

## When leaders ask questions: Can humility premiums buffer the effects of competence penalties?



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### ABSTRACT

We advance a questions-as-information approach to the study of the consequences of asking questions for leader effectiveness. We contend that questions go beyond their instrumental purpose to convey information about the asker's lack of competence and high humility, and thus inform possible doubts about the leader, producing competence penalties and humility premiums. In Study 1, we find that most practitioners do not ask questions at every opportunity and many do not endorse questions as a way of looking competent, especially if competence is in doubt. In Studies 2–5, we shed light on both the competence and humility repercussions of questioning. We find that competence penalties occur when leader competence is in doubt ex ante, but humility premiums are pervasive. Humility premiums affect leader helping and trust positively and buffer the negative effects of competence penalties. We discuss the implications of our findings for leadership, communication, and decision making in organizations.

### 1. Introduction

An old Chinese proverb states that one is a fool for a moment if he or she asks questions, and a fool forever if he or she does not. This points to the central role that the asking of questions plays in problem solving. Questions are asked as decision makers define problems and gather information about possible solutions, the most crucial stages in the process of rational decision making (Hastie & Dawes, 2010). Organizational research has shown that questions play a powerful role in visioning (Cooperrider, Whitney, & Stavros, 2008), feedback-seeking (Anseel, Beatty, Shen, Lievens, & Sackett, 2015), unlocking value in negotiations (Miles, 2013), learning (Marquardt, 2014), and creativity (Gelb, 2000). At the same time, questions reveal what the asker does not know, hence, the allusion to being “a fool” in the proverb. Similar to other forms of advice-seeking, questions pose a threat to the asker's perceived competence, an important determinant of social status (Blau, 1955; Brooks, Gino, & Schweitzer, 2015). Faced with this threat, individuals may prefer to employ more defensive alternatives. Yet, alternatives such as presenting one's ideas in the affirmative, albeit open for discussion, may undermine the extent to which the asker appears to truly seek the perspective of others. This may hurt the effectiveness of social interactions.

Examples abound where excellent performance is more characteristic of those who ask questions in settings ranging from dating (Huang,

Yeomans, Brooks, Minson, & Gino, 2017) and recruitment interviews (Kador, 2010) to heart surgeries (Aveling et al., 2018). A prominent organizational scholar Edgar Schein suggests that business managers too, should engage in *humble inquiry*, “the fine art of drawing someone out, of asking questions to which you do not already know the answer, of building a relationship based on curiosity and interest in the other person” (Schein, 2013, p. 2), even if it is contrary to the default of showing leadership by speaking in the affirmative. The term *humble inquiry* is fitting because when leaders ask questions to which they do not know the answers, they presumably show a concomitant accurate assessment of self-limitations, a willingness to learn from others, and an appreciation of the other's perspectives and knowledge, all of which represent the defining characteristics of humility (Owens, Johnson, & Mitchell, 2013). And yet, humble inquiry has not been examined empirically in terms of such an important positive effect for the leader.

In choosing whether to ask questions, those in positions of formal authority may be deterred more than others by the threat to perceived competence. After all, the schema of a successful leader is that of someone more knowledgeable and competent than the rest (Epitropaki, Sy, Martin, Tram-Quon, & Topakas, 2013; Lord, Foti, & De Vader, 1984; Porath, Gerbasi, & Schorch, 2015). Higher social status derived from perceived leader competence legitimizes and facilitates the exercise of power and influence (de Klepper, Sleebos, & Agneessens, 2017; Krackhardt, 1990; Thye, 2000). At the same time, acknowledging the

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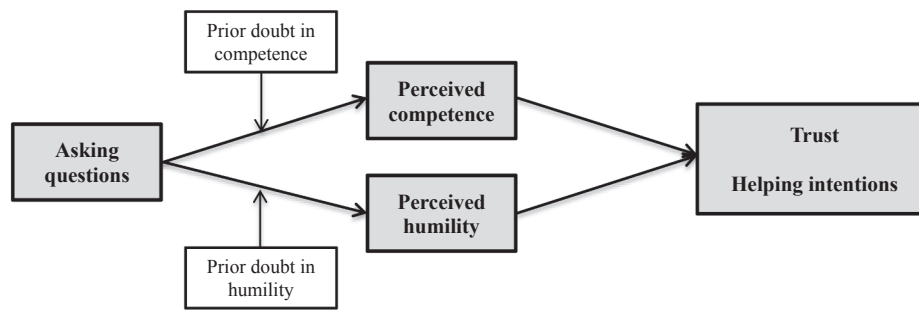


Fig. 1. Questions-as-information model.

ideas and suggestions of others may confer status and power to those being asked – who, in strategic management terms, compete for organizational rewards (Salancik & Pfeffer, 1982). Hence, leaders may be more reluctant to ask questions, especially when directed at their subordinates (Alexiev, Jansen, Van den Bosch, & Volberda, 2010; Lee, 1997, Lee, 2002). In other words, concerns about competence penalties (i.e., being perceived as less competent due to question-asking) may overshadow potential humility premiums (i.e., being perceived as more humble due to question-asking). As a result, the net balance of these effects and the downstream consequences of both may go unexamined. Yet, what if leaders who ask questions end up helped and trusted more than those who do not?

To guide the study of the potential consequences of question-asking for leaders, we advance a *questions-as-information* model. The model regards questions as going beyond their instrumental purpose to convey information about humility and competence, both of which affect leader effectiveness. We argue that when competence/humility are in doubt *ex ante*, the information conveyed by questions is likely to produce competence penalties and humility premiums (Fig. 1). The model guides our inquiry into the behavior and beliefs of management practitioners too. We examine if questions get asked at every opportunity and whether practitioners anticipate both negative and positive effects of asking questions. In four experiments we then highlight the conditions for and the magnitude of such effects.

Our contribution is to theorize about the consequences of humble inquiry for leaders (Schein, 2013) and provide a first empirical test of the hypothesized effects. We show that leaders who ask humble questions may incur competence penalties (e.g., in the presence of an *ex ante* doubt in leader competence), but pervasive humility premiums can buffer the negative effects on leader trust and helping. As such, our results dispel the negative beliefs that may prevent leaders from asking questions, support the primary role of warmth-like characteristics in social cognition (Casciaro & Lobo, 2008; Cuddy, Glick, & Beninger, 2011), and add to the emerging stream of literature documenting the positive effects of questions in various contexts (Aveling et al., 2018; Huang et al., 2017). We also enrich the literatures on leader humility (Owens & Heckman, 2012) and participative leadership styles (Arnold, Arad, Rhoades, & Drasgow, 2000; Courtright, Fairhurst, & Rogers, 1989) by shedding light on their behavioral manifestation in organizations. By documenting the effects of question-asking on leader effectiveness, our work not only extends the knowledge of the tradeoffs inherent in different communication strategies (Chaudhry & Loewenstein, 2019) but also bridges what we know about the role of communication in problem solving (Larrick, 2016; Woolley, Chabris, Pentland, Hashmi, & Malone, 2010) with the literature on how leaders build relationships with their followers (Van Quaquebeke & Felp, 2018). This is significant from the perspective of leadership theory because problem solving is regarded as a key task-oriented leader behavior (Judge, Piccolo, & Ilies, 2004; Northouse, 2017; Weissenberg & Kavanagh, 1972). Yet, we suggest that relationships become affected by *how* one problem-solves, and question-asking may enable leaders to both problem-solve and build trust.

## 2. Questions as information

We advance *questions-as-information* as a framework for studying the consequences of asking questions for perceived leader competence, humility, and downstream consequences of trust and helping intentions toward the leader. Our focus is not on *whether* leaders seek advice but on *how* they do so, and we compare the asking of questions to which the leader does not know the answers to other forms of information gathering.

### 2.1. The effect of asking questions on perceived leader competence and humility

Although merely a form of language, questions may convey information about the asker. They are “an expression of inquiry requiring or inviting an answer” (Webster’s II Dictionary, 2005, p. 582). Hence, unlike affirmative statements, questions show the reliance by the asker on someone else to help provide the answer. Miles (2013) draws on works in philosophy and cognitive psychology to provide a classification of reasons for asking questions: to look for information that the asker does not know, to make a known answer go “on the record”, to test the knowledge of others or, for rhetorical purposes where no answer is expected. The classification of questions is important to situate questions discussed in the leadership literature within the broader context of questioning and its possible consequences.

Schein’s (2013) “humble” questions are questions to which the asker truly does not know the answers, which may diminish perceptions of leader competence, i.e., result in competence penalties. On the contrary, questions asked to either put something “on the record”, to test others, or for rhetorical purposes may indicate greater knowledge and/or politeness, enhancing perceptions of leader competence (Porath et al., 2015). Thus, “humble” questions are unique in their potential to produce competence penalties because of the very purpose of this type of questions to learn about something the leader admits to not knowing.

At the same time, there has been no empirical evidence to date that questions labelled as “humble” are capable of changing perceptions of the asker’s humility. Humility expressed in organizations is defined as “an interpersonal characteristic that emerges in social contexts that connotes (a) a manifested willingness to view oneself accurately, (b) a displayed appreciation of others’ strengths and contributions, and (c) teachability” (Owens et al., 2013, p. 1518). With humble questions, leaders should be perceived to accurately observe gaps in their knowledge, appreciate others’ contributions by inviting them explicitly, and be eager to be taught by the answers. Thus, humility premiums for the leader merit empirical testing.

To sum up, unlike any other question category, humble questions may produce both competence penalties and humility premiums. For the remainder of this manuscript, we use the “asking of questions” to refer to the asking of humble questions.

## 2.2. Leader competence and humility as diagnostic information

Both leader competence and humility are associated with positive outcomes in leader-follower relationships and may, thus, be attended to as diagnostic information. For example, there is substantial research evidence that perceptions of competence and warmth (arguably, humility is warmth-like, Davis et al., 2011) are primary in driving inferences about interpersonal relationships, and account for much of the variance in first impressions (Fiske, Cuddy, & Glick, 2007). There is also specific evidence regarding the positive effects of competence and humility on leader effectiveness.

Leader competence, for example, is crucial for the success of the attempts to lead others due to better visioning, problem solving, influence, as well as follower acceptance and satisfaction (Bass & Stogdill, 1990). Reviews and longitudinal studies of the traits of effective leaders have long pointed to the importance of leader competence and intelligence (House & Aditya, 1997; Howard & Bray, 1988). Meta-analyses report a significant positive correlation between both subjective and objective measures of leader intelligence and effectiveness (Judge et al., 2004; Lord, De Vader, & Alliger, 1986). Moreover, some findings suggest that “the leadership status is afforded to those who effectively manage a reputation for intelligence” (Judge et al., 2004, p. 548). This conclusion is largely supported by studies linking perceptions of competence to being regarded as a leader (Porath et al., 2015), as well as by a large body of research within the implicit leadership theories tradition (Epitropaki et al., 2013; Lord et al., 1984; Lord & Emrich, 2001; Lord & Maher, 1991). People expect leaders to be intelligent, knowledgeable, and educated (Epitropaki & Martin, 2004; Lord et al., 1986; Offermann, Kennedy, & Wirtz, 1994), act as superheroes or messiahs who have all the answers (Meindl, 1995; Meindl, Ehrlich, & Dukerich, 1985) and as such, deserve senior positions in organizational hierarchies (Oldmeadow & Fiske, 2007). To sum up, leader competence is both diagnostic of effectiveness and desirable for regarding someone as a leader and worthy of the responsibility for dyadic and group outcomes.

Similarly, leader humility is diagnostic of positive consequences for the leader, as well as dyads and groups. In fact, humility helps all close relationships (Porter & Schumann, 2018; Thomas, Martin, Epitropaki, Guillaume, & Lee, 2013). As for leader humility, it increases employee retention and learning by raising job satisfaction and employee engagement, respectively (Owens et al., 2013). Warmth characteristics such as humility may confer social status just like perceived competence (Casciaro & Lobo, 2008; de Klepper et al., 2017). Even narcissistic leaders who express high humility may be regarded as more effective, evoke greater employee engagement and better job performance (Owens, Wallace, & Waldman, 2015). More generally, greater levels of leader humility are associated with more empowering leadership behaviors, as well as with initiating and utilizing shared leadership in teams (Chiu, Owens, & Tesluk, 2016; Ou et al., 2014). Importantly, leader humility sets the stage for humility at the level of the team, thereby enhancing team performance (Owens et al., 2013; Owens & Hekman, 2016). Leader humility is, thus, desirable, along with leader competence, because it is diagnostic of positive work outcomes.

## 2.3. The role of doubt in leader competence and humility

In what follows, we suggest that the asking of questions is likely to be attended to as information when the desirable high levels of competence and humility of the leader are in doubt *ex ante*. First, this is so because individuals are more likely to anchor on information that is more relevant to the judgment at hand (Higgins & Brendl, 1995; Mussweiler & Strack, 2001). As discussed above, the asking of humble questions speaks directly to both the leader’s level of competence and humility, thereby clarifying possible doubts. Second, doubts in leader competence and humility produce important uncertainty about leader-follower relationship. As with all interpersonal communication, individuals are motivated to seek information to reduce uncertainty about

the relationship, be it in initial or repeat interactions (Berger & Calabrese, 1975; Knobloch & Solomon, 2002), and do so in the most expedited manner possible (Holtz, 2015; Lind, 2001). Berger and Calabrese’s uncertainty reduction theory (1975) suggests additionally that ways in which communication partners seek information evolve from less to more intimate and direct. For example, people may ask about “superficial” demographic information initially, and proceed later to ask about the person’s attitudes and opinions. We suggest that the form of communication, such as whether someone asks questions versus makes affirmative statements, may be information in and of itself. As such, it is likely to be used to eliminate the doubts that lead to high uncertainty about the leader-follower relationship. As the level of uncertainty diminishes, the form of communication is less likely to be treated as information. The proposed mechanism is in line with the postulate from the decision-making literature that the sensitivity to additional information diminishes when individuals are more confident in their opinions (Bonaccio & Dalal, 2006; Gino & Moore, 2007; Harvey & Fischer, 1997; Nisbett & Ross, 1980; See, Morrison, Rothman, & Soll, 2011; Soll & Larrick, 2009; Tversky & Kahneman, 1974).

Note that doubts about leader competence and humility are not limited to early stages of relationships and may resurface in repeat interactions. As Ferris and colleagues (2003) suggest, perceptions of an individual’s personal characteristics and accomplishments at work are volatile, and reputations are fragile although it takes a long time to build them. Novel tasks and new forms of collaboration due to technology, geography, employee and customer base, changes in governance systems or other relevant changes may stretch the limits of what the leader is known to cope with and handle well, raising doubts about leader competence and/or humility. In sum, we predict that when the desirable high levels of leader competence and humility are in doubt, humble questions will produce competence penalties and humility premiums.

**Hypothesis 1 (competence penalty).** When leader competence is in doubt *ex ante*, leaders who gather information by asking questions (vs. making affirmative statements) will be regarded as less competent.

**Hypothesis 2 (humility premium).** When leader humility is in doubt *ex ante*, leaders who gather information by asking questions (vs. making affirmative statements) will be regarded as more humble.

## 2.4. The effect of asking questions on trust and helping

We have argued above that leader competence and humility are important for building positive leader-follower relationships. Thus, it is logical to predict effects of questions that go beyond perceived competence and humility to affect in-the-moment trust in the leader and intentions to comply with the leader’s request for help. After all, it is because of cumulative in-the-moment effects from actions that indicate leader competence and humility that these qualities become associated with more long-term indicators of leader effectiveness (Van Quaquebeke & Felps, 2018).

Trust is defined as a psychological state predisposing the trustor to accept vulnerability based on positive expectations about the actions of the trustee (Mayer, Davis, & Schoorman, 1995; Rousseau, Sitkin, Burt, & Camerer, 1998). Such positive expectations are likely to arise from believing that the person who is trusted (i) cares for and supports the values and needs of the trustor and (ii) is competent to handle tasks and challenges that arise in the pursuit of common goals. These theoretical links have been tested extensively, including for leader-follower relationships (Dirks & Ferrin, 2002). Meta-analyses report that trust is affected positively by leader competence and benevolence, the latter defined as the extent to which the person feels appreciated and supported in his or her values and perspectives (Colquitt, Scott, & LePine, 2007). Given the obvious link between humility and benevolence, we postulate a positive effect of leader humility on trust (see also Weick,

2001). Both leader competence and humility will thus have a positive impact on trust in the leader.

As for helping intentions, they capture the extent to which those who are being asked for their input comply with such a request. The same mechanisms that predispose followers to make themselves vulnerable to the leader are likely to produce compliance with leader requests. Follower reactions may even go above and beyond compliance to forms of what is referred to as *citizenship behaviors* (Colquitt et al., 2007). The influence and persuasion literature supports the positive effect of leader competence and humility on helping intentions. Cialdini (2001, p. 77) advocates that executives “should take pains to ensure that they establish their own expertise before they attempt to exert influence”. Consistent with this recommendation, research finds that displays of competence increase influence (Carli, 2001). Hence, helping intentions are more likely to be greater for leaders who are viewed as more competent. At the same time, a similar influence-facilitating role is attributed to interpersonal liking (Cialdini, 2001). Liking is typically greater for leaders who are perceived to be more humble because individuals enjoy seeing that someone relies upon them and appreciates their perspective (e.g., Brooks et al., 2015). Therefore, we predict that helping intentions are likely to be greater for more humble leaders.

To sum up, because the asking of questions is likely to produce competence penalties when leader competence is in doubt *ex ante*, while the relationship between perceived competence and downstream consequences is positive, we predict a corresponding negative indirect effect of asking questions on trust and helping. In contrast, because the asking of questions is likely to produce humility premiums when leader humility is in doubt *ex ante*, while the relationship between perceived humility and downstream consequences is positive, we predict a corresponding positive indirect effect of asking questions on trust and helping.

**Hypothesis 3.** Competence penalties will mediate a negative effect of question asking (vs. making affirmative statements) on trust and helping intentions toward the leader.

**Hypothesis 4.** Humility premiums will mediate a positive effect of question asking (vs. making affirmative statements) on trust and helping intentions toward the leader.

### 3. Overview of studies

We conducted five studies to test our predictions regarding the effects of asking questions on perceived leader competence, humility, trust, and helping intentions. In Study 1, we examined how often management practitioners ask questions and whether they anticipate both positive and negative effects of question-asking. In a series of experimental studies, we next tested such effects. Study 2 was a scenario experiment in which we manipulated the *ex-ante* doubt in leader competence (through educational credentials and experience) and then assessed competence penalties due to question-asking (vs. making affirmative statements). In Study 3, to manipulate the doubt about leader humility, we varied the leader’s *ex-ante* reputation for humility. We then assessed humility premiums from question-asking (vs. making affirmative statements). In Study 4, we examined how competence penalties from asking questions compare to penalties from openly admitting to not knowing, and tested additionally indirect effects of asking questions on leader trust and helping intentions. In Study 5, we used a different scenario, and on top of manipulating the form of information gathering, we manipulated leader credentials and reputation for humility simultaneously.

### 4. Study 1: Practitioners’ beliefs

In Study 1, we examined the practical relevance of the questions-asking information model in light of the day-to-day behavior of management

practitioners and their anticipation of the hypothesized effects of question-asking. If managers do not ask questions at every opportunity and endorse more defensive forms of communication to get help, this sheds light on the need, from a practical point of view, for a systematic study of the effects of question-asking. As with other forms of communication, the asking of questions may be curtailed due to the anticipation of negative effects and a lack of appreciation of the role of mitigating factors and/or positive effects (Chaudhry & Loewenstein, 2019; Leunissen, De Cremer, van Dijke, & Folmer, 2014).

#### 4.1. Method

##### 4.1.1. Participants

Two hundred eighty-one alumni of a top-ranked business school (36% women,  $M_{age} = 37.12$ ,  $SD_{age} = 4.59$ ) participated in an online survey on “communication styles at work.”<sup>1</sup> Participants had an average of 13 years of working experience ( $SD = 5$ ), 6 years of managerial experience ( $SD = 5$ ), and 4 years working at their current organization ( $SD = 4$ ). Sixty-four percent worked for large companies (500 employees and more). Currently unemployed (4%) reflected about their past work experience. Forty one percent of the sample were senior/executive managers, 33% middle, and 9% line managers. All participants had direct reports ( $M = 7$ ,  $SD = 9$ ). All but one participant had at least a master degree. The sample was diverse in terms of countries of origin (63), countries of residence (52; 35% residing in Europe, 18% in Asia, 15% in the USA and Canada, 11% in the UK, 10% in the Middle East, 4% in both Central/South America and Africa, and 3% in Australia), and occupations (26% in business and financial operations, 22% in management, and 9% in sales and related, 6% in healthcare, and 4% in consulting).

#### 4.2. Measures

##### 4.2.1. Practitioners’ beliefs

Practitioners considered a situation in which the manager does not know something that subordinates may know. They were asked to compare “asking subordinates explicit questions about things the manager does not know” (coded as endorsement of humble questions = 1), to “presenting your own conclusions, even if preliminary, and asking for input on those from subordinates” (coded as endorsement of humble questions = 0) in terms of overall benefit, helping and trust that would ensue, and the effects on perceived competence and humility of the manager (see Appendix A).

##### 4.2.2. Doubts in competence and humility

Participants indicated, on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree), to what extent they agreed with statements about their subordinates, two of which gauged the doubt in respondent’s competence (“My subordinates doubt how *competent/effective* I am”,  $\alpha = 0.77$ , Spearman-Brown reliability = 0.76), and two gauged the doubt in respondent’s humility (“My subordinates doubt how *humble* I am/my *humility*”,  $\alpha = 0.88$ , Spearman-Brown reliability = 0.87). The order of items was counterbalanced within and across the themes of competence and humility.

##### 4.2.3. Frequency of question-asking

Respondents indicated how frequently they asked questions in interactions with subordinates during the past month at work (from 1 = not at all to 7 = all the time/at every opportunity). We used Miles (2013) descriptions of question categories to formulate four items:

<sup>1</sup> The survey was in English, the language of all programs the alumni had graduated from. Ninety-eight percent were either native speakers or fluent in English. Excluding the remaining 2% ( $N = 6$ ) of respondents did not substantively change the findings.



“asking subordinates for information that I do not know and subordinates may know” for humble questions, “asking subordinates about something I know in order to test their knowledge” for testing questions, “asking subordinates about something I know for the answer to go “on the record” for coordinating questions, and “drawing attention to issues or showing consideration by asking subordinates questions with no actual need of an answer” for rhetorical questions.

#### 4.2.4. Control variables

We assessed the respondents' position (“non-managerial”, “line management”, “middle management”, “senior/executive management”, or “other”), and the hierarchy of authority at their employing organizations, as these factors could affect the endorsement of questions as a superior form of seeking input, as suggested by research on humility and advice use in organizations (Keltner, Gruenfeld, & Anderson, 2003; Owens & Hekman, 2012; See et al., 2011; Soll & Larrick, 2009; Tost, Gino, & Larrick, 2012). The hierarchy of authority was measured on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree) using five items from Schminke, Cropanzano, and Rupp (2002), e.g., “There can be little action here until a supervisor approves a decision”,  $\alpha = 0.92$ . Participants reported gender, age, education, occupation, number of direct reports, years of work/managerial experience, years of experience at the current/last employing organization, and the size of the organization.<sup>2</sup>

#### 4.3. Results

Descriptive statistics of all measured variables are presented in Table 1. The vast majority of participants endorsed the asking of questions as an overall better way of seeking input from subordinates (81%) and show humility (86%). A significantly smaller proportion endorsed doing so as a way of looking competent (61%,  $z = 5.32$ ,  $p < 0.001$  vs. 81% overall endorsement). Only 29% of respondents reported asking questions “all the time/at every opportunity.”

We estimated logistic regression models to examine what affected the endorsement of questions as superior (Table 2). We found that believing that subordinates doubted one's competence decreased the endorsement of questions as superior for looking competent (model 2, odd ratio = 0.66,  $p < 0.01$ ) and for evoking help from subordinates (model 5, odd ratio = 0.67,  $p < 0.05$ )<sup>3</sup>. In contrast, believing that subordinates doubted one's humility did not affect how the asking of questions compared to seeking input on tentative conclusions.

#### 4.4. Discussion

Study 1 showed that practitioners recognized the benefits of questions over a more defensive form of information gathering. However, only a minority admitted using questions at every opportunity, possibly due to anticipated competence penalties. In line with our theoretical reasoning and previous research on humility in organizations (Owens & Hekman, 2012), practitioners were less likely to endorse question-asking as a means of showing competence. Also, those who believed their subordinates doubted their competence more, were more likely to endorse tentative conclusions as superior to question-asking for both appearing competent and getting help. Provided that subordinates may doubt one's competence for a reason (e.g., lack of experience specific to the task at hand), this finding reveals a paradox whereby the people who need others the most prefer to seek input in more defensive ways.

<sup>2</sup> Adding these control variables to the analyses did not substantively change the findings.

<sup>3</sup> Including the frequency with which respondents asked different types of questions as a predictor, to control for possible self-justification motives in the endorsement of different forms of information gathering, did not substantively change the findings.

In what follows we experimentally test the implications of such choices for the perceptions of leader competence, humility, as well as trust in the leader and helping intentions of subordinates. Our findings can inform practitioners' beliefs with respect to when competence penalties and humility premiums show, and whether humility premiums can buffer the effects of competence penalties for leaders who ask questions.

### 5. Study 2: Competence penalties

Study 2 was designed to test the prediction that leaders will incur competence penalties when prior to asking questions, leader competence is in doubt.

#### 5.1. Method

##### 5.1.1. Participants and design

403 US-based adults were recruited online through Amazon Mechanical Turk to share their thoughts about a work situation. A total of 310 passed an initial attention check (13 failed, 3%) and three scenario comprehension checks (80 more failed, 20%). They were paid \$1.00 for participation. Appendix B provides detailed information about this sample and the samples in our subsequent studies.

Participants were randomly assigned to conditions of a 2 (questions vs. conclusions)  $\times$  2 (high vs. low credentials) between-subjects design. The number of participants required for this and all subsequent studies was determined based on a-priori power analysis with estimated smaller effect sizes (i.e., Cohen's  $f = 0.20$ ; Cohen, 1992), which would require a sample size of 327 to be powered at 95%. All power calculations were conducted using G\*Power (Faul, Erdfelder, Lang, & Buchner, 2007). In this and all subsequent studies, we aimed at inviting a slightly greater number of participants to compensate for the expected rates of inattentiveness (Hauser & Schwarz, 2016). The actual number of valid responses was 95% of the target sample size and exceeded the 80% power target.

##### 5.1.2. Procedure and manipulation

Participants read a scenario depicting a newly appointed VP of Procurement, Jamie Smith, at a defense and aerospace company (adapted from Greyser & Ellet, 2015, see Appendix C) and pictured themselves as plant managers working with the VP. In the *high credentials* (i.e., low doubt in competence) condition, Jamie was described as a graduate of the Massachusetts Institute of Technology (MIT), with 12 years of experience, and a regular presenter at professional conferences. In the *low credentials* (i.e., high doubt in competence) condition, Jamie was said to be a graduate of a substantially lower ranked engineering institute in Massachusetts, with 2 years of experience, and a regular attendee of professional conferences. Tasked with developing a cost-cutting policy, Jamie emailed plant managers questions/conclusions about possibilities for cost cutting. The subject of the email was “Questions/Conclusions regarding new cost-cutting policy”, and Jamie's questions/conclusions were listed in the body of the email, e.g., “Can NKIC lower costs by reducing the number of suppliers?”/“NKIC can lower costs by reducing the number of suppliers.” The email ended by inviting managers to provide their input on the questions/conclusions. As a comprehension check, participants were asked how many years of experience Jamie had, whether Jamie graduated from MIT or a lower ranked institution, and whether in the email Jamie asked questions, communicated conclusions, or introduced a new team member. As in all subsequent studies, we dropped, as planned ex ante, the data of participants who failed to pass all comprehension checks.

##### 5.1.3. Measures

Participants assessed leader competence using six items: competent, capable, effective, skilled, intelligent, and knowledgeable (Fiske, Cuddy, Glick, & Xu, 2002). Participants indicated the extent to which they believed Jamie to be each of these adjectives on 7-point Likert-



**Table 2**  
Logistic regression analyses of practitioner’ beliefs, Study 1.

Model	(1)	(2)	(3)	(4)	(5)
	Dependent variable: Question-asking is better...				
	overall	to look...		to evoke..	
Predictors:		competent	humble	trust	help
Doubt in competence	0.81 (0.14)	0.66** (0.09)	0.83 (0.15)	0.79 (0.12)	0.67* (0.10)
Doubt in humility	1.12 (0.17)	0.95 (0.11)	1.12 (0.19)	0.97 (0.13)	0.95 (0.13)
<b>Control variables:</b>					
Hierarchical organization	0.96 (0.10)	0.95 (0.08)	1.09 (0.14)	1.04 (0.10)	1.16 (0.13)
Senior manager	2.49* (1.07)	0.93 (0.35)	2.95* (1.50)	2.33* (0.96)	1.45 (0.62)
Middle manager	2.21 (0.93)	0.97 (0.36)	1.41 (0.63)	1.22 (0.47)	1.11 (0.46)
Humble questions (frequency)	1.39* (0.18)	1.12 (0.12)	1.46** (0.21)	1.30* (0.16)	1.18 (0.15)
Coordinating questions (frequency)	0.95 (0.11)	0.88 (0.08)	0.88 (0.11)	0.97 (0.10)	0.94 (0.10)
Testing questions (frequency)	1.41** (0.18)	1.28** (0.12)	1.14 (0.15)	1.16 (0.12)	1.13 (0.12)
Rhetorical questions (frequency)	0.88 (0.09)	1.02 (0.08)	1.08 (0.12)	0.87 (0.08)	1.09 (0.10)
Constant	0.41 (0.42)	2.04 (1.76)	0.30 (0.34)	1.04 (0.99)	1.31 (1.29)
Pseudo R <sup>2</sup>	0.08	0.05	0.08	0.05	0.05

Note. N = 281. \*\*\* p < 0.001.  
\*\* p < 0.01.

\* p < 0.05. Odd-ratios for logistical models. Standard errors in parentheses. Excluding the frequency with which respondents asked different types of questions from predictors does not substantively alter the results.

type scales (1 = not at all, 7 = extremely),  $\alpha = 0.92$ .

5.2. Results and discussion

We predicted that the leader with low credentials would incur a competence penalty for asking questions. A 2 (questions vs. conclusions) × 2 (high vs. low credentials) analysis of variance (ANOVA) of perceived leader competence revealed a significant main effect of credentials ( $F(1, 306) = 39.53, p < .001, \eta_p^2 = 0.11$ ),<sup>4</sup> and a significant interaction between questions vs. conclusions and credentials ( $F(1, 306) = 7.23, p < .01, \eta_p^2 = 0.02$ ). The main effect of questions vs. conclusions was not significant ( $F(1, 306) = 1.08, p > .25, \eta_p^2 = 0.004$ ). Planned contrast analyses showed that the leader with low credentials was seen as less competent in the questions condition ( $M = 5.08, SD = 1.29$ ) than in the conclusions condition ( $M = 5.50, SD = 0.99, F(1, 306) = 6.95, p = .009, d = -0.37$ ). For the leader with high credentials, the effect of asking questions on perceived competence was not significant ( $M = 6.10, SD = 0.77$  vs.  $M = 5.91, SD = 0.89, F(1, 306) = 1.36, p = .25, d = 0.23$ ), see Fig. 2. Thus, consistent with our predictions, there was a competence penalty (i.e., subsequent drop in perceived competence) for asking questions for the leader whose competence was ex-ante doubted due to low credentials, but not for the leader whose credentials left little room for doubting leader competence.

<sup>4</sup> As we intended, participants saw the leader as more competent in the high credentials condition ( $M = 6.00, SD = 0.84$ ) than in the low credentials condition ( $M = 5.30, SD = 1.16, t(308) = 6.09, p < .001, d = 0.69$ ). The effect held for both questions ( $M = 6.10, SD = 0.77$  vs.  $M = 5.08, SD = 1.29, F(1, 306) = 38.31, p < .001, d = 0.97$ ) and conclusions ( $M = 5.91, SD = 0.89$  vs.  $M = 5.50, SD = 0.99, F(1, 306) = 6.83, p = .009, d = 0.44$ ) conditions.

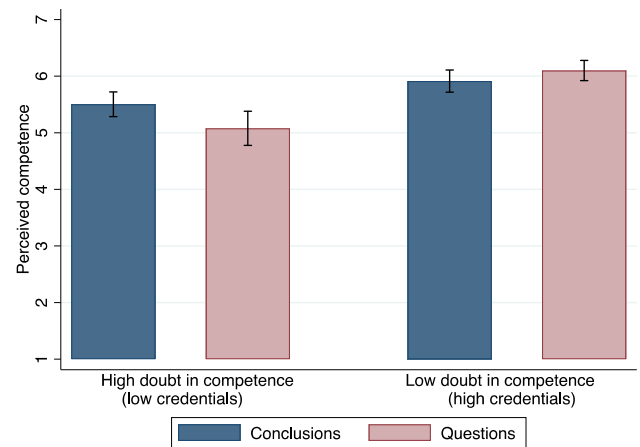


Fig. 2. Competence penalty for asking questions, Study 2. Note. Error bars represent 95% confidence intervals.

6. Study 3: Humility premiums

Study 3 was designed to test the prediction that leaders who ask questions will receive a humility premium when their humility is in doubt ex ante.

6.1. Method

6.1.1. Participants and design

406 US-based adults were recruited and remunerated as in Study 2. A total of 329 passed an initial attention check (24 failed, 6%) and two comprehension check questions on the scenario (53 more failed, 13%). The study employed a 2 (questions vs. conclusions) × 2 (good vs. poor reputation) between-subjects design, and target sample size was 327 as in Study 2.

6.1.2. Procedure and manipulation

Participants read the same scenario as in Study 2, except that information about educational credentials was omitted, and the VP Jamie Smith was said to have 12 years of experience. In the good/poor reputation condition, Jamie was described as having a reputation for being/not being considerate, a great listener/not being a great listener, willing/not willing to admit mistakes, and someone who truly cares/does not truly care about the opinions and perspectives of both peers and subordinates. The above manipulation targeted the three dimensions of humility as discussed in Owens and Hekman (2012) and Owens et al. (2013). We used Study 2 manipulation of questions/conclusions. To check whether participants understood the scenario, we asked whether Jamie had a reputation for being considerate and a great listener or not, and whether in the email Jamie asked questions, communicated conclusions, or introduced a new team member.

6.1.3. Measures

We assessed perceived leader humility using the 9-item expressed humility scale (Owens et al., 2013). The items refer to the three dimensions of humility (teachability, accurate self-view, and appreciation of others’ contributions) and have shown strong predictive validity for leader humility (Owens et al., 2013; Owens & Hekman, 2016). Sample items included “Jamie is willing to learn from others”, “Jamie acknowledges when others have more knowledge and skills”, and “Jamie is likely to show appreciation for the unique contributions of others”. Participants expressed their agreement with the items on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree),  $\alpha = 0.97$ .

## 6.2. Results and discussion

We predicted that the leader with an ex-ante poor reputation for humility would receive a humility premium from asking questions. A 2 (questions vs. conclusions)  $\times$  2 (good vs. poor reputation) ANOVA of perceived leader humility revealed significant main effects of reputation ( $F(1, 325) = 289.77, p < .001, \eta_p^2 = 0.47$ ),<sup>5</sup> and questions vs. conclusions ( $F(1, 325) = 29.55, p < .001, \eta_p^2 = 0.08$ ), as well as a significant interaction effect ( $F(1, 325) = 4.39, p = .037, \eta_p^2 = 0.01$ ). Planned contrast analyses showed that all leaders received significant humility premiums, albeit the leader with poor reputation benefited from asking questions more ( $M = 3.44, SD = 1.22$  vs.  $M = 4.26, SD = 1.13, F(1, 325) = 28.45, p < .001, d = 0.70$ ) than did the leader with good reputation ( $M = 5.52, SD = 0.79$  vs.  $M = 5.88, SD = 0.71, F(1, 325) = 5.56, p = .02, d = 0.49$ ), see Fig. 3. Positive humility premiums, including for leaders whose reputation left little room for doubt about leader humility, ran contrary to Hypothesis 2.

## 7. Study 4: Asking questions vs. admitting to not knowing and the consequences for trust and helping intentions

In Study 4, we shifted our attention back to the only potential deterrent of asking questions – the competence penalty, to better understand its source. If the penalty arises from an implicit admission of not knowing, then a similar penalty should arise from an open acknowledgement that the leader does not know certain things. In Study 4, we compared the asking of questions to explicitly admitting to not knowing. We also tested the effects of different forms of information gathering on trust in the leader and helping intentions. Perceptions of leader competence and humility were examined as mediators of these effects.

Study 4 also contained additional controls and manipulation checks. First, because question-asking increases perceived leader humility independent of the ex-ante doubt in leader humility (Study 3), and in the leadership context, perceived humility positively affects perceived competence (e.g., “A good leader should invite others’ opinions and contributions”, Owens et al., 2015; Owens & Hekman, 2016), any competence penalty due to question-asking may be mitigated by a positive effect of question-asking on perceived leader competence because of greater perceived leader humility. Hence, to accurately assess competence penalties associated with question-asking, we controlled for perceived leader humility when analyzing perceived leader competence. Second, to check that participants regarded the leader as welcoming subordinate input across all experimental conditions, we elicited perceptions of the participative decision-making. Finally, we checked that the questions the leaders asked were seen as humble (i.e., with answers truly unknown).

### 7.1. Method

#### 7.1.1. Participants and design

480 US-based adults were recruited as in Studies 2 and 3 to participate in an online study in exchange of \$1.50. A total of 353 passed an initial attention check (22 failed, 5%) and three scenario comprehension checks (105 more failed, 22%). The study consisted of a 3 (questions vs. conclusions vs. not-knowing)  $\times$  2 (high vs. low credentials) between-subjects design. The required number of participants was determined as in previous studies ( $f = 0.20, 95\%$  power, target sample

<sup>5</sup> As we intended, participants saw the leader as more humble in the good reputation condition ( $M = 5.70, SD = 0.77$ ) than in the poor reputation condition ( $M = 3.84, SD = 1.24, t(327) = 16.31, p < .001, d = 1.80$ ). The effect held for both questions ( $M = 5.88, SD = 0.71$  vs.  $M = 4.26, SD = 1.13, F(1, 325) = 112.45, p < .001, d = 0.97$ ) and conclusions ( $M = 5.52, SD = 0.79$  vs.  $M = 3.44, SD = 1.22, F(1, 325) = 181.07, p < .001, d = 0.44$ ) conditions.

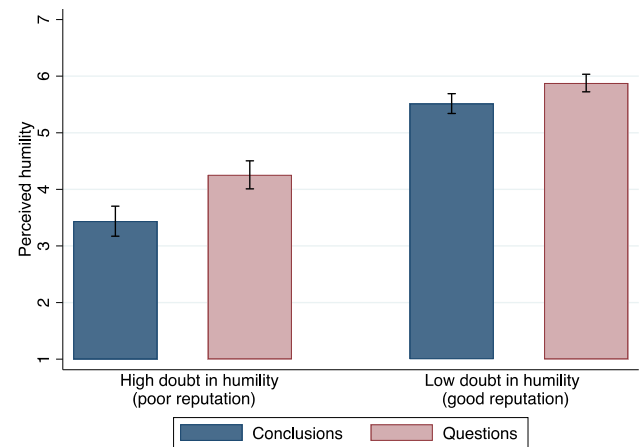


Fig. 3. Humility premium for asking questions, Study 3. Note. Error bars represent 95% confidence intervals.

size of 390). The actual number of valid responses was 91% of the target sample size and exceeded the 80% power target.

#### 7.1.2. Procedure and manipulation

Participants read the same scenario as in Studies 2 and 3. High/low credentials of the leader and questions/conclusions were manipulated as in Study 2. In the additional *not-knowing* condition, the leader explicitly admitted to not knowing (“I don’t know whether ...” vs. “My conclusions are...” vs. “My questions are...”). We included the same comprehension checks as in Study 2, except that in the new *not-knowing* condition, “asking questions” was replaced by “sharing some unknowns” when checking whether participants recalled correctly what the leader did.

### 7.2. Measures

#### 7.2.1. Leader competence and humility

We assessed perceptions of leader competence and humility using the items from Study 2 ( $\alpha = 0.97$ ) and Study 3 ( $\alpha = 0.93$ ), respectively.

#### 7.2.2. Trust in the leader

We used a direct measure of trust (Colquitt et al., 2007). Participants indicated the extent to which they agreed with the statements (1 = strongly disagree, 7 = strongly agree): “I can fully trust Jamie.” and “Jamie is a trustworthy leader.” We averaged the two items into an overall measure of trust,  $\alpha = 0.92$ , Spearman-Brown reliability = 0.90.

#### 7.2.3. Helping intentions toward the leader

Participants indicated how likely they would be (1 = very unlikely, 7 = very likely) to help Jamie (5 items, e.g., “help Jamie get oriented to the new job in every possible way,” “offer suggestions to improve how new cost-cutting policy is developed,” “give up meal and other breaks to work on the cost-cutting policy”),  $\alpha = 0.82$ .

#### 7.2.4. Manipulation checks

Participants rated the extent to which they thought the leader was (1) truly looking for information that they did not know and others might know (“humble inquiry”) or, (2) asking about something for the answer to go “on the record”, (3) in order to test the knowledge of others, and (4) with no actual need of an answer (Miles, 2013), using a scale ranging from 1 (not at all) to 7 (completely). If our manipulation of question-asking was successful, participants were expected to regard the leader as engaging in “humble inquiry” more in the questions condition than in the conclusions condition. In contrast, our manipulation should not have affected the three other purposes of communication, averaged together as an indicator of “non-humble inquiry”,



$\alpha = 0.76$ .<sup>6</sup>

Finally, participants rated the leader on six items of participative decision-making style (Arnold et al., 2000), as a check on whether they noticed that the leader welcomed input from subordinates in all experimental conditions. Sample items included: “Jamie encourages others to express ideas and suggestions” and “Jamie is likely to make decisions based only on his/her ideas” (reverse-coded). Participants expressed their agreement on a 7-point Likert-type scale (1 = strongly disagree, 7 = strongly agree),  $\alpha = 0.86$ .

### 7.3. Results

Descriptive statistics of all measured variables are presented in Table 3 (see Appendix D for information on the discriminant validity of measures employed).

#### 7.3.1. Manipulation checks

Participants were less likely to agree with the statement that the leader engaged in “humble inquiry” in the conclusions condition ( $M = 4.57$ ,  $SD = 1.71$ ) than in the questions ( $M = 6.04$ ,  $SD = 0.97$ ,  $t(2\ 3\ 6) = 7.94$ ,  $p < .001$ ,  $d = 1.03$ ) and not-knowing ( $M = 5.97$ ,  $SD = 1.16$ ,  $t(2\ 4\ 0) = 7.32$ ,  $p < .001$ ,  $d = 0.95$ ) conditions. In contrast, participants rated the extent to which the leader was communicating for other purposes similarly in the conclusions ( $M = 3.40$ ,  $SD = 1.35$ ) and questions ( $M = 3.34$ ,  $SD = 1.50$ ,  $t(2\ 3\ 6) = 0.37$ ,  $p = .71$ ,  $d = 0.05$ ) conditions, and somewhat lower in the not-knowing ( $M = 3.04$ ,  $SD = 1.50$ ) than conclusions conditions ( $t(2\ 4\ 0) = 1.98$ ,  $p = .05$ ,  $d = -0.26$ ). In sum, the leader was perceived as seeking information they did not have where this was intended.

We next checked whether our description of the leader as welcoming input was understood across all experimental conditions. Indeed, participants rated the extent to which the leader was participative above the mid-point of the scale both in the conclusions ( $M = 5.12$ ,  $SD = 0.83$ ,  $t(1\ 2\ 6) = 15.30$ ,  $p < .001$ ), questions ( $M = 5.53$ ,  $SD = 0.53$ ,  $t(1\ 1\ 0) = 30.01$ ,  $p < .001$ ), and not-knowing conditions ( $M = 5.44$ ,  $SD = 0.72$ ,  $t(1\ 1\ 4) = 21.63$ ,  $p < .001$ ).<sup>7</sup>

#### 7.3.2. Competence penalties

A 3 (conclusions vs. questions vs. not-knowing) X 2 (high vs. low credentials) ANOVA of perceived competence with perceived humility as a covariate revealed significant main effects of communication form ( $F(2, 346) = 48.96$ ,  $p < .001$ ,  $\eta_p^2 = 0.22$ ), credentials ( $F(1, 346) = 29.45$ ,  $p < .001$ ,  $\eta_p^2 = 0.08$ ),<sup>8</sup> and perceived humility ( $F(1, 346) = 66.02$ ,  $p < .001$ ,  $\eta_p^2 = 0.16$ ). The marginal effect of perceived humility on perceived competence was positive (0.58; 95% CI: [0.42, 0.68]), in line with the idea that in the leadership context, perceived humility positively affects perceived competence. As shown in Fig. 4, upper panel, the main effect of the form of communication was qualified somewhat by an interaction with credentials, although the 3 (form of communication) X 2 (credentials) interaction was not significant ( $F(1, 346) = 1.13$ ,  $p = .32$ ,  $\eta_p^2 = 0.01$ ).

To test our hypotheses regarding the significance of competence penalties, we conducted planned contrasts analyses with a Bonferroni correction for multiple comparisons. The results showed that there was a competence penalty for asking questions vs. providing conclusions for the leader with low credentials ( $F(1, 346) = 10.40$ ,  $p = .006$ ,

$d = -0.62$ ), but not for the leader with high credentials ( $F(1, 346) = 2.75$ ,  $p = .39$ ,  $d = -0.30$ ), in line with Hypothesis 1. In contrast, competence penalties for admitting to not knowing vs. providing conclusions were significant in both low and high credentials conditions ( $F(1, 346) = 45.75$  and  $54.20$ , both  $p < .001$ ,  $d = -1.28$  and  $-1.35$ , respectively). Admitting to not knowing also resulted in significant competence penalties as compared to question-asking, both in the low ( $F(1, 346) = 11.92$ ,  $p = .003$ ,  $d = -0.68$ ) and high credentials conditions ( $F(1, 346) = 33.10$ ,  $p < .001$ ,  $d = -1.05$ ).

#### 7.3.3. Humility premiums

A 3 (conclusions vs. questions vs. not-knowing) X 2 (high vs. low credentials) ANOVA of perceived humility revealed a significant main effect of communication form ( $F(2, 347) = 25.22$ ,  $p < .001$ ,  $\eta_p^2 = 0.13$ ). Other effects were not significant ( $F < 2$ ,  $p > .30$ ). Participants judged the leader to be less humble in the conclusions ( $M = 5.24$ ,  $SD = 1.04$ ) than in the questions ( $M = 5.86$ ,  $SD = 0.67$ ,  $t(2\ 3\ 6) = 5.37$ ,  $p < .001$ ,  $d = 0.70$ ) and not-knowing ( $M = 5.95$ ,  $SD = 0.75$ ,  $t(2\ 4\ 0) = 6.01$ ,  $p < .001$ ,  $d = 0.78$ ) conditions. The ratings of perceived humility were similar in the questions and not-knowing conditions ( $t(224) = 0.93$ ,  $p = .35$ ). Planned contrasts analyses (see Fig. 4, lower panel) with a Bonferroni correction for multiple comparisons showed that there were significant humility premiums for question-asking as compared to providing conclusions for both low and high leader credentials ( $F(1, 347) = 14.96$  and  $15.87$ , both  $p < .001$ ,  $d = 0.65$  and  $0.75$ , respectively). Across the same conditions, the extra humility premium for admitting to not knowing vs. asking questions was not significantly different from zero ( $F(1, 347) = 1.94$  and  $0.04$ ,  $p = .66$  and  $1.00$ ,  $d = 0.32$  and  $-0.05$ , respectively).<sup>9</sup>

#### 7.3.4. Indirect effects on trust and helping

We expected that the effects of question-asking on perceived competence and humility would lead to meaningful changes in trust and the intention to help the leader. To test for mediation, we estimated simultaneous indirect effects via the two mediators (i.e., Hypothesis 3: question-asking → perceived leader competence → trust and helping, and Hypothesis 4: question-asking → perceived leader humility → trust and helping). To account for the effect of perceived leader humility on perceived leader competence, in line with previous theoretical reasoning (Owens et al., 2015; Owens & Hekman, 2016) and the results on competence penalties above, we included in addition a serial indirect effect (i.e., question-asking → perceived leader humility → perceived leader competence → trust and helping), following the recommendations by Hayes (2018). That is, we tested a model with two simultaneous mediators specifying in addition a causal path from one mediator to the other (see Model 6 in Hayes, 2018, p. 586). We employed a bootstrapping procedure (5000 random samples with replacement from the full sample) to determine 95% bias-corrected confidence intervals (CI) around the estimates of indirect effects (MacKinnon, Fairchild, & Fritz, 2007; Preacher & Hayes, 2008; Shrout & Bolger, 2002), see Table 4.

In line with the competence-based mediation postulated in Hypothesis 3, there was a significant negative indirect effect of questions vs. conclusions via perceived competence for the leader with low credentials on both trust ( $-0.31$ , 95% CI:  $[-0.53; -0.13]$ ) and

<sup>6</sup> All forms of non-humble inquiry correlated higher with each other (more than 0.45, all  $p < .05$ ) than with humble questions (all  $p > .05$ ).

<sup>7</sup> The leader was perceived as less participative when providing conclusions than when asking questions ( $t(2\ 3\ 6) = 4.37$ ,  $p < .001$ ,  $d = 0.57$ ), or admitting to not knowing ( $t(2\ 4\ 0) = 3.17$ ,  $p = .002$ ,  $d = 0.41$ ). Controlling for leader participative style in all the analyses did not substantively change the findings.

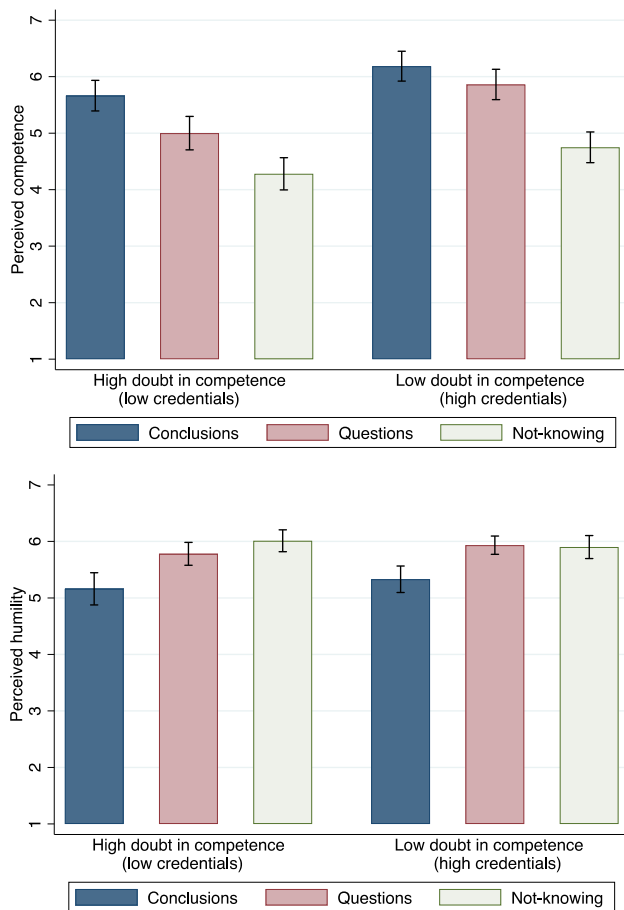
<sup>8</sup> The significant main effect of credentials suggests our manipulation of the doubt in leader competence was successful.

<sup>9</sup> For completeness, we conducted analogous tests of humility premiums controlling for perceptions of competence. As in the analyses above, there were positive humility premiums from question-asking vs. providing conclusions for all leaders, irrespective of their credentials (planned contrasts = 0.71 and 0.60 for low and high leader credentials, respectively;  $F(1, 346) = 23.45$  and  $18.70$ , both Bonferroni-adjusted  $p < .001$ ,  $d = 0.93$  and  $0.76$ ). The extra humility premium for admitting to not knowing vs. asking questions was significant only for low leader credentials (planned contrasts = 0.40 and 0.30 for low and high leader credentials, respectively;  $F(1, 346) = 6.94$  and  $4.11$ , Bonferroni-adjusted  $p = .04$  and  $0.17$ ,  $d = 0.51$  and  $0.38$ ).

**Table 3**  
Descriptive statistics, Study 4.

Variable	Mean	SD	Min	Max	Correlations							
					1	2	3	4	5	6	7	
1 Perceived leader competence	5.33	1.28	1	7	(0.97)							
2 Perceived leader humility	5.67	0.90	1	7	<b>0.26</b>	(0.93)						
3 Helping intentions	4.90	1.04	1	7	<b>0.48</b>	<b>0.55</b>	(0.82)					
4 Trust	5.15	1.12	1	7	<b>0.62</b>	<b>0.50</b>	<b>0.62</b>	(0.92)				
5 Participative decision making	5.36	0.73	2	7	<b>0.29</b>	<b>0.77</b>	<b>0.56</b>	<b>0.47</b>	(0.86)			
6 Humble inquiry	5.49	1.50	1	7	0.01	<b>0.51</b>	<b>0.23</b>	<b>0.20</b>	<b>0.44</b>	–		
7 Non-humble inquiry	3.26	1.45	1	7	0.05	–0.07	<b>0.13</b>	<b>0.15</b>	0.03	–0.02	(0.76)	

Note.  $N = 353$ . Significant correlations ( $p < .05$ ) are in **bold**. Coefficient alphas appear across the diagonal in parentheses. Humble inquiry refers to the extent to which the leader was believed to truly look for information that s/he did not know. Non-humble inquiry refers to communication for other purposes (e.g., to test others' knowledge).



**Fig. 4.** Competence penalty (upper panel) and humility premium (lower panel) for asking questions and admitting to not knowing, Study 4. Note. Error bars represent 95% confidence intervals.

helping (–0.18, 95% CI: [–0.34; –0.06]). In contrast, for the leader with high credentials, the indirect effect via perceived competence was not significant (–0.14, 95% CI: [–0.30; 0.00] for trust and –0.08, 95% CI: [–0.19; 0.00] for helping). The indirect positive effects via perceived humility were significant for both helping and trust regardless of leader credentials (values between 0.24, 95% CI: [0.11; 0.41] and 0.33, 95% CI: [0.15; 0.55]), in line with the humility-based mediation postulated in Hypothesis 4. Positive indirect effects compensated for the negative indirect effects via perceived competence, resulting in either significant positive (for helping the leader with high credentials, 0.32, 95% CI: [0.11; 0.54]) or non-significant total indirect effects (for trusting the leader with high credentials, 0.24, 95% CI: [0.00; 0.49],

and for trusting and helping the leader with low credentials, 0.08, 95% CI: [–0.24; 0.40] and 0.23, 95% CI: [–0.04; 0.51]).

The analysis of the indirect effect of explicitly admitting to not knowing (vs. question-asking) showed that it resulted in significantly larger negative indirect effects via perceived competence for both trust and helping and in both low (–0.39, 95% CI: [–0.66; –0.17] and –0.27, 95% CI: [–0.48; –0.12]) and high (–0.56, 95% CI: [–0.82; –0.33] and –0.39, 95% CI: [–0.61; –0.22]) credentials conditions. The extra positive indirect effects of admitting to not knowing (vs. question-asking) via perceived humility were not significant regardless of leader credentials (0.08, 95% CI: [–0.01; 0.22] and 0.10, 95% CI: [–0.01; 0.25] for low credentials; –0.01, 95% CI: [–0.11; 0.08] and –0.01, 95% CI: [–0.13; 0.10] for high credentials). Overall, admitting to not knowing vs. asking questions resulted in negative total indirect effects on trust and helping (significant only for the leader with high credentials, –0.58, 95% CI: [–0.91; –0.29] for trust and –0.42, 95% CI: [–0.70; –0.15] for helping).

#### 7.4. Discussion

In Study 4, we replicated the results of Study 2 in that there was a significant competence penalty (i.e., subsequent drop in perceived leader competence) for asking humble questions vs. providing conclusions only for the leader whose competence was initially doubted due to low credentials. Humility premiums (i.e., subsequent increase in perceived leader humility), however, were pervasive, and both reduced the magnitude of competence penalties and buffered the negative effects of such penalties on trust in the leader and helping intentions. As predicted (Hypothesis 3), the competence penalty for the leader with low credentials mediated the negative indirect effect of question asking on both trust and helping. Humility-mediated positive indirect effect on trust and helping (Hypothesis 4) either offset or surpassed the negative indirect effect of questions via perceived competence. All in all, the asking of questions emerged as superior to more defensive forms of information gathering.

We also compared the asking of questions to openly admitting to not knowing. While the two communication forms resulted in comparable humility premiums, the competence penalties were higher for explicitly admitting to not knowing than for asking questions. As a result, leaders who explicitly admit to not knowing – as opposed to doing so only implicitly through questions – are likely to be trusted and helped less. Thus, question-asking appears to be a more subtle and therefore, less detrimental form of admitting to not knowing in seeking input from subordinates.

#### 8. Study 5: Examining robustness of competence penalties and humility premiums

Study 5 goal was to test the robustness of the effects of question asking with a new scenario and relative to manipulating the doubts in

**Table 4**  
Indirect effects on trust and helping, Study 4.

	DV = Trust Indirect effect of IV on DV				DV = Helping Intentions Indirect effect of IV on DV			
	via perceived competence	via perceived humility	serial (via perceived humility → perceived competence)	Total	via perceived competence	via perceived humility	serial (via perceived humility → perceived competence)	Total
<b>IV = Questions (vs. Conclusions)</b>								
1 High credentials	-0.14 (-0.30; 0.00)	0.24 (0.11; 0.41)	0.15 (0.07; 0.26)	0.24 (0.00; 0.49)	-0.08 (-0.19; 0.00)	0.32 (0.16; 0.51)	0.08 (0.04; 0.17)	0.32 (0.11; 0.54)
2 Low credentials	-0.31 (-0.53; -0.13)	0.24 (0.11; 0.43)	0.15 (0.07; 0.28)	0.08 (-0.24; 0.40)	-0.18 (-0.34; -0.06)	0.33 (0.15; 0.55)	0.09 (0.03; 0.18)	0.23 (-0.04; 0.51)
<b>IV = Not-knowing (vs. Questions)</b>								
1 High credentials	-0.56 (-0.82; -0.33)	-0.01 (-0.11; 0.08)	-0.01 (-0.11; 0.09)	-0.58 (-0.91; -0.29)	-0.39 (-0.61; -0.22)	-0.01 (-0.13; 0.10)	-0.01 (-0.08; 0.06)	-0.42 (-0.70; -0.15)
2 Low credentials	-0.39 (-0.66; -0.17)	0.08 (-0.01; 0.22)	0.09 (-0.02; 0.21)	-0.22 (-0.57; 0.08)	-0.27 (-0.48; -0.12)	0.10 (-0.01; 0.25)	0.06 (-0.01; 0.16)	-0.11 (-0.38; 0.15)

Note. N = 353. Entries are unstandardized coefficients. DV = dependent variable. IV = independent variable. Bootstrapped (5000 replications) 95% bias-corrected confidence intervals (CI) in parentheses. Effects in bold are significant (CIs exclude 0).

leader competence and humility at the same time. When we manipulated one type of doubt at a time (competence through credentials or humility through reputation), participants may have regarded the dimension we did not manipulate as non-problematic. Hence, our findings in previous studies likely described how questions and the prior doubt in competence affected generally humble leaders, and how questions and the prior doubt in humility affected generally competent leaders. It is instructive to examine the same effects against the backdrop of humility and competence doubts, respectively.

For example, the doubt in one’s humility, as other warmth-related doubts, may be primary and foundational (Cuddy et al., 2011). In particular, it goes beyond doubting whether tasks would be executed to doubting the very intentions behind leader actions, and whether tasks are pursued for everyone’s benefit and with consideration of everyone’s input. Until it is resolved, a high doubt in humility may de-sensitize people to the effects of a more secondary doubt in leader competence, eliminating competence penalties. Similarly, humility premiums shown in Study 3 may change against the backdrop of a high doubt in leader competence. Owens and Hekman (2012) qualitatively examined the meanings attached to the exercise of humble leadership, and highlighted a practitioners’ belief that humble behaviors (and thus question-asking) may only benefit leaders who are not doubted in terms of competence. Study 5 could furnish evidence in this respect as we manipulated leader credentials and reputation simultaneously to generate conditions with ex-ante competence/humility doubts set at high/low, low/low, low/high, and high/high.

8.1. Method

8.1.1. Participants and design

770 US-based adults were recruited as in Studies 2–4, of which 502 passed an initial and a final attention checks (79 failed, 10%) and three scenario comprehension checks (189 more failed, 25%). The study employed a 2 (questions vs. conclusions) × 2 (high vs. low credentials) × 2 (good vs. poor reputation) between-subjects design. Participants were paid \$1.50 upon study completion. The required number of participants was determined as in previous studies (f = 0.15, 95% power, target sample size of 580). The actual number of valid responses was 87% of the target sample size and exceeded the 80% power target.

8.1.2. Procedure and manipulation

Participants were asked to read a scenario that was structurally similar to that in Studies 2–4, but described a newly appointed CEO of a medical device manufacturer, Jamie Smith, in the midst of a product quality crisis (adapted from Roberto, 2014, see Appendix E). Participants pictured themselves as Jamie’s product managers and read Jamie’s description along two dimensions: good/poor reputation and high/low competence credentials, followed by an email that Jamie addressed to product managers with questions/conclusions about an upcoming press conference to deal with the crisis. As a comprehension check, we asked whether Jamie’s credentials and/or reputation were in doubt, and whether in the email Jamie asked questions or communicated conclusions.

8.1.3. Pretest

To check whether we induced ex-ante doubts in leader competence and humility (i.e., prior to information gathering), we conducted a pretest of our manipulation of good/poor reputation and high/low credentials. Ninety-five participants were recruited as in the main study, although from a different, non-overlapping sample (43% women; M<sub>age</sub> = 35.79, SD = 10.68). They read the part of the scenario preceding Jamie’s email with questions/conclusions. This part described Jamie as having good/poor reputation for humility and high/low competence credentials. Participants were randomly assigned to one of the four conditions and evaluated Jamie’s competence and humility, as

in Study 4.

The results of a 2 (high vs. low credentials)  $\times$  2 (good vs. poor reputation) ANOVA of humility perceptions showed a significant main effect of the reputation manipulation ( $F(1, 91) = 460.46, p < .001, \eta_p^2 = 0.83$ ). Neither the main effect of credentials nor the interaction was significant ( $F < 2, p > .20$ ). Simple effect analyses revealed that participants regarded Jamie as more humble in the good (vs. poor) reputation condition, both when Jamie was described as having low and high credentials ( $F(1, 91) = 201.90$  and  $262.89$ , both  $p < .001, d = 4.34$  and  $4.75$ ). Thus, our manipulation of the doubt in humility was effective.

Analogous 2X2 ANOVA of competence perceptions showed a significant main effect of the credentials manipulation ( $F(1, 91) = 238.82, p < .001, \eta_p^2 = 0.72$ ). The main effect of reputation turned out to be significant too ( $F(1, 91) = 15.50, p < .001, \eta_p^2 = 0.15$ ), as did the interaction ( $F(1, 91) = 8.69, p < .01, \eta_p^2 = 0.09$ ). Simple effect analyses revealed that in both poor and good reputation conditions, Jamie was perceived as more competent in the high (vs. low) credentials condition ( $F(1, 91) = 151.16$  and  $88.87$ , both  $p < .001, d = 3.88$  and  $2.65$ ). These results suggest that the manipulation of the doubt in competence was effective. The main effect of reputation and the interaction were significant because in the low credentials condition, participants regarded Jamie as more competent when the scenario described the CEO as having good (vs. poor) reputation ( $F(1, 91) = 22.33, p < .001, d = 1.31$ ). These results suggest that as in Study 4 and consistent with the specificities of the leadership role (Owens et al., 2015; Owens & Hekman, 2016), a positive signal about leader humility enhanced perceived leader competence. Hence, as in Study 4, we controlled for perceived humility in the analyses of perceived competence to accurately assess competence penalties.

#### 8.1.4. Measures

Assessments of perceived leader competence and humility were counterbalanced, and we used the same items as in previous studies, both  $\alpha = 0.97$ . As in Study 4, participants rated the extent to which they would trust ( $\alpha = 0.97$ , Spearman-Brown reliability = 0.97) and help the leader ( $\alpha = 0.88$ ) with help items adapted to the context, e.g., “help Jamie prepare for the press conference in every possible way,” “offer suggestions on how to begin the press conference,” “give up meal and other breaks to work on points for the press-conference.” Finally, as in Study 4, we assessed the extent to which participants thought the leader (i) truly looked for information he/she did not know, or (ii) communicated for other purposes ( $\alpha = 0.68$ ),<sup>10</sup> and (iii) had a participative decision-making style ( $\alpha = 0.95$ ).

## 8.2. Results

Descriptive statistics are presented in Table 5 (see also Appendix D).

### 8.2.1. Manipulation checks

The leader was believed to look for information he/she did not know less in the conclusions condition ( $M = 3.76, SD = 1.75$ ) than in the questions condition ( $M = 5.61, SD = 1.40, t(5\ 0\ 0) = 13.50, p < .001, d = 1.17$ ). In contrast, participants rated the extent to which the leader was communicating for other purposes similarly in the conclusions ( $M = 3.18, SD = 1.32$ ) and questions ( $M = 3.36, SD = 1.30, t(5\ 0\ 0) = 1.53, p = .13, d = 0.14$ ) conditions. These results suggest the manipulation of communication forms was successful.

We further checked whether the leader was perceived as welcoming input irrespective of the communication form. Participants rated the

<sup>10</sup> The three forms of non-humble inquiry correlated higher with each other (between 0.37 and 0.47, all  $p < .05$ ) than with humble questions (all  $p > .05$ , except for one correlation coefficient of 0.23,  $p < .05$ ).

extent to which the leader was participative above the mid-point of the scale both in the questions ( $M = 5.15, SD = 0.78, t(2\ 5\ 8) = 23.71, p < .001$ ) and conclusions ( $M = 4.26, SD = 1.06, t(2\ 4\ 2) = 3.79, p < .001$ ) conditions.<sup>11</sup>

### 8.2.2. Competence penalties

A 2 (questions vs. conclusions)  $\times$  2 (high vs. low credentials)  $\times$  2 (good vs. poor reputation) ANOVA of perceived competence with perceived humility as a covariate revealed a significant main effect of credentials ( $F(1, 493) = 163.52, p < .001, \eta_p^2 = 0.25$ ), questions vs. conclusions ( $F(1, 493) = 7.38, p < .01, \eta_p^2 = 0.01$ ), and perceived humility ( $F(1, 493) = 181.85, p < .001, \eta_p^2 = 0.27$ ), as well as a significant 3-way interaction ( $F(1, 493) = 6.30, p = .012, \eta_p^2 = 0.01$ ). All other effects were not significant ( $F < 2, p > .05$ ). As in Study 4, the marginal effect of perceived humility on perceived competence was positive (0.59; 95% CI: [0.51; 0.68]).

To test the significance of competence penalties, we analyzed planned contrasts (with a Bonferroni correction for multiple comparisons), Fig. 5, upper panel. In line with the results of Studies 2 and 4, provided a good reputation for humility, question-asking had a significant negative effect on perceived leader competence (i.e., competence penalty) in the low credentials condition ( $F(1, 493) = 12.10, p = .002, d = 0.64$ ), but not in the high credentials condition ( $F(1, 493) = 0.02, p = 1.00, d = 0.03$ ). When humility was in doubt due to poor reputation, competence penalties were not significant both in the low ( $F(1, 493) = 0.28, p = 1.00, d = 0.09$ ) and high ( $F(1, 493) = 3.60, p = 0.23, d = 0.36$ ) credentials conditions.

### 8.2.3. Humility premiums

A 2X2X2 ANOVA of perceived humility revealed significant main effects of reputation ( $F(1, 494) = 220.34, p < .001, \eta_p^2 = 0.31$ ), questions vs. conclusions ( $F(1, 494) = 206.96, p < .001, \eta_p^2 = 0.30$ ), and credentials ( $F(1, 494) = 28.85, p < .001, \eta_p^2 = 0.06$ ). None of the interactions were significant ( $F < 4, p > .05$ ). Planned contrasts (with a Bonferroni correction, Fig. 5, lower panel) showed that question-asking had a positive effect on perceived leader humility (i.e., humility premium) in all conditions. Humility premiums were significant in the poor and good reputation conditions both when leader competence credentials were low ( $F(1, 494) = 53.92$  and  $79.53$ , both  $p < .001, d = 1.35$  and  $1.58$ ) and high ( $F(1, 494) = 42.22$  and  $36.43$ , both  $p < .001, d = 1.23$  and  $1.04$ ).<sup>12</sup>

### 8.2.4. Indirect effects on trust and helping

We expected to replicate the indirect effect of question-asking on trust and helping via perceived competence (Hypothesis 3) and humility (Hypothesis 4). The 95% BC CI for the indirect effects (see Table 6) revealed a significant negative indirect effect via perceived competence for the leader with good reputation and low ( $-0.31, 95\% \text{ CI: } [-0.52; -0.14]$ , for trust, and  $-0.18, 95\% \text{ CI: } [-0.33; -0.07]$ , for helping), but not high credentials ( $-0.01, 95\% \text{ CI: } [-0.16; 0.14]$ , for trust, and  $-0.01, 95\% \text{ CI: } [-0.09; 0.08]$ , for helping), consistent with our hypotheses and the results of Study 4. As for the leader with poor reputation, the indirect effect via perceived competence was not

<sup>11</sup> The leader was perceived as less participative when he/she communicated using conclusions than when he/she asked questions ( $t(5\ 0\ 0) = 10.79, p < .001, d = 0.97$ ). Controlling for leader participative style in all the analyses did not substantively change the findings.

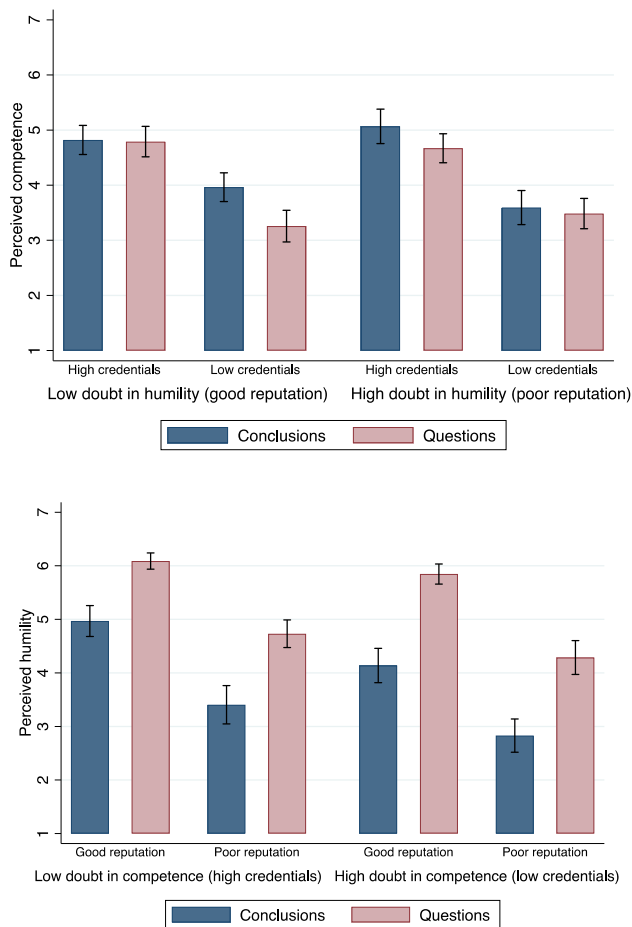
<sup>12</sup> The results of analogous tests of humility premiums while controlling for perceptions of competence were qualitatively similar. That is, there were significant humility premiums from question-asking vs. providing conclusions for leaders with poor and good reputation, both when leader competence credentials were low (planned contrasts = 1.57 and 1.11,  $F(1, 493) = 42.08$  and  $91.02$ , both Bonferroni-adjusted  $p < .001, d = 1.13$  and  $1.96$ ) and high (planned contrasts = 0.83 and 1.15,  $F(1, 493) = 42.98$  and  $26.94$ , both Bonferroni-adjusted  $p < .001, d = 1.24$  and  $0.84$ ).



**Table 5**  
Descriptive statistics, Study 5.

Variable	Mean	SD	Min	Max	Correlation							
					1	2	3	4	5	6	7	
1 Perceived leader competence	4.21	1.57	1	7	(0.97)							
2 Perceived leader humility	4.60	1.51	1	7	<b>0.61</b>	(0.97)						
3 Helping intentions	4.51	1.36	1	7	<b>0.51</b>	<b>0.59</b>	(0.88)					
4 Trust	3.91	1.75	1	7	<b>0.73</b>	<b>0.78</b>	<b>0.64</b>	(0.97)				
5 Participative decision making	4.72	1.02	1	7	<b>0.58</b>	<b>0.89</b>	<b>0.57</b>	<b>0.71</b>	(0.95)			
6 Humble inquiry	4.71	1.83	1	7	<b>0.30</b>	<b>0.59</b>	<b>0.41</b>	<b>0.45</b>	<b>0.65</b>	–		
7 Non-humble inquiry	3.27	1.31	1	7	–0.08	–0.07	–0.09	– <b>0.08</b>	–0.02	0.06	(0.68)	

Note.  $N = 502$ . Significant correlations ( $p < .05$ ) are in bold. Coefficient alphas appear across the diagonal in parentheses. Humble inquiry refers to the extent to which the leader was believed to truly look for information that s/he did not know. Non-humble inquiry refers to communication for other purposes (e.g., to test others' knowledge).



**Fig. 5.** Competence penalty (upper panel) and humility premium (lower panel) for asking questions, Study 5. Note. Error bars represent 95% confidence intervals.

significant regardless of leader credentials (high credentials,  $-0.18$ , 95% CI:  $[-0.42; 0.05]$ , for trust, and  $-0.10$ , 95% CI:  $[-0.27; 0.02]$ , for helping; and low credentials,  $-0.05$ , 95% CI:  $[-0.21; 0.13]$ , for trust, and  $-0.03$ , 95% CI:  $[-0.14; 0.07]$ , for helping).

The indirect positive effects of question-asking via perceived humility were significant for all four combinations of leader credentials and reputation (values between 0.42, 95% CI:  $[0.26; 0.61]$ , and 0.98, 95% CI:  $[0.74; 1.26]$ ). The positive indirect effects via perceived humility surpassed the negative indirect effects via perceived competence, resulting in positive and significant total indirect effects of question-asking on both trust and helping (values between 0.58, 95% CI:  $[0.38; 0.81]$ , and 1.18, 95% CI:  $[0.79; 1.59]$ ).

### 8.3. Discussion

In Study 5, we replicated and extended the findings from previous studies. First, we replicated competence penalties from Studies 2 and 4 using a new scenario. Second, the additional experimental conditions in Study 5 allowed us to analyze competence penalties from asking questions against the novel backdrop of a high doubt in leader humility. We found that participants were not sensitive to the informational value of questions relative to competence (i.e., there was no competence penalty for asking questions) when leader humility was in doubt ex ante. Although at this stage we can only speculate about the mechanism for these results, the negative interpersonal affect that may characterize interactions with a leader whose humility is in doubt may make leader competence less focal, just as “negative interpersonal affect renders task competence virtually irrelevant in a person’s choice of a partner for task interactions” (Casciaro & Lobo, 2008). This is consistent with the view of warmth (and hence, humility) being more primary and foundational, and hence, capable of “switching off” attention toward information that speaks to other dimensions of social cognition (Cuddy et al., 2011). That is, one boundary condition for the questions-as-information model is that questions become information regarding leader competence *only when* leader competence is in doubt but leader humility is not.

Importantly, this result does not imply that, using labels similar to Casciaro and Lobo (2005), people trust and follow “arrogant fools” (low credentials and poor reputation) more than “humble fools” (low credentials and good reputation). Although “arrogant fools” did not receive a competence penalty for asking questions (Fig. 5, upper panel, bars 7 and 8), their competence (controlling for perceived leader humility) was deemed comparable to those of “humble fools” (Fig. 5, upper panel, bars 3 and 4). In contrast, their lower perceived humility (Fig. 5, lower panel, bars 7 and 8) placed them at a clear disadvantage in comparison to “humble fools” (Fig. 5, lower panel, bars 5 and 6).

As for humility premiums, in line with previous studies, we found pervasive humility premiums from asking questions for all combinations of doubts in leader competence/humility. Perhaps, question asking is such a representative form of humble behavior that it does not leave room to alternative interpretations. For example, when participants considered leaders who admitted openly that they did not know something in Study 4, it produced competence penalties for them irrespective of the prior doubt in leader competence. Similarly, humility premiums may be positive irrespective of the prior doubt in leader humility because of how openly humble it is to ask questions for which the leader does not know the answers.

We found again that the asking of questions affects trust and helping intentions via perceived leader competence and humility. Consistent with our hypotheses and findings in Study 4, the negative indirect effect on both trust and helping intentions through competence perceptions was significant for leaders with low credentials and good reputation. We did not replicate this pattern of indirect effects for leaders whose reputation was poor as it seemingly de-sensitized the respondents to

**Table 6**  
Indirect effects on trust and helping, Study 5.

	DV = Trust Indirect effect of IV on DV				DV = Helping Intentions Indirect effect of IV on DV			
	via perceived competence		via perceived humility		via perceived competence		via perceived humility	
	serial (via perceived humility → perceived competence)	humility → perceived competence	serial (via perceived humility → perceived competence)	humility → perceived competence	serial (via perceived humility → perceived competence)	humility → perceived competence	serial (via perceived humility → perceived competence)	humility → perceived competence
1 High credentials, good reputation	-0.01 (-0.16; 0.14)	0.64 (0.45; 0.89)	0.30 (0.20; 0.42)	0.93 (0.61; 1.25)	-0.01 (-0.09; 0.08)	0.42 (0.26; 0.61)	0.17 (0.08; 0.27)	0.58 (0.38; 0.81)
2 High credentials, poor reputation	-0.18 (-0.42; 0.05)	0.76 (0.51; 1.08)	0.35 (0.22; 0.52)	0.94 (0.52; 1.35)	-0.10 (-0.27; 0.02)	0.50 (0.29; 0.76)	0.20 (0.10; 0.33)	0.59 (0.31; 0.89)
3 Low credentials, good reputation	-0.31 (-0.52; -0.14)	0.98 (0.74; 1.26)	0.45 (0.31; 0.62)	1.12 (0.75; 1.52)	-0.18 (-0.33; -0.07)	0.64 (0.41; 0.91)	0.25 (0.13; 0.40)	0.72 (0.44; 1.03)
4 Low credentials, poor reputation	-0.05 (-0.21; 0.13)	0.84 (0.57; 1.15)	0.39 (0.25; 0.58)	1.18 (0.79; 1.59)	-0.03 (-0.14; 0.07)	0.54 (0.33; 0.81)	0.22 (0.11; 0.37)	0.73 (0.46; 1.05)

Note. N = 502. Entries are unstandardized coefficients. DV = dependent variable. IV = independent variable. Bootstrapped (5,000 replications) 95% bias-corrected confidence intervals (CI) in parentheses. Effects in bold are significant (CIs exclude 0).

regarding questions as information. As in prior studies, there were pervasive positive indirect effects of questions on trust and helping intentions through humility premiums. These positive indirect effects were consistently larger than negative indirect effects via perceived competence. We used different scenarios in Studies 4 and 5, and with both scenarios, the total indirect effects were never negative. While future research should examine whether this generalizes to other settings, we showed that the total indirect effect of question-asking on trust and helping can be positive irrespective of prior doubts in leader competence and/or humility. This possibility contradicts practitioners' beliefs that humble behaviors, such as the asking of questions, are outright detrimental for leaders who have not yet established their reputation for competence (Owens & Hekman, 2012).

### 9. General discussion

In four experiments and a study of practitioners' beliefs, we have shown that while practitioners may often refrain from asking questions, especially for fear of competence penalties, questions are likely beneficial for leaders beyond their direct instrumental value. By regarding questions as information, we found that competence penalties from asking humble questions arise only when leader competence is in doubt ex ante. In contrast, humility premiums are pervasive. Furthermore, the positive effects of humility premiums on trust in the leader and helping intentions can buffer the negative effects of competence penalties, dispelling some of the practitioners' concerns (as per Study 1 and Owens & Hekman, 2012). The most important theoretical implications of our findings relate to the study of leadership, communication, and decision making in organizations. We discuss these first, followed by a discussion of limitations and new avenues for future research, and practical implications.

#### 9.1. Theoretical implications

Given that the asking of questions is such an important behavior in the exercise of many leadership duties (e.g., visioning, problem solving, and relationship building), it is important to understand the full range of consequences associated with it. Traditionally, the asking of questions has been subsumed under the broader category of information gathering behaviors, which were part of the "initiating structure" (task-oriented) rather than "consideration" (relationship-oriented) behaviors (Schriesheim, House, & Kerr, 1976). Hence, the asking of questions featured as an item on scales that purported to measure leader behaviors that helped accomplish tasks but were distinct from what would be done to show consideration for the followers. The effect of such behaviors was compared to, and contrasted with, the effect of consideration behaviors. Only very recently have Van Quaquebeke and Felps (2018) called for a different approach to understanding what makes leaders effective. In their analysis of what they referred to as "respectful inquiry" defined as the asking of questions and listening, they call for considering not only the content but also the form of routine communication behaviors of leaders, and examining the corresponding repercussions on the motivation of followers. They argued that such behaviors constituted the "building blocks" of leadership styles, and that theorizing at the level of behaviors would be more amenable to empirical testing, falsification, and the building of theory that is more precise and therefore, more actionable.

This suggestion resonates with growing research on humility in organizations where, across a range of organizational settings, very specific behaviors are pointed to as manifestations of leader humility with important outcomes for the leader and the organization (e.g., Owens & Hekman, 2012). Following suit, we submitted to empirical testing the possibility of competence penalties and, previously overlooked, humility premiums associated with the asking of questions for which the leader does not know the answers. We showed additionally that perceptions of competence and humility mediated the effect of

asking questions on leader trust and helping intentions, and that possible competence penalties may be offset by humility premiums in terms of their effect on trust and helping intentions. Even for leaders whose competence is in doubt *ex ante*, the total effect of asking questions, compared to other forms of information gathering, may be favorable.

This finding is important because extant literature on group and organizational decision making strongly supports the view that to make effective decisions, group members should share information fully (Janis, 1972; Larrick, 2016; Larson, Foster-Fishman, & Keys, 1994; Mesmer-Magnus & DeChurch, 2009; Stasser & Titus, 2003; Woolley et al., 2010). Organizational decision making may suffer if barriers that exist at the level of individual leaders for asking questions prevent relevant information from reaching the right decision makers at the right time (Gino, 2018). Our findings suggest that the reputational barriers of question-asking may, in fact, be rather low, and it is difficult to justify more defensive forms of information gathering.

By suggesting that the form of communication may be information in and of itself, we extend uncertainty reduction theory (Berger & Calabrese, 1975), which describes how the need to reduce uncertainty affects communication processes in interpersonal interactions. We also contribute to the research on business communication. This literature documents that communication constitutes 70 to 80% of what managers do in a given day, the bulk of that communication happening with subordinates, and that for leaders in executive positions in organizations, personal sources of information prevail over impersonal ones such as reports and outputs from management information systems (Brown & Eisenhardt, 1997; Mintzberg, 1973). To our knowledge, our studies are the first in the literature to examine alternative forms of communication in the exercise of a participative leadership style (Arnold et al., 2000). We compared leaders who ask questions to leaders who make affirmative statements regarding the same content and serving the same purpose of inviting participative decision making. In a sense, we documented a mere “framing” effect (Kahneman & Tversky, 2000). The significant differences point to the importance of the form of communication in organizational settings and hence, communication skills of organizational members (Raelin, 2013).

We provide empirical evidence that an *ex-ante* doubt in leader competence may affect the extent to which the form of information gathering (e.g., the asking of questions) produces competence penalties for the leader. These competence penalties and pervasive humility premiums jointly mediate the effect of asking questions on leader trust and helping intentions. Being aware of costs and benefits of asking questions vs. other forms of seeking information from others in the organization or the external environment may help leaders manage impressions in ways that benefit them the most. For instance, awareness of possible consequences may deter leaders from asking questions in one-shot but not repeated interactions. In this sense, our work resonates with theoretical models built to alert decision makers about the informational value of their chosen communication strategies such as thanking, apologizing, bragging, or blaming (Chaudhry & Loewenstein, 2019). Such models focus similarly on the tradeoffs between appearing competent and appearing likable, and caution individuals to reason carefully about the importance of context to costs and benefits associated with their choices to engage in a particular form of communication.

We showed that the asking of questions for which the leader does not know the answers (Schein, 2013) is perceived as a manifestation of leader humility. In fact, humility premiums for leaders who asked questions were pervasive irrespective of prior doubts in leader humility and competence. This result supports other evidence for the primary and foundational role of warmth-like characteristics in social cognition and relationship-building broadly speaking, and in work settings, in particular (Casciaro & Lobo, 2008; Cuddy et al., 2011). Admittedly, it is not rare that important behaviors do not come across as intended, but with questions for which the asker truly does not know the answers, the

theoretical prediction of greater perceived humility for the asker and the label “humble” turned out to be accurate.

## 9.2. Limitations and future research

Despite their richness, our findings are subject to limitations that point toward promising avenues for future research. First, it would be interesting to explore whether they generalize to other organizational contexts. We examined reactions to leaders described as occupying positions of formal authority. If we are to regard leadership as “shared” and a “practice” (Raelin, 2016), it could be interesting to conduct studies in which the asking of questions originated from leaders in positions of no formal authority. The sensitivity to competence penalties may be particularly strong in more formal and hierarchical settings but these are also settings where humble behaviors may be most impactful (Owens & Hekman, 2012; Van Quaquebeke & Felps, 2018). Would non-hierarchical settings diminish or amplify the effects of asking questions on leader effectiveness?

It is also interesting to examine whether our findings generalize beyond the leadership context. Would the effects we examine apply to questions asked by workers in lateral or bottom-up flows of organizational communication? And what would be the net balance of competence penalties and humility premiums as a function of the asker or other situational factors? Would other relationships we found generalize, such as the effect of humility on perceived competence or, does that only hold due to the specificities of the leadership role? Would alternative manipulations of the doubt in leader competence and/or humility produce similar results? Whereas we targeted the perceived likelihood that the leader has the desirable high levels of competence and humility, one could induce doubt by using contradictory evidence for these qualities or objective probability information.

In relation to leader effectiveness, it would be interesting to consider a broader range of downstream consequences of asking questions. Van Quaquebeke and Felps (2018) provide a roadmap for why the asking of questions and listening helps build relationships and improve organizational performance. Greater trust in the leader and helping intentions are only one class of possible responses to respectful inquiry. The asking of questions also offers to followers the opportunity to shape the conversation and subsequent actions so as to satisfy to a greater extent follower psychological needs for competence, autonomy, and relatedness (Van Quaquebeke & Felps, 2018). What kinds of behaviors would this “unlock”?

Although in our studies the asking of questions never backfired for the leader in terms of the overall effect of competence penalties and humility premiums, it would be important to identify conditions under which the asking of questions may be detrimental. For example, what if the leader kept asking the same questions again and again? What if the questions referred to well-known facts (e.g., text of relevant laws)? We believe that repeat or primitive questions may increase competence penalties from asking questions to the point where they could overwhelm humility premiums resulting in negative overall effects for the leader. Future research could test this prediction. As shown in Study 1, most management practitioners do not ask questions at every opportunity, and this may be due to additional hindrance factors that need to be explored.

Understanding why the asking of questions produces the effects we document is also important for identifying practices to encourage the asking of questions by leaders in organizations. For example, we argued that competence penalties arise from the implicit acknowledgement that the asker does not know something. This clashes with the ideal of an all-knowing leader (e.g., Epitropaki & Martin, 2004; Meindl, 1995; Oldmeadow & Fiske, 2007). Could organizations diminish the perceived clash through practices that associate the asking of questions with leaders at different hierarchical levels or levels of experience? New leaders could be introduced with questions rather than answers from the leader, and project meetings could commence with the posing of

open questions. If humble inquiry becomes habitual and broad (e.g., by leaders with different credentials and reputations), will questions continue to convey information about the competence of specific askers?

### 9.3. Practical implications

The findings from four experiments on how the asking of questions compares to alternative forms of information gathering informs beliefs and concerns management practitioners share in relation to “humble” behaviors (Study 1 and Owens & Hekman, 2012). Leaders should note that although humble questions represent an open acknowledgement of one’s limitations, this does not always translate into lower perceptions of the asker’s competence. For example, we found that competence credentials, such as educational credentials and experience, free leaders from possible competence penalties for asking questions. Hence, showcasing these and similar credentials may be instrumental for those who would otherwise refrain from asking questions for fear of competence penalties.

At the same time, leaders whose competence was in doubt *ex ante* did incur competence penalties for asking questions as opposed to seeking input on tentative conclusions. Yet, there are several important qualifiers for such an effect. First, there may be no penalty as a function of doubt in competence if the *ex-ante* doubt in leader humility is relatively high (as per Study 5). In that case, leaders would be well advised to ask questions as a step toward overcoming a poor reputation for humility because they would be receiving humility premiums. As for leaders who do incur competence penalties, it is important to note that they may fear competence penalties disproportionately because of neglecting to factor into their analysis all the favorable consequences that come with higher perceptions of humility that accompany the asking of questions. Finally, if questions are asked by leaders who want to build their competence over time, it is perfectly justified to assume competence penalties in the short term. As mentioned above, their effect may be buffered by humility premiums and they pave the way to a level of competence at which penalties disappear.

Because we compared very specific behaviors, our research findings are actionable. In addition to focusing on the asking of questions, we showed how the seeking of input from subordinates was possible through the formulation of tentative conclusions and by admitting openly that the leader does not know something. Although most practitioners would agree that the formulation of tentative conclusions is a defensive and less genuine form of seeking input, they may regard it as humble to admit openly what the leader does not know.

## Appendix A

Questions used to elicit practitioners’ beliefs in Study 1 (randomized):

1. When a manager does not know something that subordinates may know, which of the following ways of seeking input is better, in your opinion?
2. When a manager does not know something that subordinates may know, which of the following ways of seeking input will evoke more help from subordinates, in your opinion?
3. When a manager does not know something that subordinates may know, which of the following ways of seeking input will evoke more trust from subordinates, in your opinion?
4. When a manager does not know something that subordinates may know, which of the following ways of seeking input will make the manager look more competent, in your opinion?
5. When a manager does not know something that subordinates may know, which of the following ways of seeking input will make the manager look more humble, in your opinion?

Response options (randomized):

1. Asking subordinates explicit questions about things the manager does not know.
2. Presenting your own conclusions, even if preliminary, and asking for input on those from subordinates.

## Appendix B

See Table B1.

Notwithstanding, humility premiums from the latter form of seeking input are “hit” harder by competence penalties than if questions were asked. Thus, it is better to ask questions instead.

A final practical take-away from our work is to highlight both competence and humility-driven repercussions of one’s behavior as a leader. After all, a leader who is more considerate and humble in his or her style may not be the one who devotes disproportionate attention to the personal and task-unrelated concerns of the subordinates, but the one who performs task-oriented behaviors in ways that most foster mutual trust and respect. The asking of questions will not only help build one’s competence over time, as our opening Chinese proverb suggests, but also, as we have shown, help build more trusting and helpful relationships from the get-go.

## 10. Conclusion

We advanced questions-as-information as a theoretical framework for studying the effects of asking questions on leader effectiveness. We documented how questions may produce competence penalties for the asker but also lead to humility premiums capable of compensating for the negative effects of competence penalties. A promising research agenda opens in relation to understanding the net balance of the effects of competence penalties and humility premiums as a function of leader characteristics and organizational context, and on a wider range of possible consequences, shedding further light on the “how” of effective problem solving in organizations.

### CRedit authorship contribution statement

**Irina Cojuharenco:** Conceptualization, Methodology, Investigation, Formal analysis, Writing - original draft, Writing - review & editing. **Natalia Karelaia:** Conceptualization, Methodology, Investigation, Formal analysis, Writing - original draft, Writing - review & editing, Funding acquisition.

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**Table B1**  
Sample characteristics, Studies 2–5.

	Study 2	Study 3	Study 4	Study 5	
1 Sample size	310	329	353	502	
By condition:					
Condition 1	High credentials, Conclusions 81	Good reputation, Conclusions 80	Low credentials, Conclusions 63	High credentials, Good reputation, Conclusions 61	
Condition 2	High credentials, Questions 74	Good reputation, Questions 84	Low credentials, Questions 50	High credentials, Good reputation, Questions 59	
Condition 3	Low credentials, Conclusions 82	Poor reputation, Conclusions 83	Low credentials, Not-knowing 55	High credentials, Poor reputation, Conclusions 51	
Condition 4	Low credentials, Questions 73	Poor reputation, Questions 82	High credentials, Conclusions 64	High credentials, Poor reputation, Questions 64	
Condition 5			High credentials, Questions 61	Low credentials, Good reputation, Conclusions 67	
Condition 6			High credentials, Not-knowing 60	Low credentials, Good reputation, Questions 62	
Condition 7				Low credentials, Poor reputation, Conclusions 64	
Condition 8				Low credentials, Poor reputation, Questions 74	
2 Proportion of women	43%	52%	47%	54%	
3 Age, M (SD)	35.25 (10.69)	34.33 (9.08)	35.75 (9.60)	37.57 (11.35)	
4 Race:					
	Caucasian	75%	79%	76%	80%
	African American	8%	7%	9%	8%
	Hispanic	5%	6%	6%	5%
	Asian	8%	5%	7%	6%
5 Work experience, years, M (SD)	13.76 (10.51)	13.39 (9.71)	14.54 (9.35)	16.07 (10.58)	
6 Proportion of those with at least a college or university degree	70%	73%	75%	71%	
7 Employment situation:					
	full or part time	73%	79%	88%	81%
	unemployed	19%	16%	10%	15%
	full-time students	8%	5%	2%	4%

## Appendix C

You will now read a scenario involving a work situation at NKIC Technologies, a defense and aerospace company in the U.S. Please picture yourself as a plant procurement manager at NKIC Technologies.

-----  
 NKIC Technologies is a **defense and aerospace company** with 15 manufacturing plants in the U.S. producing advanced electronic systems for aircraft manufacturers. The company was consistently profitable. However, recent market changes are forcing NKIC technologies to try to lower costs.

Among other areas, the CEO thought there was an opportunity to save money in procurement. With the approval of the board of directors, the CEO hired NKIC Technologies' first corporate Vice President of Procurement, Jamie Smith.

A graduate of **Massachusetts Institute of Technology (ITT Technical Institute Norwood)**, Jamie has **12(2) years of experience** in the industry. Jamie is **regularly giving(attending) talks** in defense and aerospace conferences on challenges faced by the industry due to recent market changes.

Jamie's appointment was announced through a press release on the NKIC Technologies website and in an email sent by Corporate Human Resources. On Jamie's first day, the CEO stressed that the primary concern should be cutting costs and doing it as quickly as possible. Jamie studied the cost of materials in NKIC plants for the previous year, and considered how to inform the plant procurement managers of this work. The decision has been to email plant managers.

Press "continue" to see Jamie's email:

-----  
 To: Plant Procurement Managers  
 From: Jamie Smith, Corporate Vice President of Procurement  
 Subject: Conclusions(Questions)(Unknowns) regarding new cost-cutting policy

Dear All,

NKIC Technologies is in need of a new cost-cutting policy. My task is to develop a policy as quickly as possible. I have now studied the cost of materials in NKIC plants for the previous year.

My conclusions (questions) are (I don't know whether):

- NKIC can lower costs by reducing the number of suppliers. (Can NKIC lower costs by reducing the number of suppliers?)
- NKIC can take advantage of economies of scale for some materials used at multiple NKIC plants. (Can NKIC take advantage of economies of scale for some materials used at multiple NKIC plants?)
- National vendors can do a better job than local suppliers of delivering material on time to multiple NKIC plants. (Can national vendors do a better job than local suppliers of delivering material on time to multiple NKIC plants?)
- Plant procurement managers can notify me of all contracts of \$250,000 or more two weeks before the contracts are signed. (Can plant procurement managers notify me of all contracts of \$250,000 or more two weeks before the contracts are signed?)

In the next two weeks, let's hear everybody's take on these conclusions (questions)(issues).

Developing a new cost-cutting policy is of utmost importance to our continued competitiveness. Our markets are changing rapidly and we need to respond quickly and effectively.

Sincerely,  
 Jamie Smith  
 Corporate Vice President of Procurement

## Appendix D

See [Table D1](#).

**Table D1**  
Confirmatory factor analysis of measures in Studies 4 and 5: Comparisons of nested structural models.

Model	Study 4							Study 5						
	$\chi^2$	df	CFI	RMSEA	SRMR	Comparison to Model 1	$\Delta\chi^2$	$\chi^2$	df	CFI	RMSEA	SRMR	Comparison to Model 1	$\Delta\chi^2$
						$\Delta df$							$\Delta df$	
1	1611.77	367	0.87	0.10	0.07	-	-	2389.76	367	0.89	0.11	0.07	-	-
2	4030.90	371	0.61	0.17	0.26	2419.13	4	5428.78	371	0.74	0.17	0.11	3039.02	4
3	4799.60	376	0.52	0.18	0.25	3187.83	9	6832.57	376	0.66	0.19	0.11	4442.81	9
4	1701.88	371	0.86	0.10	0.07	90.11	4	2711.21	371	0.88	0.11	0.07	321.45	4
5	4257.91	374	0.58	0.17	0.26	2646.14	7	6095.53	374	0.7	0.18	0.11	3705.77	7
6	4910.00	377	0.51	0.19	0.17	3298.23	10	7285.68	377	0.64	0.19	0.11	4895.92	10

Note.  $N = 353$  in Study 4, and 502 in Study 5. In Model 1 (best model for both studies), the items for the five constructs (i.e., perceived competence, perceived humility, trust, helping, and participative style) indicated five separate latent constructs.  $\chi^2$  = chi-square statistic;  $df$  = degrees of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual.

## Appendix E

You will now read a scenario involving a work situation at **Matterhorn Health**, a medical device manufacturer. Please picture yourself as a **Product Manager at Matterhorn**.

-----  
Matterhorn recently went to market with the GlucoGauge blood glucose monitor. In spite of extensive pre-release testing, since the product's launch, there have been **troublesome reports of customers experiencing inaccurate readings**.

Note that product quality crises do not always get resolved immediately. **The CEO Jamie Smith** has a lot to deal with to figure out the root of the issue and how Matterhorn can get ahead of this problem.

**Jamie has a good (poor) reputation as a person.** You don't doubt (doubt) Jamie's ability to listen and admit mistakes. Jamie was just seen showing great (a lack of) consideration for the opinions and perspectives of others in a large work meeting. **Moreover, Jamie is highly (not very) qualified** with over 12 years (only 4 years) of industry experience, and an impeccable (a mixed) record of managing prior PR crises. You greatly admired (seriously doubted) Jamie's choices in one recent case of PR trouble.

So far, everybody in the organization has worked long hours, and the CEO has just sent you an email.

Press "continue" to see Jamie's email:

-----  
To: Product Managers  
From: Jamie Smith, CEO  
Subject: Conclusions re GlucoGauge (Questions re GlucoGauge)

Dear All,

I received your assessments regarding our difficulties with the introduction of the GlucoGauge. At this point, we need to hold a press conference.

Below are my conclusions (questions):

- Media will have some tough questions. (What tough questions will media have?)
- We shall blame inaccurate readings of GlucoGauge on consumers misusing the device or component malfunction. One of these causes is more important than the other. (Shall we blame inaccurate readings of GlucoGauge on consumers misusing the device or component malfunction? Is one of these causes more important than the other?)
- I should address customers, healthcare professionals, insurers, government regulators, or shareholders in the opening statement for the press conference. (Should I address customers, healthcare professionals, insurers, government regulators, or shareholders in the opening statement for the press conference?)
- We can expect the full resolution of the product malfunction issue next week or next month. (Can we expect the full resolution of the product malfunction issue next week or next month?)

Let's hear everybody's take on these conclusions (questions).

I would like to hold the press conference tomorrow afternoon.

Sincerely,

Jamie Smith

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