Thielmann, I., Moshagen, M., & Hilbig, B. E. (2018). Who lies? A large-scale reanalysis linking basic personality traits to unethical decision making. *Judgment & Decision Making*, 13, 356–371.
- Hilbig, B. E. (2022). Personality and behavioral dishonesty. *Current Opinion in Psychology*, 47, 101378. https://doi.org/10.1016/j.copsyc.2022.101378
- Hilbig, B. E., Moshagen, M., Thielmann, I., & Zettler, I. (2022). Making rights from wrongs: The crucial role of beliefs and justifications for the expression of aversive personality. *Journal of Experimental Psychology: General*, 151, 2730–2755. https://doi.org/10.1037/xge0001232
- Hilbig, B. E., Moshagen, M., & Zettler, I. (2015). Truth will out: Linking personality, morality, and honesty through indirect questioning. *Social Psychological and Personality Science*, *6*(2), 140–147. https://doi.org/10.1177/1948550614553640
- Hilbig, B. E., & Thielmann, I. (2021). On the (mis)use of deception in web-based research. *Zeitschrift für Psychologie*, 229(4), 225–229. https://doi.org/10.1027/2151-2604/a000466
- Hilbig, B. E., & Zettler, I. (2009). Pillars of cooperation: Honesty-Humility, social value orientations, and economic behavior. *Journal of Research in Personality*, 43(3), 516–519. https://doi.org/10.1016/j.jrp.2009.01.003
- Hilbig, B. E., Zettler, I., & Heydasch, T. (2012). Personality, punishment and public goods: Strategic shifts towards cooperation as a matter of dispositional Honesty-Humility. *European Journal of Personality*, 26(3), 245–254. https://doi.org/10.1002/per.830
- Hoijtink, H., Mulder, J., van Lissa, C., & Gu, X. (2019). A tutorial on testing hypotheses using the Bayes factor. *Psychological Methods*, 24(5), 539–556. https://doi.org/10.1037/met0000201

THIELMANN ET AL. 881

- Jiang, T. (2013). Cheating in mind games: The subtlety of rules matters. *Journal of Economic Behavior & Organization*, 93, 328–336. https://doi.org/10.1016/j.jebo.2013.04.003
- Klein, S. A., Thielmann, I., Hilbig, B. E., & Zettler, I. (2017). Between me and we: The importance of self-profit versus social justifiability for ethical decision making. *Judgment & Decision Making*, 12(6), 563–571.
- Klein, S. A., Thielmann, I., Hilbig, B. E., & Heck, D. W. (2020). On the robustness of the association between Honesty-Humility and dishonest behavior for varying incentives. *Journal of Research in Personality*, 88, 104006. https://doi.org/10.1016/ j.jrp.2020.104006
- Kleinlogel, E. P., Dietz, J., & Antonakis, J. (2018). Lucky, competent, or a just a cheat? Interactive effects of Honesty-Humility and moral cues on cheating behavior. *Personality and Social Psychology Bulletin*, 44(2), 158–172. https://doi.org/10.1177/0146167217733071
- Lee, K., & Ashton, M. C. (2020). Why six factors, why it matters. *European Journal of Personality*, 34, 562–590. https://doi.org/10.1002/per.2284
- Leiner, D. J. (2019). SoSci Survey (Version 3.2.00) [Computer software]. https://www.soscisurvey.de
- Levine, E. E., & Lupoli, M. J. (2022). Prosocial lies: Causes and consequences. *Current Opinion in Psychology*, 43, 335–340. https://doi.org/10.1016/j.copsyc.2021.08.006
- Levine, E. E., & Schweitzer, M. E. (2014). Are liars ethical? On the tension between benevolence and honesty. *Journal of Experimental Social Psychology*, 53, 107–117. https://doi.org/10.1016/j.jesp.2014.03.005
- Levine, E. E., & Schweitzer, M. E. (2015). Prosocial lies: When deception breeds trust. Organizational Behavior and Human Decision Processes, 126, 88–106. https://doi.org/10.1016/j.obhdp. 2014.10.007
- Markowitz, D. M., & Levine, T. R. (2020). It's the situation and your disposition: A test of two honesty hypotheses. *Social Psychological and Personality Science*, 12(2), 213–224. https://doi.org/10.1177/1948550619898976
- Mazar, N., Amir, O., & Ariely, D. (2008). The dishonesty of honest people: A theory of self-concept maintenance. *Journal of Marketing Research*, 45(6), 633–644. https://doi.org/10.1509/jmkr.45.6.633
- McCrae, R. R., & Costa, P. T. (1987). Validation of the five-factor model of personality across instruments and observers. *Journal of Personality and Social Psychology*, *52*(1), 81–90. https://doi.org/10.1037/0022-3514.52.1.81
- Moshagen, M., Hilbig, B. E., & Zettler, I. (2014). Faktorstruktur, psychometrische Eigenschaften und Messinvarianz der deutschen Version des 60-Item HEXACO Persönlichkeitsinventars [Factor structure, psychometric properties, and measurement invariance of the German-language version of the 60-item HEXACO personality inventory revised]. *Diagnostica*, 60(2), 86–97.
- Moshagen, M., Hilbig, B. E., & Zettler, I. (2018). The dark core of personality. *Psychological Review*, *125*(5), 656–688. https://doi.org/10.1037/rev0000111
- Moshagen, M., Zettler, I., & Hilbig, B. E. (2020). Measuring the dark core of personality. *Psychological Assessment*, *32*(2), 182–196. https://doi.org/10.1037/pas0000778
- O'Connor, A. M., Judges, R. A., Lee, K., & Evans, A. D. (2021). Examining Honesty-Humility and cheating behaviors across younger and older adults. *International Journal of Behavioral*

- Development, 46(2), 112–117. https://doi.org/10.1177/01650 254211039022
- Office for National Statistics. (2022). The effects of taxes and benefits on household income, disposable income estimate. https://www.ons.gov.uk/file?uri=/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/datasets/householddisposableincomeandinequality/financialyearending2021/hdiireferencetables202021.xlsx
- Paul, A. A., Lee, K., & Ashton, M. C. (2022). Who tells prosocial lies? A HEXACO model investigation. *Journal of Research in Personality*, 98, 104232. https://doi.org/10.1016/j.jrp.2022.104232
- Schild, C., Moshagen, M., Ścigała, K. A., & Zettler, I. (2020). May the odds—Or your personality—Be in your favor: Probability of observing a favorable outcome, Honesty-Humility, and dishonest behavior. *Judgment & Decision Making*, 15(4), 600–610.
- Ścigała, K. A., Schild, C., Heck, D. W., & Zettler, I. (2019). Who deals with the devil? Interdependence, personality, and corrupted collaboration. *Social Psychological and Personality Science*, 10(8), 1019–1027. https://doi.org/10.1177/1948550618813419
- Ścigała, K. A., Schild, C., & Zettler, I. (2020). Dishonesty as a signal of trustworthiness: Honesty-Humility and trustworthy dishonesty. *Royal Society Open Science*, 7(10), 200685. https://doi.org/10.1098/rsos.200685
- Shalvi, S., Gino, F., Barkan, R., & Ayal, S. (2015). Self-serving justifications: Doing wrong and feeling moral. *Current Directions in Psychological Science*, *24*(2), 125–130. https://doi.org/10.1177/0963721414553264
- Thielmann, I., Böhm, R., & Hilbig, B. E. (2021). Buying unethical loyalty: A behavioral paradigm and empirical test. *Social Psychological and Personality Science*, *12*(3), 363–370. https://doi.org/10.1177/1948550620905218
- Thielmann, I., Hilbig, B. E., & Zettler, I. (2020). Seeing me, seeing you: Testing competing accounts of assumed similarity in personality judgments. *Journal of Personality and Social Psychology*, 118(1), 172–198. https://doi.org/10.1037/pspp0000222
- Thielmann, I., Moshagen, M., Hilbig, B. E., & Zettler, I. (2021). On the comparability of basic personality models: Meta-analytic correspondence, scope, and orthogonality of the Big Five and HEXACO dimensions. *European Journal of Personality*, *36*, 870–900. https://doi.org/10.1177/08902070211026793
- Thielmann, I., Rau, R., & Locke, K. D. (2022). Trait-specificity versus global positivity: A critical test of alternative sources of assumed similarity in personality judgments. *Journal of Personality and Social Psychology*, 124, 828–847. https://doi.org/10.1037/pspp0 000420
- Thielmann, I., Spadaro, G., & Balliet, D. (2020). Personality and prosocial behavior: A theoretical framework and meta-analysis. *Psychological Bulletin*, *146*(1), 30–90. https://doi.org/10.1037/bul0000217
- Verschuere, B., Spruyt, A., Meijer, E. H., & Otgaar, H. (2011). The ease of lying. *Consciousness and Cognition: An International Journal*, 20(3), 908–911. https://doi.org/10.1016/j.concog.2010.10.023
- Volk, A. A., Visser, B. A., & Book, A. (2020). The theoretical superiority of the HEXACO Model of Personality. *European Journal of Personality*, *34*, 555–556. https://doi.org/10.1002/per.2284
- Wiltermuth, S. S. (2011). Cheating more when the spoils are split. *Organizational Behavior and Human Decision Processes*, 115(2), 157–168. https://doi.org/10.1016/j.obhdp.2010.10.001

Zettler, I., Thielmann, I., Hilbig, B. E., & Moshagen, M. (2020). The nomological net of the HEXACO Model of Personality: A large-scale meta-analytic investigation. *Perspectives on Psychological Science*, 15(3), 723–760. https://doi.org/10.1177/1745691619895036

# SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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