

# **What Do You Recommend? The Effects of Communication and Dark Personality on Misreporting in Autonomous Teams**

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Running Head: The Effects of Communication and Dark Personality on Misreporting by Autonomous Teams

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# **What Do You Recommend? The Effects of Communication and Dark Personality on Misreporting in Autonomous Teams**

## **ABSTRACT**

In autonomous teams, the responsibility for important tasks and decisions, like reporting decisions, is shared among team members, creating uncertainty about how much influence each team member has on the team's decision. We examine autonomous teams to analyze the effects of communication and team member personality on team cost reporting decisions. Our results show that team misreporting becomes more pronounced the darker the team members' personality and that communication among team members fulfills a crucial role. Specifically, communication among team members fails to discipline dishonest team members with a darker personality. At the same time, it can infect honest team members with a less dark personality, both leading to more team misreporting. Our results grant detailed insight into the black box that is autonomous teams and showcases how their joint decision-making processes depend on communication and team composition.

**Keywords:** Misreporting, autonomous teams, communication, honesty, budgetary slack, Dark Triad.

**JEL Classification:** C92, D91, M41, M51.

**Data Availability:** Experimental instrument and data are available upon request.

## I. INTRODUCTION

Many organizations have recognized that human capital and adaptability are the cornerstones of success, and, consequently, they have flattened their organizational structures and transferred decision authority to autonomous teams (Bernstein, Bunch, Canner, and Lee 2016a). These autonomous teams are groups of employees with shared, collective responsibility to plan, manage, and execute tasks and decisions (Guzzo and Dickson 1996; De Jong, De Ruyter, and Lemmink 2004). What makes autonomous teams valuable is their ability to use local knowledge, respond to market pressures, and facilitate employee learning (Bernstein et al. 2016a; Bernstein, Canner, and Dobbs 2016b). A peek into the business and economics literature suggests that most large firms have started employing autonomous teams over the last couple of decades (Lazear and Shaw 2007).<sup>1</sup> However, despite their prevalence in practice, we have done little research on how autonomous teams' joint decision-making processes.

In this study, we examine how autonomous teams make cost reporting decisions. In particular, we focus on the role of communication and team member personality in team decision-making. Cost reporting decisions have been studied extensively in the experimental accounting literature (e.g., Evans, Hannan, Krishnan, and Moser 2001). However, at least two crucial differences exist between cost reporting decisions in those traditional settings and cost reporting decisions in autonomous teams. First, rather than one manager carrying sole responsibility for cost reporting decisions, this responsibility is shared among all members of autonomous teams (Yukl 1999; Hackman 2002; Carson, Tesluk, and Marrone 2007; Solansky 2008). Second, in autonomous teams, the budgetary slack resulting from overstating costs does not generate private economic benefits for the one manager making the cost reporting decision either. Instead, its generated economic benefits accrue to all members of the team.

Sharing responsibility for and having a shared economic stake in the cost reporting decision leads to uncertainty about how much each team member effectively influences the decision. Many autonomous teams randomly designate one team member who makes the decisions on the team's behalf (Solansky 2008). Some autonomous teams distribute different decisions to different team members (Carson et al. 2007). Others also assign decisions to team members for a predetermined period rather than indefinitely (Erez, Lepine, and Elms 2002). However, since the formal responsibility for decisions is shared, other team members have a legitimate say in how the team's decisions should be made.

The uncertainty underlying how much influence each team member has on the team's cost reporting decision paves the way for communication to fulfill a prominent role, separating autonomous teams from their non-autonomous, extensively studied counterparts. Non-autonomous teams have firm-appointed managers who possess both formal and real authority to make decisions (Aghion and Tirole 1997). Accordingly, communication is a second-order process in non-autonomous teams where team members, at best, share unsolicited preferences with the firm-appointed manager. In contrast, in autonomous teams, formal authority and the economic stake in decisions are shared, implying communication is more critical: Team members can exchange recommendations about the team's cost reporting decisions and directly steer it in their preferred direction.

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<sup>1</sup> Lawler, Mohrman, and Ledford (1995) report firms' use of autonomous teams increased from 27% in 1987 to 68% in 1993 among Fortune 1000 firms. This percentage further increased to 79% for the Fortune 1000 and 81% for manufacturing firms in 2004 (Druskat and Wheeler 2004).

Since people have an innate desire to behave consistently (Eyster 2002; Yariv 2002; Falk and Zimmermann 2016, 2018), team members should be relatively reluctant to revise the recommendations they make during the communication process. However, we expect that some team members are more easily swayed by other team member's recommendations than others. Specifically, recommending more honest reporting to others means team members care more about projecting a positive image to themselves and others (in this case, the image of being an honest person) than about the shared economic benefits of misreporting for the team. When team members are more concerned about projecting a positive image, they should also be more inclined to demonstrate their concern for others by being more considerate of their recommendations. Importantly, we expect these image-conscious team members to adopt others' recommendations more, even if those recommendations suggest less honest reporting and thus conflict with theirs. Jointly, these theoretical arguments lead to our first hypothesis, which predicts that team members who recommend more honest reporting to their team will adopt others' recommendations more.

The second part of our theory features the Dark Triad of personality, consisting of narcissism, Machiavellianism, and psychopathy. Previous literature has demonstrated the Dark Triad's relevance in various accounting contexts (Majors 2015; Wang 2017; Hobson, Stern, and Zimbelman 2020). In the context of reporting decisions in autonomous teams, the Dark Triad also exhibits a conceptual link: Team members who score higher on Dark Triad traits (hereafter dark team members), prioritize self-interest more, feel more entitled, and are less capable of including moral and social considerations in their decisions (Bailey 2014; Jones and Paulhus 2014; Majors 2015). Accordingly, we expect that dark team members care disproportionately more about the economic benefits of misreporting (primarily those accruing to themselves and not necessarily to the rest of the team) than about projecting a positive image to themselves and others. Based on these arguments, our second hypothesis predicts that dark team members will recommend less honest reporting to their team than their non-dark counterparts.

To test our hypotheses, we designed and analyzed a modified participative budgeting game. The game builds on prior management accounting literature (e.g., Evans et al. 2001) and introduces an autonomous team setting as a new feature. Specifically, two participants randomly formed a team in which they shared the economic benefits of building slack. At the start of the game, participants exchanged recommendations about which cost report to submit as a team. Next, participants submitted the cost report they prefer their team to submit. Since the experimental software randomly chose one of the cost reports to be submitted as the team's cost report, participants faced uncertainty about whether their report would serve as the team's cost report.

We recruited qualified participants through an online labor market to play the game. Our results show support for our first hypothesis: Participants' recommendations are a significant driver of whether they heed their team member's recommendations. When participants recommend more honest reporting to their team members, they adopt their team members' recommendation more in the cost report they prefer their team to submit. We also find support for the second hypothesis: Participants' score on the Dark Triad traits negatively relates to their proclivity to recommend honest reporting to their partner. Together, our results suggest that team misreporting becomes more pronounced the darker the personality in the autonomous team. These teams fail to discipline relatively dishonest team members with a darker personality while infecting relatively honest team members with a less dark personality.

Rather than steering the communication process, dark team members may prefer to make reporting decisions for the team without the uncertainty of others' potentially influencing the decision. Therefore, in an alternative version of the game, we allow participants to increase their chances of making the cost reporting decision for the team right before they participate in the rest of the game. Results reveal that scoring higher on the Dark Triad traits also positively relates to increasing one's likelihood to make decisions for the entire team. Therefore, in addition to not being disciplined and infecting others, team members with a darker personality are also more likely to exploit opportunities to make critical administrative and organizational decisions on behalf of themselves and others.

Our study makes several contributions. First, our study contributes to the budgeting literature in management accounting. This literature has primarily analyzed cost reporting settings where one manager is both formally and effectively responsible for submitting cost reports to corporate headquarters (e.g., Hannan, Rankin, and Towry 2006; Rankin, Schwartz, and Young 2008; Church, Hannan, and Kuang 2012; Douthit and Stevens 2015; Church, Kuang, and Liu 2019; Douthit and Majerczyk 2019). Some of this literature has extended the traditional budgeting game to feature multiple reporting managers and tested how transparency between those managers has peer effects and leads to mutual monitoring (e.g., Zhang 2008; Evans, Moser, Newman, and Stikeleather 2016; Brunner and Ostermaier 2019; Guo, Libby, Liu, and Tian 2019). However, this literature does not feature a setting where formal responsibility and the economic stakes for cost reporting decisions are shared, which is a setting that is prevalent in many organizations that have decided to rely on more autonomous teams. Therefore, the uncertainty and trade-offs underlying cost reporting decisions in those settings differ from the trade-offs usually discussed in the budgeting literature.

Second, we contribute to the management accounting literature examining how firms can improve the efficacy of teams. Much of this literature focuses on how accounting systems and procedures affect mutual monitoring, peer observability, and coordination within teams (e.g., Towry 2003; Rankin 2004; Rowe 2004; Arnold, Hannan, and Taftkov 2020). However, in autonomous teams, tasks and decisions occur within a structure not well captured by either team members acting alone or by multiple team members acting collectively. The uncertainty underlying the effective responsibility for tasks and decisions in autonomous teams makes communication among team members more critical. Some research suggests that promoting and fostering communication in such teams is productive and desirable because it promotes information sharing, engagement, collaboration, and cooperation (Pentland 2012; Markova and Perry 2014; Waber, Magnolfi, and Lindsay 2014; Haas and Mortensen 2016). However, we find that communication can also be harmful.

Lastly, we contribute to the management literature examining shared leadership in group settings (Yukl 1989; Pearce and Sims 2000; Gronn 2002; Carson et al. 2007; Bergman, Rentsch, Small, Davenport, and Bergman 2012). The concept of shared leadership is close to how we conceptualize the shared responsibility and shared economic stakes in autonomous teams. Specifically, the management literature has many ways to define shared leadership, but what nearly all definitions have in common is that shared leadership involves multiple team members sharing responsibility and influencing each other.<sup>2</sup> Although shared leadership is said to have various benefits for the effectiveness of teams, we know relatively little about the conditions in which it emerges. Some teams select certain people for specific leadership roles, while they are

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<sup>2</sup> In this way, shared leadership is often contrasted with hierarchical leadership in which one formally appointed leader takes on all responsibility (Bolden 2011)

randomly determined or emerge naturally in others (Bergman et al. 2012; Hu, Zhang, Jiang, and Chen 2019). Our study suggests that team composition is an essential determinant of shared leadership. Specifically, team members scoring higher on the Dark Triad traits engage in more influencing activities, and they are more likely to succeed in infecting others. Darker team members are also more likely to pull leadership responsibility toward them and away from others in the team when presented with the opportunity.

## **II. THEORETICAL BACKGROUND AND HYPOTHESES**

### **Theoretical Background**

Honesty in managerial reporting is an established topic of interest in the management accounting literature. The baseline setting considers a manager with private cost information submitting a cost report to corporate headquarters (Evans et al. 2001). As long as the manager's cost report falls into the range of possible, publicly known cost realizations, corporate headquarters approves the budget request. The manager keeps the difference between the reported cost and the actual cost (i.e., budgetary slack) while the corporate headquarters receives the profit above the reported cost. In the baseline setting, budgetary slack exclusively benefits the reporting manager. Accordingly, the extent of misreporting is determined by the following trade-off: Preserving one's image of being honest by reporting truthfully and pursuing the private economic benefits of budgetary slack by reporting dishonestly.

Experimental studies have extended and studied this baseline setting extensively. For instance, some experiments allow corporate headquarters or a representative to reject the manager's cost report (Rankin et al. 2008; Douthit and Stevens 2015). Rejection authority has different consequences for managers' reporting decisions depending on how the manager's reporting decision and the headquarters' involvement are structured and framed. Other experimental studies have identified various circumstances under which managers' inclination to report truthfully increases. Examples of these circumstances include but are not limited to the presence of social pressure to be honest (Hannan et al. 2006), whether submitting the cost report requires a factual assertion or not (Rankin et al. 2008; Douthit and Stevens 2015), whether the manager's report leads to a gain or a loss for the firm (Cardinaels 2016), the headquarters' legitimacy of being the rightful claimant of the total surplus (Douthit and Majerczyk 2019), and the measurement basis of cost reports (e.g., Church et al. 2019).

### **Hypothesis Development**

#### *Misreporting in Autonomous Teams – Communication*

We examine cost reporting decisions in the context of autonomous teams. The uncertainty in how much influence each team member effectively has lends importance to interactive and communicative processes involving the team members (Che and Yoo 2001; Solansky 2008; Yukl 2012; Markova and Perry 2014). By exchanging recommendations, team members can influence each other and steer the team's reporting decision in the desired direction. When considering which recommendation to make to others, we expect team members to balance the shared economic benefits of misreporting and projecting a positive image to themselves and others (in this case, the image of being an honest person). We know from literature in economics that shared economic benefits, especially in a team context, may sway people to lie more (Conrads, Irlenbusch, Rilke, and Walkowitz 2013; Kocher, Schudy, and Spantig 2018). However, since lying violates the social norm of honesty and people can be concerned with putting forth a positive image about being honest (Schlenker 1980; Hannan et al. 2006; Leary 2019),

the team context may also prevent some recommending it as an option for their team. Therefore, how team members balance the trade-off between shared economic benefits and projecting a positive image to themselves and others may vary from person to person.

During the exchange of recommendations, team members should find it challenging to revise their recommendations based on others' recommendations. Although recommendations are non-binding, we expect the communication process to have a commitment-like character for team members. Existing literature in economics provides evidence that people prefer consistency between non-binding commitments and later behavior, and people have also been shown to value such consistency in others (Eyster 2002; Yarovitz 2002; Falk and Zimmermann 2016, 2018). In addition, psychological studies have demonstrated the crucial role of former actions on people's perception of right or wrong (Festinger 1957; Harmon-Jones and Harmon-Jones 2007). Similarly, Steel (1988) argues that people are motivated to behave in a way that affirms the integrity of the self.<sup>3</sup>

However, we propose that some team members are more easily swayed to revise their recommendations than others. Specifically, we expect that others' recommendations influence team members by making either honest or dishonest reporting more salient (Baumeister 1998; Schweitzer and Hsee 2002; Mazar, Amir, and Ariely 2008) and by changing their understanding of social norms within the team (Cialdini and Trost 1998; Church et al. 2012). The degree to which team members incorporate others' recommendations will depend on their recommendations. When team members recommend honest reporting to the team, they care more about projecting a positive image to themselves and others (in this case, the image of being an honest person) than about the shared economic benefits of misreporting. Whenever team members are more concerned about projecting a positive image, they should also be more inclined to demonstrate their concern for others by being more considerate of their recommendations. Based on these arguments, our first hypothesis predicts that team members who recommend more honest reporting heed others' recommendations more strongly.

**H1:** Team members adopt others' recommendations more when they recommend more honest reporting to those other team members.

### *Misreporting in Autonomous Teams – The Dark Triad*

So far, our theoretical roadmap suggests that when team members in autonomous teams recommend more honest reporting, they heed their others' recommendations more. Jointly, this raises the question of which team members recommend more honest reporting to their team and thus adopt others' recommendations more. We have already established that this depends on balancing the trade-off between the shared economic benefits of misreporting and projecting a positive image to themselves and others. We conjecture that how team members resolve this balancing act depends non-trivially on the darkness of their personalities.

“The Dark Triad” of personality is an established meta-construct for personality in psychology comprising narcissism, Machiavellianism, and psychopathy. An emerging research stream in accounting has examined the influence of Dark Triad traits in accounting contexts because it

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<sup>3</sup> For instance, being caught with an inconsistency as a politician can have substantial political costs. Therefore, a technique in public debates is pointing out opponents' inconsistencies (see, for instance, Ericson, Murphy, and Zeuschner 2011; Newman, Sather, and Woolgar 2013). Managers should also avoid changing direction over time and follow through with their plans to appear confident instead (e.g., Staw and Ross 1989; Kaplan, Klebanov, and Sorensen 2012).

is known for its malevolent qualities (Majors 2015; Wang 2017; Hobson et al. 2020). In particular, narcissists feel more entitled and have stronger feelings of dominance, Machiavellians find it easier to justify prioritizing their self-interest, and psychopaths are less capable of including moral considerations and others' perspectives in their decision-making (Bailey 2014; Jones and Paulhus 2014; Majors 2015). Although the accounting and psychological literature consider each trait conceptually distinct, they are highly related, and, therefore, they often considered simultaneously.

Building on prior psychological literature, we expect team members who have a darker personality (hereafter dark team members) will justify self-interested pursuits more easily, will feel more entitled to make the cost reporting decision on their team's behalf, and are relatively unaffected by social considerations (such as the image they project to themselves and others) and others' interests (Jones and Paulhus 2014; Majors 2015; Hobson et al. 2020). Therefore, we expect they have a stronger inclination to weigh the economic benefits of misreporting (primarily those accruing to themselves and not necessarily those accruing to the rest of the team) more heavily than projecting a positive image. Jointly, these theoretical arguments lead to our second hypothesis.

**H2:** Team members with a darker personality recommend less honest reporting to others in the team.

— *Figure 1 about here* —

Hypotheses one and two jointly comprise a theoretical framework that features a moderated mediation model (see Figure 1). Collectively, the moderated mediation model predicts that (1) team members adopt others' recommendations more when they recommend more honest reporting to those other team members, and (2) that their proclivity to recommend more honest reporting is negatively related to the darkness of their personality. Therefore, the model predicts that team members with a darker personality recommend less honest reporting and, as a result, incorporate others' recommendations less. We did not formulate a third hypothesis for the moderated mediation model because it would be a reformulation of hypotheses 1 and 2 combined and, therefore, not add any additional theoretical predictions.

### III. EXPERIMENTAL METHOD

#### Experimental Design

We test our hypotheses by programming a modified participative budgeting game in oTree (Chen, Schonger, and Wickens 2016). Our design combines elements of a quasi-experiment with those of a controlled experiment. Specifically, like a quasi-experiment, our design does not feature an experimental manipulation. The primary reason for not featuring a manipulation is that the independent variables central to our hypotheses reflect decisions (i.e., *Recommended Honesty*, *Other's Recommended Honesty*) and stable personality traits (i.e., *Dark Score*). Such independent variables cannot be manipulated and are, therefore, ideally measured.

However, our design also captures some of the benefits of a controlled experiment through random assignment. That is, the independent variable central to our first hypothesis and our entire theoretical framework, i.e., *Other's Recommended Honesty*, is determined by another participant in the team. Since participants are randomly matched to form teams of two, we can reliably attribute differences in the cost reporting decision participants would submit for the team to differences in the independent variable and, therefore, in part, assess causality. The



random matching of participants accomplished the same thing as the random assignment of participants to experimental conditions in a controlled experiment.<sup>4</sup>

## Experimental Setting

Building on prior budgeting experiments (Evans et al. 2001), we consider a firm setting in which two participants represent an autonomous team. The team's task is to manage a project that generates 6000 Lira, the currency used in the experiment, in revenue. Although the firm's revenue is constant, the project's costs may vary from team to team. The project's costs were randomly drawn from the following set of Lira: {4000, 4001, ..., 5999, 6000}.<sup>5</sup> Participants are told that their firm's headquarters does not know the actual project cost and only knows it lies between 4000 and 6000 Lira. The firm's profit equals the revenue that the project generates (i.e., 6000 Lira) minus the team's cost report.<sup>6</sup> Each participant in the team earns a fixed salary of 500 Lira. However, on top of this amount, they keep and equally split the difference between the funds provided by corporate headquarters (based on their team's cost report) and the actual project cost randomly determined by the computer.

— *Figure 2 about here* —

Figure 1 displays an overview of the procedures, and the Appendix reveals an excerpt of our experimental materials. First, both participants in the team observe their actual project costs. Next, they enter the communication stage, in which they simultaneously recommend to each other which cost their team should report to corporate headquarters. Therefore, we operationalized communication as participants exchanging cost report recommendations, and we did not allow them to send additional textual messages to each other.<sup>7</sup> We told participants that recommendations are not binding and that they can choose their recommendation as they wish. After observing the other participant's recommendation, both participants submit the cost report they prefer their team to submit to corporate headquarters.<sup>8</sup> Our experimental software then randomly selects one of their cost reports to be submitted as the team's cost report to corporate headquarters.<sup>9</sup>

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<sup>4</sup> This particular advantage of interactive laboratory studies has been exploited before in the management accounting literature (for instance, see Maas, Van Rinsum, and Towry (2012)).

<sup>5</sup> Since we also run a control treatment that excludes communication, we prefer the project's costs to be as constant as possible. To this purpose, we let the computer draw each dyad's project costs beforehand. In this way, participants across treatments are exposed to similar cost realizations, which reduces noise in our dependent variables.

<sup>6</sup> In our setting, no participant represents corporate headquarters because our focus is on the role of communication in how autonomous teams arrive at cost reporting decisions. We expect that, in the case of relatively autonomous, self-organized teams, the link between those reporting the costs and corporate headquarters is not particularly strong nor salient (Akerlof and Kranton 2008). Accordingly, having another participant to take the role of the (passive) headquarters would confound our results by introducing distributional concerns with respect to this third participant (see also Church et al. 2012).

<sup>7</sup> Although communication may involve all kinds of other messages (e.g., narratives, visual messages, and non-verbal expressions), we focus our theory on exchanging recommendations about cost reporting decisions. Accordingly, we chose to maximize control in by restricting communication to recommending cost numbers. In this way, we eliminate dimensions of communication that are outside the scope of our theory.

<sup>8</sup> We also run a version of our study, i.e., the control treatment, where participants do not send each other recommendations before stating how they prefer their team to report about its incurred costs. This control treatment only serves as a baseline for how participants submit cost reports.

<sup>9</sup> This procedure is akin to the strategy method that is often used in experimental economics (Brandts and Charness 2011; Fischbacher, Gächter, and Quercia 2012). The usual benefit of using the strategy method is that it doubles the number of observations. However, the usual drawback is that participants are not entirely sure which decision

The procedure we used to elicit cost reports from participants implies that participants are not entirely sure whose cost report will be submitted as the team's cost report. This is a key feature of our experimental design because leadership and managerial roles are typically informally assigned in autonomous teams and come with some degree of uncertainty. The uncertainty of who eventually decides on behalf of the team also paves the way for two-way communication and team member personality to fulfill a prominent role, which is a key focus of our study.

After the study, participants completed a short questionnaire. First, we elicited participants' responses to the short Dark Triad instrument (Jones and Paulhus 2014). We require their responses to this instrument to construct a measure for the darkness of their personality for hypothesis two. Lastly, we included the Light Triad, which consists of the subscales of humanism, faith in humanity, and Kantianism (Kaufman, Yaden, Hyde, and Tsukayama 2019), and a handful of demographics variables to serve as noise controls or controls for robustness tests. Notably, some of our independent variables are choices made by the participants during the experiment or aim to capture their personalities in daily life. This implies that they could be correlated to other operational variables (Libby, Bloomfield, and Nelson 2002). We measure these operational variables too in the questionnaire and control for their impact in non-tabulated robustness tests.<sup>10</sup>

## Measures

Our primary dependent variable of interest is *Honesty*, which is the percentage of possible budget slack ignored by the cost reports participants prefer their team to submit. We measure *Honesty* similar to prior experimental budgeting research as  $1 - (\text{Cost Report} - \text{Actual Costs}) / (\text{Maximum Costs} - \text{Actual Costs})$ . Therefore, *Honesty* ranges from 0 to 1, where 0 is an entirely untruthful cost report and 1 is an entirely truthful cost report. We also measure recommendations participants send and receive, i.e., *Recommended Honesty* and *Other's Recommended Honesty*, similarly:  $1 - (\text{Cost Report Recommendation} - \text{Actual Cost}) / (\text{Maximum Costs} - \text{Actual Costs})$ . Accordingly, recommendations have the same possible range of values as our main dependent variable *Honesty*. Another critical variable we measure is *Dark Score*, which equals the extracted score on the Dark Triad traits we measured in the questionnaire. Specifically, we run an exploratory factor analysis and extract the score of the first and only factor that loads using the regression method.<sup>11</sup>

## Participants

Before running our experimental study, we obtained formal approval from an institutional review board. Next, we recruited participants using Amazon's Mechanical Turk (MTurk). Recent experimental papers in management accounting have also used this platform to recruit participants (e.g., Chan and Zhang 2020; Deller and Michels 2021). We recruited participants from Amazon Mechanical Turk (MTurk) to participate in our study because they allow for higher variance in scores on the Dark Triad traits than student samples do. Like the researchers before

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will become critical for payout. In our experimental design, this "drawback" is actually key to capturing the uncertainty that is inherent in decision-making processes of autonomous teams.

<sup>10</sup> Our inferences regarding the hypothesis tests remain unchanged when we add control variables for gender, age, trust, trustworthiness, and educational level to our empirical specifications.

<sup>11</sup> We exclude item 7 (I have never gotten into trouble with the law) and item 8 (I enjoy having sex with people I hardly know) of the psychopathy subscale when constructing our measure because they meet the three criteria for exclusion: (1) their item-rest correlation is lower than 0.3, (2) internal consistency improves when either are excluded, and (3) the items themselves at face value seem inconsistent with the other items. The internal consistency of the remaining items shows excellent internal consistency ( $\alpha = 0.928$ ).

us, we recruited participants in the United States with an approval rating of 95 percent or higher, with at least 500 Human Intelligence Tasks (HITs) completed on MTurk (Peer, Vosgerau, and Acquisti 2014; Bentley 2021). Participants who accepted our HIT received a flat rate of \$0.25 upon completing the HIT successfully. On top of this amount, they could earn an additional \$1.35 and \$4.05 depending on their decisions, another participant’s decisions, and a random process. On average, the experiment lasted 7 minutes.

To ensure that our sample of participants is qualified to participate in our experiment, we used a combination of ex-ante and ex-post exclusion procedures (Bentley 2021).<sup>12</sup> First, during the instruction phase, we immediately excluded participants that answered one of the four comprehension questions incorrectly (a total of 136 observations). These participants were excluded immediately and were paid \$0.25 for their time. Second, if participants dropped during the experiment, implying their team member could not continue either, the software excluded both from the study and not just the participant who dropped (a total of 25 observations).<sup>13</sup> The dropped participant received \$0.25 while the team member received \$0.25 plus the converted base fee of 500 Lira, which equaled \$1.60 in total. Lastly, we incorporated two checks to ensure that participants paid attention to the experimental stimuli and participated seriously when they reached the questionnaire.<sup>14</sup> We exclude participants from our sample who do not pass the two checks (a total of 26 observations). Jointly, these selection criteria lowered our sample from 347 observations to a usable sample of 152 observations.<sup>15</sup> That is, we retain 44 percent of our Amazon’s Mechanical Turk sample, which is similar to prior accounting literature that uses MTurkers (Bonner, Clor-Proell, and Koonce 2014; Cardinaels, Hollander, and White 2019). However, it is important to stress that our study features an interactive component and a cost reporting component, which requires higher quality participants and may have caused a larger portion of participants to be excluded.

## IV. RESULTS

### Descriptive Results

In our usable sample, 35 percent of the participants are female, the average age is 37 years old (SD = 9.95), and 70 percent have a college or university degree. We start our analysis by visualizing the honesty participants incorporate in their cost reports. For this purpose, we split the participants in our primary treatment into two groups based on the median *Recommended Honesty*. Figure 2 displays a box plot for the average *Dishonesty* split based on whether participants score above or equal to the median *Recommended Honesty* (45 observations) or below the median *Recommended Honesty* (45 observations). It also lists the average *Honesty* for participants in a control treatment that excludes communication (62 observations).

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<sup>12</sup> Like Bentley (2021), we prefer to use ex-ante over ex-post exclusion procedures because excluding participants based on objective criteria during the experiment eliminates any discretion on our part. However, ex-post exclusion procedures can still have value to check whether participants paid attention, and they can still be reliable if researchers commit to these ex-post exclusion procedures ex-ante.

<sup>13</sup> The only alternative to this design choice would have been replacing the dropped participant with a “bot.” Since this would involve a certain degree of deception, we decided not to go down this path and exclude the team from participating instead.

<sup>14</sup> The checks ask participants to evaluate the following statements by answering either “true” or “false”: “Before I submitted the cost report that I wanted my team to submit, I received a cost report recommendation from the other participant” and “I could choose whether I wanted to become my team’s manager.”

<sup>15</sup> The 152 observations comprise 62 observations for the control treatment and 90 observations for the main treatment.

— Figure 2 about here —

Figure 2 reveals that the communication process fulfills a relevant role in steering participants' input for their team's cost reporting decision. However, its effects depend on participants' use of communication to recommend what the team should do. Specifically, we find evidence of a positive effect of communication on *Honesty* conditional on the participant recommending a preference for honesty to their team member ( $t_{105} = 3.463$ , two-tailed  $p\text{-value} < 0.001$ ). At the same time, it reveals support for a negative effect of communication on *Honesty* conditional on the participant recommending a preference for dishonesty to their team member ( $t_{105} = -4.195$ , two-tailed  $p\text{-value} < 0.001$ ).

## Hypothesis tests

### *Hypothesis 1 – Misreporting and Communication in Autonomous Teams*

To test the first hypothesis, we focus on participants in the main treatment that includes communication and conduct an OLS regression using robust standard errors.<sup>16</sup> The dependent variable of interest is *Honesty*, which is specified as a function of two independent variables, *Recommended Honesty* and *Other's Recommended Honesty*, and their interaction. The first hypothesis predicts that participants incorporate others' recommendations more in the cost report they prefer their team to submit when they recommended more honest reporting themselves. Accordingly, if our interaction term is significantly different from zero and positive, we have found support for this hypothesis. Table 1 displays the results and reveals support for the first hypothesis. Specifically, the effect of *Other's Recommended Honesty* on *Honesty* increases as *Recommended Honesty* increases ( $\beta = 0.487$ , two-tailed  $p\text{-value} < 0.001$ ). Inversely, the influence of the other's recommendation on participants' cost reports decreases as they recommend more dishonest reporting themselves.

— Table 1 about here —

What is striking about these results is that incorporating the other's recommendation in one's cost reporting decision does not just increase as participants recommend more honest reporting themselves. Instead, they need to recommend a sufficiently high threshold of honesty before incorporating others' recommendations. Specifically, Table 1 reveals that at the 50<sup>th</sup> percentile and 75<sup>th</sup> percentile of *Recommended Honesty*, participants do incorporate others' recommendations (two-tailed  $p\text{-value} < 0.001$ ). However, at the 25<sup>th</sup> percentile of *Recommended Honesty*, we find no evidence that participants incorporate others' recommendations into their input for the team's reporting decision anymore (two-tailed  $p\text{-value} > 0.100$ ).

— Figure 3 about here —

To visualize this conditional indirect effect, we plotted the predicted values of *Honesty* as a function of *Other Recommended Honesty* at the three different levels of *Recommended Honesty* in Figure 3. This interaction plot will help us examine how participants' recommendations precisely interact with their team member's recommendations. Visual inspection of Figure 3 shows that as participants recommend more honesty (i.e., *Recommended Honesty* increases from the 25<sup>th</sup> to the 75<sup>th</sup> percentile), the influence of their team member's recommendation on

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<sup>16</sup> Results similar to OLS can be obtained using the ANOVA estimation procedure. The only difference is that ANOVA presents the results of the estimation procedure differently. Since all our endogenous variables are fractions, that lie between 0 and 1, we also ran them using fractional response regressions (Papke and Wooldridge 1996). Our results remain inferentially similar, too.

their cost report increases. Inversely, as their team member recommends more honesty (i.e., *Other's Recommended Honesty* increases from 0 to 1), the influence of participant's own recommendation on their cost report increases.

## *Hypothesis 2 – Misreporting and The Dark Triad in Autonomous Teams*

— Table 2 about here —

The second hypothesis predicts that having a dark personality is negatively related to participants' recommendation to report honestly. We test this hypothesis using OLS regressions that predict *Recommended Honesty* as a function of *Dark Score*, which equals the extracted score on the Dark Triad traits included in the questionnaire.<sup>17</sup> According to our second hypothesis, we should find a negative coefficient because being darker should be associated with recommending less honesty. Table 2 column 1 shows direct support for the second hypothesis: we find evidence of a significant negative relationship between *Dark Score* and *Recommended Honesty* ( $\beta = -0.111$ , two-tailed  $p\text{-value} = 0.004$ ). Also, Table 2 column 2 reveals support for a significant negative relationship between *Dark Score* and *Honesty* ( $\beta = -0.092$ , two-tailed  $p\text{-value} = 0.008$ ), which could, at least in part, be explained by the observed relationship between *Dark Score* and *Recommended Honesty* in column 1.

## **Supplemental Analyses**

### *Conditional Indirect Effect of the Dark Triad on Honesty via Recommended Honesty*

Combining both the first and second hypotheses, we can predict that dark participants' inclination to recommend less honest reporting also indirectly leads to less incorporation of the other participant's recommendation in the cost report. This entire process, in turn, explains dark participants' inclination to submit less honest cost reports. We test this entire process using a moderated mediation model.<sup>18</sup> In particular, we rely on a path between *Dark Score* and *Recommended Honesty* and a path between *Recommended Honesty* and *Honesty*, while *Other's Recommended Honesty* moderates the latter.

— Table 3 about here —

We estimate the full empirical model and analyze a potential conditional indirect effect of *Dark Score* on *Honesty* via *Recommended Honesty* each at the mean of *Other's Recommended Honesty*. Since our sample is relatively small, we use bootstrapping with 5,000 replications to estimate a 95% bias-corrected confidence interval. Table 3 reveals support for a negative conditional indirect effect of *Dark Score* on *Honesty* via *Recommended Honesty* at the mean of *Other's Recommended Honesty* because its 95% bias-corrected confidence interval does not contain zero (-0.127, -0.026). Accordingly, dark participants recommended less honest reporting than non-dark participants, leading them to submit less honest reports. However, their inclination to recommend less honest reporting also leads them to incorporate the other's recommendation less in cost reports. Also, Table 3 shows that the negative conditional indirect effect

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<sup>17</sup> Specifically, we run an exploratory factor analysis and extract the score of the first and only factor that loads using the regression method. We exclude item 7 (i.e., I have never gotten into trouble with the law) and item 8 (I enjoy having sex with people I hardly know) of the psychopathy subscale when constructing our measure because they meet the three criteria for exclusion: (1) their item-rest correlation is lower than 0.3, (2) internal consistency improves when either are excluded, and (3) the items themselves at face value seem inconsistent with the other items. The internal consistency of the remaining items shows excellent internal consistency ( $\alpha = 0.928$ ).

<sup>18</sup> Specifically, we follow the procedure specified for model 14 in Hayes (2017).

increases as *Other's Recommended Honesty* increases. This is due to the significant interaction term in path 2 and the mechanism central to the first hypothesis ( $\beta = 0.492$ , two-tailed  $p$ -value  $< 0.001$ ).

#### *Which team members change their mind?*

Our theory supporting the first hypothesis predicts that team members who recommend more honest reporting should be more easily swayed to revise their recommendation based on others' recommendations, even when these others recommend less honest reporting. In this section, we analyze this prediction using *Honesty Revision*, which is the difference between *Honesty* and *Recommended Honesty*. Accordingly, *Honesty Revision* possible range is -1 (switching from a fully honest recommendation to submitting a fully dishonest report) and 1 (switching from a fully dishonest recommendation to submitting a fully honest report).<sup>19</sup> We still focus on participants in the main treatment that includes communication and conduct an OLS regression using robust standard errors. We predict the dependent variable of interest *Honesty Revision* as a function of two independent variables, *Recommended Honesty* and *Other's Recommended Honesty*, and their interaction term.

— Table 4 about here —

Table 4 displays the results. We find that participants who recommend more honest reporting revise their recommendations more and they revise them downward ( $\beta = -0.549$ , two-tailed  $p$ -value  $< 0.001$ ). However, how much they revise their recommendations downward depends on the other participant's recommendation. Specifically, the relationship between their recommendation and their downward revision is attenuated as the other participant's recommendation recommends more honest reporting ( $\beta = 0.487$ , two-tailed  $p$ -value  $< 0.001$ ).

The marginal effects in Table 4 grant more insight into this interaction effect. Specifically, at the 25<sup>th</sup> percentile of *Other's Recommended Honesty* (which is a nearly fully dishonest recommendation by the other participant) and the 50<sup>th</sup> percentile of *Other's Recommended Honesty* (which is a nearly perfectly balancing recommendation by the other participant), participants revise their recommendation downward as they recommended more honest reporting to the other participant (two-tailed  $p$ -value  $< 0.001$ ). However, at the 75<sup>th</sup> percentile of *Other's Recommended Honesty* (which is nearly a fully honest recommendation by the other participant), participants do not revise their recommendation (two-tailed  $p$ -value  $> 0.100$ ).

#### *Not Being Dark or Being Light?*

Psychology research has recently shifted its attention to developing a conceptual counterpart to the Dark Triad, called the Light Triad (Kaufman et al. 2019). It consists of faith in humanity, humanism, and Kantianism, and is known for its benevolent qualities. People who have faith in humanity believe that humans are fundamentally good regardless of what is said and done. Humanists celebrate other people and their successes because they value others' worth and dignity. Kantians treat people as they ideally would like to be treated. The Light Triad has not been tested as vastly as the Dark Triad has, and its traits are negatively correlated with the Dark Triad traits (Kaufman et al. 2019).

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<sup>19</sup> We also conducted this supplemental analysis by taking the absolute difference between *Honesty* and *Recommended Honesty*. Our inferences are unaffected.

Since the Dark and Light Triad are inversely related, one could question whether our theory is driven by the lightness of the non-dark participants we classified earlier. Therefore, we conduct a robustness test to see whether our results are driven by “being light” rather than “not being dark.” We use the Light triad items to construct *Light Score*, which captures participants’ light core. The internal consistency of the Light Triad items shows an acceptable fit ( $\alpha = 0.791$ ). We ran an exploratory factor analysis and extracted the score of the first factor that loads using the regression method. Consistent with prior literature (Kaufman et al. 2019), we find that *Light Score* and *Dark Score* are negatively correlated ( $\rho = -0.216$ , two-tailed  $p$ -value = 0.041). We re-estimate the previous path model in Table 3 and re-estimate *Light Score*’s conditional indirect effect on *Dishonesty* via *Recommended Honesty*.

— Table 5 about here —

Table 5 displays the results. We again use bootstrapping with 5,000 replications to estimate a 95% bias-corrected confidence interval. Table 5 reveals no support for a positive conditional indirect effect of *Light Score* on *Honesty* via *Recommended Honesty* at the mean of *Other’s Recommended Honesty* because its 95% bias-corrected confidence interval contains zero (-0.040, 0.095). Accordingly, we find no evidence that our results are driven by dark participants not being light. However, Table 5 does present some evidence that being a light participant (rather than a non-light participant) directly affects the honesty of participants’ cost reports. Specifically, we observe support for a positive and direct relationship between *Light Score* and *Honesty* ( $\beta = 0.056$ , two-tailed  $p$ -value = 0.022).

#### *Supplemental Treatment: Taking Responsibility*

Although autonomous teams formally share responsibility for many decisions, some team members may seek to take greater personal responsibility for the decision. Team members may try to find leverage over others that can be used to take charge over the rest of the team. Although many motives and reasons may underly team members’ aspirations to take charge, their personality traits, such as the Dark Triad traits, likely also fulfill an important role. Specifically, we expect that dark team members have a greater interest in taking personal responsibility for their team’s decisions than their non-dark counterparts. Due to stronger feelings of entitlement, the ease with which they justify self-interested pursuits regardless of the cost, and their inability to have other considerations and account for interests besides their own (Jones and Paulhus 2014; Majors 2015; Hobson et al. 2020), they feel less comfortable having others make decisions on their behalf. Instead, dark team members prefer to make reporting decisions themselves, increasing the likelihood that their best interest is being kept at heart.

We test this prediction using an incremental extension of our main treatment that includes an additional step before participants choose their recommendation. Specifically, in our extension, participants choose, before any other decision, whether they would like to assume the role of the team’s manager. This choice increases the chance that their cost report will be submitted as their team’s cost report. Rather than randomly choosing one of the cost reports participants provide, as is the case in our primary treatment, the team’s cost report is now allocated based on whether participants self-select into it. Specifically, if only one of the two participants opted to assume the role of the team’s manager, the computer will submit that participant’s cost report on behalf of the team. However, if both opted to assume the role of the team’s manager, the computer randomly submitted one of the two cost reports to corporate headquarters.

— Table 6 about here —

We recruited a total of 125 new participants on Amazon’s Mechanical Turk and applied the same sample selection procedures as for our main study, reducing the usable sample to 52 observations. To examine whether dark participants are more likely to take responsibility, we run a logistic regression that predicts *Select Input*, which equals 1 if the participant opted for their input to be used as the team’s cost report, effectively becoming the team’s manager and zero when the participant did not, as a function of *Dark Score*. We use robust standard errors. Table 6 displays the results and reveals evidence for a positive relationship between *Dark Score* and *Select Input* ( $\beta = 0.742$ , two-tailed  $p$ -value = 0.022). Accordingly, dark participants are more likely to take responsibility, giving them more power to submit the team’s cost report.

## V. DISCUSSION

This study presents experimental evidence on the role of communication and team member personality in the context of cost reporting decisions in autonomous teams. We find that team members heed others’ recommendations more when they themselves recommended the team to report more honestly. Our results further show that this tendency is more pronounced for team members who score lower on dark personality traits. Jointly, our findings suggest that having team members with less dark personalities decreases misreporting of autonomous teams. For such teams, chances are greater that team members emerge who recommend and push for honest reporting. Also, chances are smaller those team members will be infected by others who recommend the team to report less honestly.

By analyzing the misreporting of costs in autonomous teams, our study has a bearing on the sources of corrupt collaboration in workplace settings. An emerging research stream in management and economics studies corrupt collaboration and finds that it emerges more easily when it benefits another cause that people collectively care about and when there is ample opportunity for people to communicate about and coordinate their unethical acts (Lewis et al. 2012; Kocher et al. 2018). Our results impact this literature by showing that corrupt collaboration can be caused by key figures in the workplace, particularly individuals scoring relatively high on the Dark Triad traits and that communication functions as a channel. Therefore, next to designing working conditions that discourage employees from initiating and supporting corrupt collaboration, firms may also want to screen employees carefully before hiring them or recruiting them for a position that focuses on teamwork, such as in an autonomous team.

Like all studies, ours is subject to limitations, some of which are inherent to the nature of experimental research. Nevertheless, they offer opportunities for future research. Throughout the paper, we carefully discuss underlying theoretical assumptions and conditions under which our theory should hold. First, as discussed in the theory and hypotheses section, we examine the role of communication for cost reports issued by autonomous teams. However, to the extent that other factors of the budgeting system or, more broadly, other contextual factors play a role, the effects of team members’ recommendations could differ from those documented in our study. Future research could systematically investigate more contextual factors of misreporting in autonomous teams to gain a more comprehensive understanding. Second, we feature team members who do not have any experience working together in our setting, i.e., the two team members do not know each other. While many autonomous teams rapidly form and dissolve nowadays, it would also be interesting to investigate whether the results would differ if the familiarity or experience working together between the two team members increased.



## APPENDIX

This Appendix includes an excerpt of our experimental materials. We show an example where the randomly drawn project costs equal 4488 Lira, participant A recommended reporting 5239 Lira while participant B recommended reporting 5262 Lira. After exchanging recommendations, participant A preferred the team to report 5239 Lira and participant B preferred the team to report 5246 Lira.

### Page 1: Recommendation

*When loading the page*

The project cost equals 4488.00 Lira.

Please click on the bar and drag the slider (or use the arrow keys) to recommend the project cost you want your team to report to corporate headquarters.

The computer will pass your cost report recommendation on to the other participant.

Next

*After clicking the slider*

The project cost equals 4488.00 Lira.

Please click on the bar and drag the slider (or use the arrow keys) to recommend the project cost you want your team to report to corporate headquarters.

The computer will pass your cost report recommendation on to the other participant.

Your recommendation: 5239 Lira!

Next

## Page 2: Cost Report

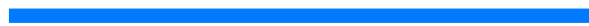
*When loading the page*

The project cost equals 4488.00 Lira.

Your cost report recommendation: 5239.00 Lira.  
The other participant's cost report recommendation: 5262.00 Lira.

Please click on the bar and drag the slider (or use the arrow keys) to choose the cost report that you would like your team to submit.

Remember that your decision will serve as your team's cost report if you become the manager.



Next

*After clicking the slider*

The project cost equals 4488.00 Lira.

Your cost report recommendation: 5239.00 Lira.  
The other participant's cost report recommendation: 5262.00 Lira.

Please click on the bar and drag the slider (or use the arrow keys) to choose the cost report that you would like your team to submit.

Remember that your decision will serve as your team's cost report if you become the manager.

Your cost report: 5239 Lira!



Next

### Page 3: Results

You and the other participant have both earned 875.50 Lira each for part 2.  
This amount consists of the fixed salary of 500 Lira and your share of the difference, which is 375.50 Lira.

This amount converts to \$2.36 at the conversion rate of \$0.27 per 100 Lira.

The table below gives you an overview of what happened.

Project cost	Your cost report	Other's cost report	Were you selected as the manager?	Team's cost report	Difference kept by the team	Profit for the firm
4488.00 Lira	5239.00 Lira	5246.00 Lira	Yes	5239.00 Lira	751.00 Lira	761.00 Lira

Next

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**FIGURE 1**  
**Theoretical Framework**

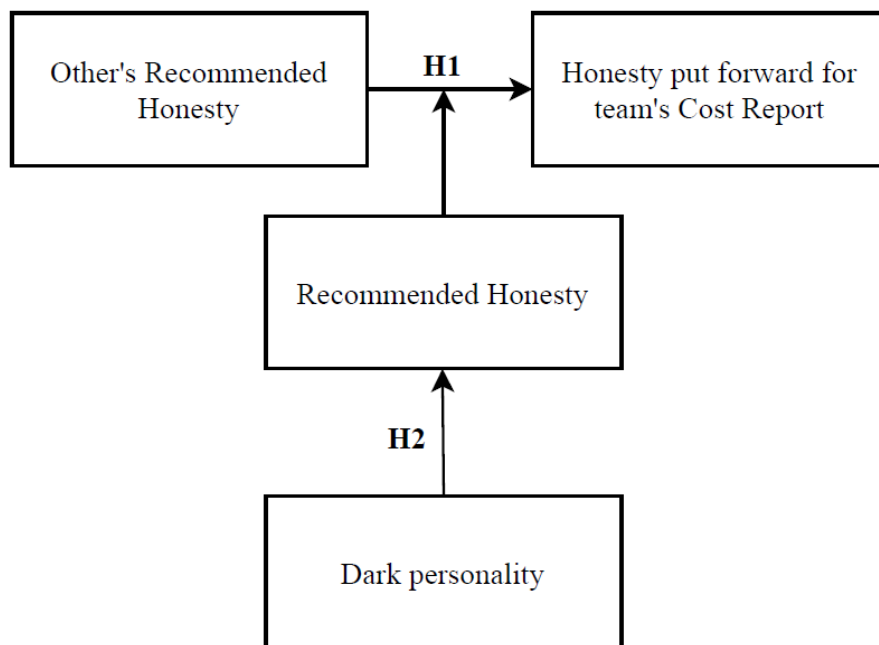


Figure 1 shows an overview of our theoretical framework. It features a moderated mediation model, specifically, model 14 specified in Hayes (2017).

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**FIGURE 2**  
**Instrument Flow**

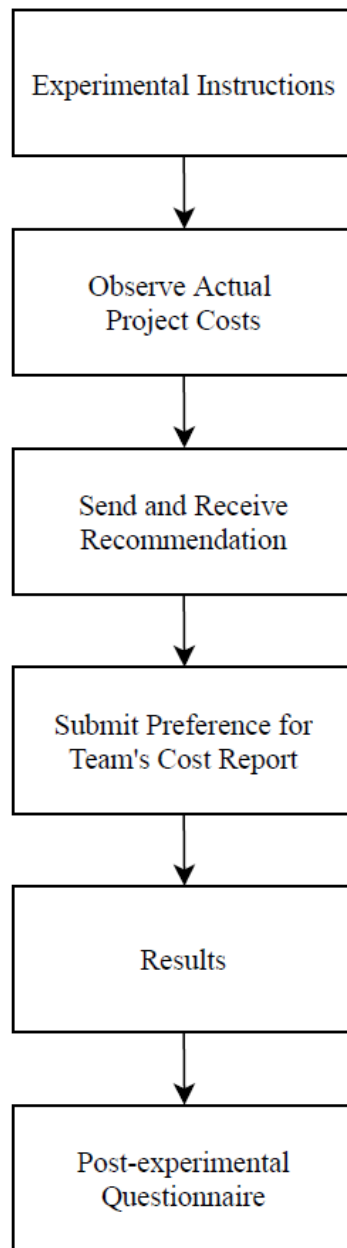


Figure 2 shows the flow of the experiment starting from the experimental instructions to the post-experimental questionnaire.

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**FIGURE 2**  
**Honesty by Communication and its Use**

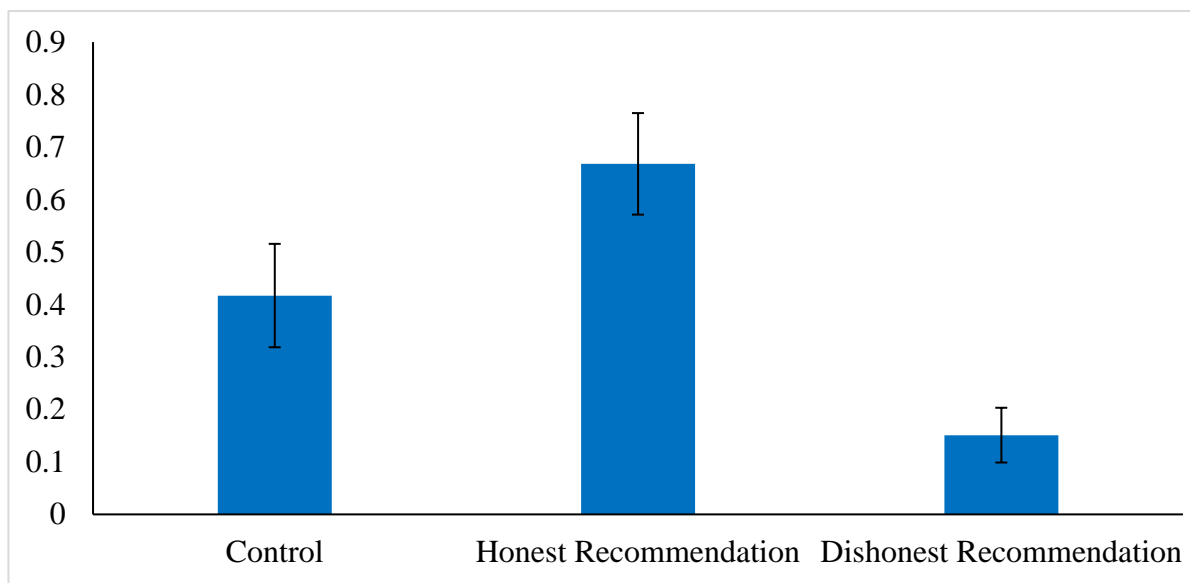


Figure 2 shows the bar plot of the average *Honesty* among managers. *Honesty* equals  $1 - (\text{cost report input} - \text{actual cost}) / (\text{maximum cost} - \text{actual cost})$ . The first bar displays the mean *Honesty* for participants in our control treatment that does not include communication. The other two bars show the mean *Honesty* for participants whose *Recommended Honesty* scores are above or equal to the median or below the median (from left to right respectively). The bins represent 95 percent confidence intervals.

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**FIGURE 3**  
**Interaction Plot for Other's Recommended Honesty by Recommended Honesty**

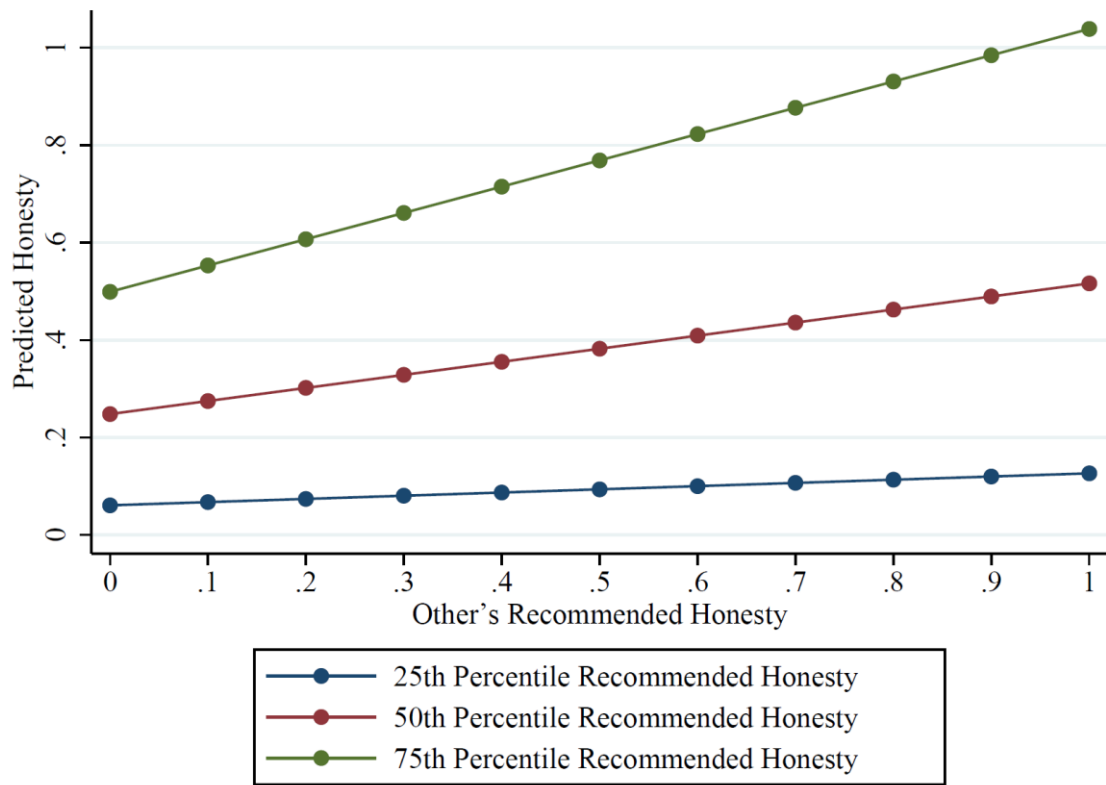


Figure 3 shows the interaction plot for the linear prediction of *Honesty* as a function of *Other's Recommended Honesty*. The three different lines represent different levels of *Recommended Honesty*: The top, green line is the linear prediction at the 25<sup>th</sup> percentile of *Recommended Honesty*, the middle, red line is the linear prediction at the 50<sup>th</sup> percentile of *Recommended Honesty*, and the bottom, blue line is the linear prediction at the 25<sup>th</sup> percentile of *Recommended Honesty*.

*Honesty* equals  $1 - (\text{cost report input} - \text{actual cost}) / (\text{maximum cost} - \text{actual cost})$ ; *Recommended Honesty* equals the honesty participants recommended to team members; *Other's Recommended Honesty* equals the honesty recommended to participants by team members.

**TABLE 1**  
**OLS Regression – Honesty on Recommendations**

Independent variables	(1) Honesty
Recommended Honesty	0.451*** (0.106)
Other's Recommended Honesty	0.052 (0.045)
Recommended Honesty * Other's Recommended Honesty	0.487*** (0.128)
Constant	0.049* (0.028)
<b>Marginal effect of Other's Recommended Honesty</b>	
25 <sup>th</sup> Percentile of Recommended Honesty	0.066 (0.043)
50 <sup>th</sup> Percentile of Recommended Honesty	0.268*** (0.047)
75 <sup>th</sup> Percentile 50 <sup>th</sup> Recommended Honesty	0.540*** (0.107)
Adj. R <sup>2</sup>	0.733
Model degrees of freedom	3
F-statistic	220.111***
Observations	90

Table 1 reports the result of an OLS regression with robust standard errors in parentheses; all p-values are two-tailed: \* p < 0.100, \*\* p < 0.050, \*\*\* p < 0.010. The dependent variable is *Honesty*, which equals 1 – (cost report input – actual cost)/(maximum cost – actual cost); *Recommended Honesty* equals the honesty participants recommended to team members; *Other's Recommended Honesty* equals the honest recommended to participants by team members.

TABLE 2		
OLS Regressions – Honesty and Recommended Honesty on Dark Triad		
Independent variables	(1) Recommended Honesty	(2) Honesty
Dark Score	-0.111 <sup>***</sup> (0.037)	-0.092 <sup>***</sup> (0.034)
Constant	0.484 <sup>***</sup> (0.043)	0.409 <sup>***</sup> (0.038)
Adj. R <sup>2</sup>	0.061	0.052
Model degrees of freedom	1	1
F-statistic	8.930 <sup>***</sup>	7.305 <sup>***</sup>
Observations	90	90

Table 3 reports the result of an OLS regression with robust standard errors in parentheses; all p-values are two-tailed: \* p < 0:100, \*\* p < 0.050, \*\*\* p < 0.010. The dependent variables are *Recommended Honesty*, which equals the honesty participants recommended to team members, and *Honesty*, which equals 1 – (cost report input – actual cost)/(maximum cost – actual cost); *Dark Score* is the extracted factor score from the Dark Triad traits using the regression method.

**TABLE 3**  
**Conditional Indirect Effect of Dark Triad Traits**

<b>Independent variables</b>	<b>(1) Honesty</b>	<b>(2) Recommended Honesty</b>
Recommended Honesty	0.439*** (0.099)	
Other's Recommended Honesty	0.048 (0.044)	
Recommended Honesty * Other's Recommended Honesty	0.492*** (0.123)	
Dark Score	-0.014 (0.022)	-0.111*** (0.037)
Constant	0.055** (0.027)	0.484*** (0.042)
R <sup>2</sup>	0.658	0.071
Observations	90	
<b>Conditional Indirect effects*</b>	<b>[95% Bias-corrected Confidence intervals]*</b>	
Mean - 1 S.D.	-0.102	-0.020
Mean	-0.127	-0.026
Mean + 1 S.D.	-0.161	-0.033

Table 3 reports the result of a structural equations model with robust standard errors in parentheses; all p-values are two-tailed: \*  $p < 0.100$ , \*\*  $p < 0.050$ , \*\*\*  $p < 0.010$ . The dependent variable is *Honesty*, which equals  $1 - (\text{cost report input} - \text{actual cost}) / (\text{maximum cost} - \text{actual cost})$ ; *Recommended Honesty* equals the honesty participants recommended to team members; *Other's Recommended Honesty* equals the honesty recommended to participants by team members; *Dark Score* is the extracted factor score from the Dark Triad traits using the regression method.

\* 95% bias-corrected confidence intervals of the conditional indirect effect of *Dark Score* on *Honesty* via *Recommended Honesty*. All three were estimated using a bootstrap with 5,000 replications at the mean – 1 S.D., the mean, and the mean + 1 S.D. of *Other's Recommended Honesty*.

**TABLE 4**  
**OLS Regression – Honesty Revision on Recommendations**

Independent variables	(1) Honesty Revision
Recommended Honesty	-0,549*** (0,106)
Other's Recommended Honesty	0,052 (0,045)
Recommended Honesty * Other's Recommended Honesty	0,487*** (0,128)
Constant	0.049* (0.028)
<b>Marginal effect of Recommended Honesty</b>	
25 <sup>th</sup> Percentile of Other's Recommended Honesty	-0.505*** (0.095)
50 <sup>th</sup> Percentile of Other's Recommended Honesty	-0.311*** (0.053)
75 <sup>th</sup> Percentile Other's Recommended Honesty	-0.068 (0.048)
Adj. R <sup>2</sup>	0,485
Model degrees of freedom	3
F-statistic	13,758***
Observations	90

Table 4 reports the result of an OLS regression with robust standard errors in parentheses; all p-values are two-tailed: \* p < 0:100, \*\* p < 0.050, \*\*\* p < 0.010. The dependent variable is *Honesty Revision*, which equals *Honesty – Recommended Honesty*; *Honesty* equals 1 – (cost report – actual cost)/(maximum cost – actual cost); *Recommended Honesty* equals the honesty participants recommended to team members; *Other's Recommended Honesty* equals the honest recommended to participants by team members.

**TABLE 5**  
**Conditional Indirect Effect of Light Triad Traits**

<b>Independent variables</b>	<b>(1) Honesty</b>	<b>(2) Recommended Honesty</b>
Recommended Honesty	0.442*** (0.099)	
Other's Recommended Honesty	0.077 (0.047)	
Recommended Honesty * Other's Recommended Honesty	0.482*** (0.121)	
Light Score	0.056** (0.024)	0.042 (0.048)
Constant	0.041 (0.027)	0.483*** (0.044)
R <sup>2</sup>	0.674	0.009
Observations	90	
<b>Conditional Indirect effects*</b>	[95% Bias-corrected Confidence intervals]*	
Mean - 1 S.D.	-0.027	0.075
Mean	-0.040	0.095
Mean + 1 S.D.	-0.050	0.120

Table 3 reports the result of a structural equations model with robust standard errors in parentheses; all p-values are two-tailed: \* p < 0.100, \*\* p < 0.050, \*\*\* p < 0.010. The dependent variable is *Honesty*, which equals 1 – (cost report input – actual cost)/(maximum cost – actual cost); *Recommended Honesty* equals the honesty participants recommended to team members; *Other's Recommended Honesty* equals the honesty recommended to participants by team members; *Light Score*, which equals the extracted factor score from the Light Triad traits using the regression method.

\* 95% bias-corrected confidence intervals of the conditional indirect effect of *Light Score* on *Honesty* via *Recommended Honesty*. All three were estimated using a bootstrap with 5000 replications at the mean – 1 S.D., the mean, and the mean + 1 S.D. of *Other's Recommended Honesty*.



**TABLE 6**  
**Logistic Regressions – Self-selection on Dark Triad**

Independent variables	(1) Select Input
Dark Score	0.742** (0.328)
Constant	0.888*** (0.329)
Pseudo R <sup>2</sup>	0.087
Model degrees of freedom	1
$\chi^2$	5.133**
Observations	52

Table 5 reports the result of a logistic regressions with robust standard errors in parentheses; all p-values are two-tailed: \* p < 0.100, \*\* p < 0.050, \*\*\* p < 0.010. The dependent variable is *Select Input*, which equals one if the participant opted to for their input to become the team's cost report 0 if the participants did not opt to do so when asked; *Dark Score* is the extracted factor score from the Dark Triad traits using the regression method.