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A Helping Hand is Hard at Work: Help-Seekers' Underestimation of Helpers' Effort

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Whether people seek help depends on their estimations of both the likelihood and the value of getting it. Although past research has carefully examined how accurately help-seekers predict whether their help requests will be granted, it has failed to examine how accurately help-seekers predict the value of that help, should they receive it. In this paper, we focus on how accurately help-seekers predict a key determinant of help value, namely, helper effort. In four studies, we find that (a) helpers put more effort into helping than help-seekers expect (Studies 1-4); (b) people do not underestimate the effort others will expend in general, but rather only the effort others will expend helping them (Study 2); and (c) this underestimation of help effort stems from help-seekers' failure to appreciate the discomfort—in particular, the guilt—that helpers would experience if they did not do enough to help (Studies 3 & 4).

Keywords

help effort, help-seeking, social judgment, prosocial behavior, decision-making

Disciplines

Human Resources Management | Organizational Behavior and Theory | Work, Economy and Organizations

Comments

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Abstract

Whether people seek help depends on their estimations of both the likelihood and the value of getting it. Although past research has carefully examined how accurately help-seekers predict whether their help requests will be granted, it has failed to examine how accurately help-seekers predict the value of that help, should they receive it. In this paper, we focus on how accurately help-seekers predict a key determinant of help value, namely, helper effort. In four studies, we find that (a) helpers put more effort into helping than help-seekers expect (Studies 1-4); (b) people do not underestimate the effort others will expend in general, but rather only the effort others will expend helping them (Study 2); and (c) this underestimation of help effort stems from help-seekers' failure to appreciate the discomfort—in particular, the guilt—that helpers would experience if they did not do enough to help (Studies 3 & 4).

Keywords: Help Effort; Help-seeking; Social Judgment; Prosocial Behavior; Decision-making

If a friend agreed to help you find a job, would you expect her to distribute your resume widely and offer a strong endorsement, or simply mention your name in passing to a couple of colleagues? If a coworker said he would give you feedback on an important presentation you were preparing, would you expect him to pore over it in detail, or just give it a quick skim? Questions like these highlight the extent to which help quality can vary. Yet despite this variability, questions about the quality of assistance one expects to receive should someone agree to help have drawn little research attention, even from studies aimed at understanding help-seekers' estimates of help outcomes. Rather than examine help-seekers' expectations of help quality, past research has examined help-seekers' expectations of whether help will be given (Bohns, 2016; Bohns et al., 2011; Bohns, Newark, & Xu, 2016; Flynn & Lake (Bohns), 2008; Newark, Flynn, & Bohns, 2014; Roghanizad & Bohns, 2017). But just as whether one anticipates rejection or acceptance influences one's decision to ask for help, so too does one's assessment of the quality of help at stake. Like expectations of compliance, expectations of help quality play a critical role in explaining an individual's motivation to seek assistance.

Help Quality and the Expected Value of Receiving Help

Most conceptions of intendedly rational or intelligent decision-making see action as guided by the anticipation of consequences (March, 1994). According to expected utility theory, satisficing, and other models of purely and boundedly rational choice (March, 1994; Mas-Colell, Whinston, & Green, 1995; Simon, 1955), decision-makers identify their alternatives, consider the consequences that may result from each of those alternatives, and then evaluate the desirability of each potential consequence according to their preferences (March, 1994; Mas-Colell et al., 1995). Fundamental to these models is the notion of expected value. In evaluating the desirability of decision alternatives, one must consider both the likelihood and value of each

of the consequences that may result from each alternative. For example, in deciding whether a particular lottery is attractive enough to justify the costs of playing, an intendedly rational decision-maker considers both the odds of winning and the amount he or she stands to win. Both pieces of information are vital.

To make rational decisions, an individual must account for both the probability and value of the potential consequences of his or her actions. This tenet of rationality holds across a variety of decision-making contexts; deciding whether to ask for help is no exception. Predictions of compliance and help quality should factor into the decision to request help. However, research on help-seeking has focused solely on help-seekers' estimations of the likelihood of receiving help, should they request it (Bohns et al., 2011; Bohns et. al., 2016; Flynn & Lake (Bohns), 2008; Newark et al., 2014; Roghanizad & Bohns, 2017). Help-seekers' estimations of the value of that help, should they receive it, have largely been ignored.

Identifying whether help-seekers accurately predict the quality of help they might receive is part and parcel of determining whether help-seekers are unduly reluctant to request help. For example, help-seekers often underestimate the likelihood that their requests for help will be granted (Flynn & Lake (Bohns), 2008; Newark et al., 2014), suggesting that help-seekers may be better off requesting help more frequently. However, if help-seekers underestimate the likelihood of receiving help but simultaneously overestimate the quality of help they are likely to receive, then encouraging help-seekers to seek help more often may be misguided. For instance, unexpectedly poor quality help might leave help-seekers regretting their decision to seek assistance, wishing instead that they had avoided the stresses, anxieties, and feelings of indebtedness often associated with asking for, and receiving, help. Moreover, helping takes time and receiving one form of help sometimes means that other avenues for addressing a problem

will not be pursued. If in the end one is not much better off than one was at the beginning, that time may feel wasted and one's overall position may feel worse.

Conversely, if those in need of help underestimate the quality of help they would receive, in addition to underestimating the likelihood that helpers will agree to their requests, then the consequences of not asking for help are even worse than previously thought. Not only would individuals who need assistance be leaving help on the table, so to speak, but that help would have been worth more than they think. Simply put, to make a sound decision about whether to seek help, a person must have an accurate sense of both the likelihood of receiving that help and its value.

Predictions of Helper Effort as a Key Determinant of Predictions of Help Quality

Help-seekers' predictions of help quality likely draw on the same factors that inform people's assessments of others' task performance more generally. Classic work on this topic (e.g., Dugan, 1989; Rotter, 1966; Weiner et al., 1971; Weiner, 1979) has shown that the three most salient factors in assessing task performance are: (1) characteristics of the task, (2) competence of the person performing the task, and (3) effort of the person performing the task. An individual attempting to predict the quality of another's performance on a particular task would consider the difficulty of the task, that person's specific competencies, and the amount of effort that person was likely to put into succeeding at the task. For example, if you knew that a colleague was working on a job application and you were to guess the quality of his or her cover letter, you would likely consider the nature of the task (How difficult is it to argue one's worth to a prospective employer in a cover letter?), that person's competencies (How capable is your colleague of making persuasive arguments in general?), and the amount of effort you would

expect your colleague to put into writing the cover letter (How motivated is your colleague to get this job?).

Though a help-seeker would likely rely on these same three factors when predicting the quality of help he or she would receive, a helping interaction has unique dynamics that may bias help-seekers' predictions of a helper's motivation to expend effort. That is, while assessment of a task's difficulty and a person's competencies to perform it should not be systematically influenced by whether the task is being performed for oneself, for the person performing the task, or for a third party, assessment of the amount of effort a person will put into a task is likely to be subject to bias in the context of a helping interaction. This bias results from help-seekers having to judge not how motivated a person is to complete a task well, but how motivated a person is to complete a task well *for them*. For example, consider the job application scenario described above, but this time imagine your colleague is writing you a letter of recommendation rather than writing his or her own cover letter. If you were to guess the quality of the arguments he or she were to make in a letter written for you, you would once again consider the nature of the task (How difficult is the task of writing a persuasive letter?), your colleague's competencies (How good is your colleague at making arguments in general?), and the amount of effort you would expect your colleague to put into writing the letter. However, while in the former scenario effort was tied to your colleague's self-interest (How motivated is your colleague to get this job?), in this scenario, effort is tied to your colleague's prosocial motivation toward you (How motivated is your colleague to write *you* a good letter and help *you* get this job?). Here, we focus on help-seekers' estimations of helper effort because estimations of helper effort are the key determinant of estimations of help quality that are likely to be misjudged by help-seekers.

Overestimating Versus Underestimating Help Effort

The accuracy of help-seekers' predictions of help quality hinge on their expectations of how much effort another person is willing to invest in helping them. At first pass, the possibilities that help-seekers will either overestimate or underestimate help effort seem equally plausible. However, we contend that help-seekers are more likely to underestimate the amount of effort helpers are willing to provide. In the sections below, we outline the arguments for both predictions, and why we expect that help-seekers, in general, will underestimate the effort helpers are willing to exert on help-seekers' behalf.

The Case for Overestimating Help Effort

Previous research on estimating the likelihood of saying "yes" to help requests has demonstrated that helpers often agree to provide assistance because of the discomfort they associate with refusing to help (Bohns et al., 2011; Flynn & Lake (Bohns), 2008; Newark et al., 2014). Help-seekers struggle to appreciate this discomfort; instead, they attribute the helper's compliance to that person's stable disposition as a "helpful person" (Gilbert & Malone, 1995; Jones & Harris, 1967; Newark et al., 2014). This line of research suggests two important dynamics that could result in help-seekers overestimating help effort. First, if potential helpers are driven primarily by the discomfort of refusing a request for help, their motivation to exert effort may be low once they decide to comply and their discomfort has been alleviated. Helping behavior driven by discomfort may feel partly coerced, leading helpers to provide assistance that is merely perfunctory. For instance, in one study, participants who felt coerced to comply with a request to volunteer at an event by a compliance technique (the fear-then-relief technique) signed up for fewer volunteering hours than those who did not feel coerced (Dolinski & Nawrat, 1998), which suggests that feeling obligated to comply with a request may result in low effort and, therefore, low quality help.

Second, if help-seekers assume that anyone who agreed to help must be a helpful person, they would likely believe that such a person would behave accordingly when it came time to perform the helping task. That is, a “helpful person” would not simply agree to help, but would also work hard at helping. However, this assumption may not be merited. Work on moral licensing suggests that helpers’ need to feel like a “helpful person” could be fulfilled by simply agreeing to help. That is, helpers could feel that they have already obtained “moral credits” just by saying “yes,” affirming their sense of self-worth and reducing the pressure they feel to demonstrate their morality through subsequent behavior (Merritt, Effron, & Monin, 2010). In addition, help effort may be more difficult to observe or assess than compliance, thereby reducing the pressure of accountability on the helper (Lerner & Tetlock, 1999). These dynamics could make putting great effort into helping less important to helpers than help-seekers think, resulting in an overestimation of help effort.

The Case for Underestimating Help Effort

Although help-seekers may expect helpers to put more effort into helping than they are actually willing to exert, we argue it is more likely that help-seekers will underestimate helpers’ effort. Specifically, we predict that help-seekers will fail to grasp the discomfort that helpers associate with not doing enough to help, leading them to underestimate the effort that helpers are likely to expend.

People tend to be more motivated to perform well when they have other people depending on them (Grant, 2008). As such, effort is likely to increase in helping situations, in large part because of the discomfort helpers feel at the prospect of disappointing others. However, help-seekers are notoriously bad at recognizing others’ prosocial motivations, tending to underestimate the discomfort helpers would feel if they were to let down those who seek their

aid (Bohns et al., 2011; Flynn & Lake (Bohns), 2008; Newark et al., 2014). Noting this, we argue that help-seekers are likely to underestimate the discomfort associated with providing poor help, leading them to underestimate the effort others are willing to put into acts of assistance.

The prospect of agreeing to help and then providing poor help is likely to generate at least as much, if not more, discomfort for potential helpers than the prospect of refusing to help in the first place. Indeed, refusing someone's request for help clearly violates the politeness norms of interpersonal interaction, making it quite uncomfortable to say "no" to another person's request, especially face-to-face (Goffman, 1967; Grice, 1975). However, saying "yes" to someone's request for help introduces additional concerns that also entail discomfort. Once someone else is dependent on us, we face the prospect of feeling guilty for letting him or her down (Wiltermuth & Cohen, 2014). They have relied on us to improve their situation and failing to do so, especially for reasons within our control, would leave us feeling bad about ourselves. We also face potential embarrassment and a threat to our self-esteem if we provide ineffective or subpar help (Dakof & Taylor, 1990; Marigold et al., 2014; Coyne, Wortman, & Lehman, 1988). In this case, we may worry about how the person we attempted to help would see us or what they might think about us. Finally, there is considerable pressure to behave in a manner that is consistent with our previous actions and statements (Aronson, 1992; Cialdini, 1993; Cialdini et al., 1999). Agreeing to be helpful, and ultimately being unhelpful, would engender feelings of dissonance. Taken together, these factors lead us to predict that helpers should be motivated to avoid the discomfort of providing low-quality help, driving them instead to invest considerable effort into helping.

The discomfort helpers associate with not doing enough to help would likely be lost on help-seekers. In general, people underestimate the role of embarrassment and discomfort as a

driver of others' behavior (Bohns & Flynn, 2010; Sabini, Siepmann, & Stein, 2001; Van Boven, Loewenstein, & Dunning, 2005). This effect has been demonstrated in a wide range of contexts, and there is no reason to expect that help-seekers would be any better at appreciating the role of discomfort in driving helpers' effort than they are at appreciating its role in driving helpers' compliance. The inability of help-seekers to recognize helpers' substantial discomfort suggests that help-seekers will underestimate helpers' effort. If this is the case, the costs of not asking for help are even more substantial than has previously been suggested: Not only might people be more likely to help than help-seekers assume, but the help they provide, and into which they put a great deal of effort, may also be more valuable than help-seekers believe.

Overview of Studies

The practical significance of this research rests, in part, on the assumption that expectations of help quality are an important factor in the decision to ask for help. Thus, before conducting our primary studies concerning help effort, we conducted a brief pilot study to test this assumption directly. Then, for our principal empirical work, we conducted four studies to test whether help-seekers underestimate helpers' effort, a key determinant of help quality. In Study 1, we developed a scavenger hunt in which participants seeking a cash prize approached individuals on a university campus and asked them to answer simple trivia questions on an iPad. Before approaching these strangers, participants predicted the effort helpers would expend by estimating the number of questions helpers would answer, the number of questions they would answer correctly, and how much time they would spend answering questions.

In Study 2, we conducted an online scenario study to examine whether this underestimation of effort was specific to help-seekers estimating the effort that a helper would

expend *on them*, or whether it was simply an example of a more general tendency people have to underestimate the effort of others, regardless of whom that effort benefits.

In Study 3, we conducted an online study with four scenarios in order to replicate the finding from Studies 1 and 2, further demonstrate its generalizability to other types of requests, and test our proposed mechanism for the effect—namely, that help-seekers fail to recognize the discomfort helpers would experience if they did not do enough to help, which in turn motivates helpers to put more effort into helping than help-seekers expect.

Finally, in Study 4 we conducted a second behavioral study to test both our main hypothesis and our proposed mechanism. In this study, helpers watched and took notes on a TED Talk video about public speaking. Help-seekers then used those notes to take a quiz about the video (which they were not allowed to watch themselves), receiving \$0.25 for each correct answer. Before taking the quiz, help-seekers estimated the discomfort helpers would feel if they did not do enough to help, as well as the effort helpers would put into their assistance. These estimates were then compared to the actual discomfort experienced and effort expended by helpers.

For all experiments, we report all measures, conditions, and data exclusions. Sample size for each study was determined by the heuristic recommended by Simmons, Nelson, and Simonsohn (2013) of at least 50 participants per cell.

Pilot Study

In an initial pilot study, we asked 99 participants (51 women, $M_{Age}=33$, $SD_{Age}=9.50$) from Amazon's Mechanical Turk to read a short paragraph about asking for help (Appendix A). We then asked them to answer two questions about what would typically drive their decision to ask for help: One about the extent to which their decision depended on how likely they thought a

potential helper would be to say “yes” to their request, the other about the extent to which their decision depended on the quality of help they thought a potential helper would provide, should they agree to help. These questions, presented in counter-balanced order, were answered with either “Not at all,” “To a low extent,” “To a moderate extent,” “To a great extent,” or “This is essential.”

We found that 92% of participants reported that their decision to ask for help was based at least to a moderate extent on expected help quality; in fact, more than half of participants (57%) reported that predicted help quality would either be essential to their decision or influence their decision to a great extent. Notably, there was no significant difference between the distribution of responses participants reported for predicted help quality and the distribution of responses they reported for predicted request compliance, [McNemar-Bowker(7)=9.86, $p=.20$]. Together, these results support the view that, although predicted compliance has been the focus of much of the research on help-seeking behavior, predicted help quality is also a significant factor in people’s decisions to ask for help.

Study 1: Estimating Help Effort in a Scavenger Hunt

In the first test of our primary research question, we explored whether help-seekers would underestimate the effort of helpers who said “yes” to a direct, in-person request for help. Participants randomly approached unknown individuals on a college campus and asked them for help answering trivia questions for a scavenger hunt. Before doing so, participants predicted helpers’ effort. These predictions of effort were then compared to actual help effort since the people who complied with these requests actually provided the requested help.

Participants

Two hundred individuals participated in this study. Fifty primary participants (31 women, $M_{Age}=21.08$, $SD_{Age}=2.46$) from two American universities¹ were paid \$20 to ask 150 secondary participants to help them win a scavenger hunt by answering trivia questions on an iPad. At each university, the primary participant who got secondary participants to answer the most trivia questions correctly was declared the winner. This primary participant received a prize of a \$25 Amazon gift certificate, in addition to his or her \$20 participation payment. Secondary participants received no compensation for completing the helping task.

Procedure and Materials

Primary participants met the experimenter in a central campus location, where they had the entirety of their task explained to them. Primary participants were told that they would be participating in a scavenger hunt in which they would randomly ask people they did not know to help them by answering trivia questions on an iPad. They were instructed to approach only individual strangers (no groups) until they found three people who were willing to help, or until their hour-long timeslot had expired. For each trivia question secondary participants answered correctly, primary participants would receive one point. At the end of the study, the primary participant with the most points would receive a \$25 gift card, in addition to his or her \$20 payment.

When primary participants approached a secondary participant, they recited the following script: “Excuse me, I’m taking part in a scavenger hunt and I was wondering if you would help me by answering a few trivia questions.” If the secondary participant agreed to help or requested

¹ Regression analysis showed that university location was not a significant predictor of any of our dependent variables (all $ps \geq .12$), with the exception of primary participants’ estimates of the amount of time secondary participants would spend answering questions, $\beta = -93\text{sec}$, $SE = 40.53$, $t(48) = -2.30$, $p = .03$. As a result, in our analyses, we have pooled the results from the two campuses, but note this discrepancy when reporting results regarding time estimations.

more information, primary participants handed the secondary participant the iPad, on which appeared the following text:

This individual is taking part in a scavenger hunt. As part of this scavenger hunt, this individual is looking for people to answer some simple trivia questions. For every question someone answers correctly, this individual will receive a point. Whichever scavenger hunt participant ends up with the most points will receive a \$25 gift certificate to Amazon.

If you would like to take part and answer some trivia questions, please click the button below to begin. There are 75 questions total, but you do not have to answer all of them—you can stop whenever you wish. Just hand the iPad back to the participant when you are finished.

After each interaction with a secondary participant, primary participants noted whether the secondary participant agreed to help. If a secondary participant agreed to help, primary participants took a step back so that they were not interacting with secondary participants or hovering directly over them while they attempted to answer the questions. Throughout the experiment, participants were observed at a distance by the experimenter.

Before approaching any secondary participants, primary participants were given a pen and an iPad. To the back of the iPad was taped a piece of paper with columns marked “yes” and “no” for primary participants to mark each secondary participant’s compliance response. Primary participants were also instructed how to go to “Bookmarks” on the iPad toolbar and reset the survey after any portion of it had been taken by a secondary participant.

Next, primary participants took the entire survey themselves. This step ensured that primary participants knew exactly what the task was before predicting the effort secondary participants would expend. The survey consisted of 75 simple, multiple-choice questions written by the authors about topics such as geography, current events, arts and culture, sports, and arithmetic (for a sample of questions, see Appendix B). We chose what we believed to be simple questions because we are interested in help-seekers’ predictions of helper effort, not task difficulty or helper competency. Therefore, answering more than a handful of questions incorrectly should indicate that the helper is not paying attention, since he or she should have the

knowledge to answer most questions correctly. A manipulation check indicates that we were mostly successful in our goal. Both primary participants and helpers answered 92% of questions correctly.

In terms of layout, two questions appeared per screen or “page,” with the exception of the last page, which displayed only the last question. After answering the questions on each page, participants pressed the “next” button to go to the following page. At no point did participants need to scroll up or down the page to see text or provide their responses.

After finishing the survey, primary participants were told how long the survey had taken them to complete by the experimenter who, unbeknownst to the primary participants, had timed them. On average, primary participants spent just over six minutes completing the survey ($M=6\text{min } 8\text{sec}$, $SD=1\text{min } 20\text{sec}$). Finally, primary participants were asked to fill out a questionnaire. Participants stated how many people they would have to approach until they found three people who would agree to participate. We asked participants to estimate request compliance to ensure that this request was not unusual in light of past research demonstrating that help-seekers tend to underestimate compliance (Bohns et al., 2011; Bohns, Roghanizad, & Xu, 2014; Flynn & Lake (Bohns), 2008; Newark et al., 2014). Subsequently, participants estimated three different measures of help effort. First, they indicated, on average, how many of the 75 survey questions secondary participants would answer before they stopped. Second, participants estimated how many questions, on average, secondary participants would answer correctly. Again, because the trivia questions were relatively straightforward, the number of questions answered correctly should reflect effort rather than knowledge or ability. This measure was intended to capture whether secondary participants were actually reading the questions and trying to answer them correctly, or simply choosing responses at random. Third, participants

estimated how long, on average, the secondary participants who agreed to participate would spend answering questions.

Results

Consistent with prior research on expectations of help compliance (Flynn & Lake (Bohns), 2008), participants overestimated how many strangers they would need to approach before finding three who were willing to help (predicted: $M=7.79$, $SD=3.59$, actual: $M=4.13$, $SD=1.42$), paired $t(47)^2=7.05$, $p<.001$, $d=1.02$. Also, as predicted, participants underestimated the effort that helpers would put into their assistance. First, primary participants significantly underestimated the number of questions that secondary participants would answer in their attempt to help primary participants. Though primary participants thought that secondary participants would answer, on average, only 24.74 questions ($SD=17.57$), secondary participants actually answered 49.03 questions ($SD=19.71$), paired $t(47)=-7.34$, $p<.0001$, $d=1.06$.

Primary participants also underestimated how many questions secondary participants would answer correctly, predicting that secondary participants would answer, on average, 18.66 ($SD=14.55$) questions correctly, when in reality secondary participants answered 45.39, ($SD=18.80$) questions correctly, paired $t(45)=-8.26$, $p<.0001$, $d=1.22$. This underestimation held even after converting primary participants' predictions into predictions of the percentage of questions that secondary participants would answer correctly, to account for their underestimation of the number of questions that secondary participants would answer overall (Predicted: $M=79\%$, $SD=16\%$, Actual: $M=92\%$, $SD=5\%$), paired $t(45)=-5.77$, $p<.0001$, $d=0.85$.

² Throughout the paper's analyses, fluctuations in degrees of freedom within a given study result from instances in which a participant did not answer a particular question, consequently reducing the sample size for that question.

Finally, primary participants underestimated the time that secondary participants would spend answering questions (Predicted: $M=3\text{min}26\text{sec}$, $SD=2\text{min}27\text{sec}$, Actual: $M=4\text{min}34\text{sec}$, $SD=2\text{min}7\text{sec}$), paired $t(46)=-2.76$, $p=.008$, $d=0.40$. However, we note that this result may be driven primarily by participants at one of the two campuses, since, although the pattern of results was the same at both locations, predictions of how much time secondary participants would spend answering questions differed between locations.

Discussion

Our first study suggests that help-seekers do, in fact, underestimate help effort in addition to compliance. In this study, helpers answered more questions, answered more questions correctly (and a greater percentage of questions correctly), and spent more time answering questions than help-seekers anticipated. In Study 2, we sought to test whether this underestimation of effort was particular to help-seekers predicting the effort that helpers would spend *on them*, or whether individuals tended to underestimate the effort that others would spend on a task regardless of who stood to benefit.

Study 2: Predicting the Effort a Helper Will Spend on Oneself—

A Unique Underestimation Effect

In our second study, we sought to examine whether the underestimation of effort we found in Study 1 is particular to helping scenarios, as we contend, or whether it is merely an instance of a more general tendency for people to underestimate the effort that others expend.

Participants

Two hundred twenty-four participants (79 women, $M_{Age}=33.21$, $SD_{Age}=9.72$) from Amazon's Mechanical Turk took part in this study in exchange for \$0.25.

Procedure and Materials

This study used a 2(Letter-Writer Condition: Self, Other) X 2(Beneficiary Condition: Self, Other) between-subjects design. Each participant was asked to imagine a scenario in which an individual applying for a job requires a letter in support of her candidacy. This letter was to be written either by oneself or someone else. In particular, each participant was assigned to one of exactly four conditions. In the first condition (another's effort benefits you), the participant imagined that she was applying for a job and, as part of her application, had asked a former colleague to write a letter in support of her candidacy. In the second condition (your effort benefits another), the participant imagined that a former colleague was applying for a job for which she had asked the participant to write a letter in support of her candidacy. In the third condition (another's effort benefits herself), the participant imagined that a former colleague was applying for a job for which she would write a letter in support of her own candidacy. In the fourth condition (your effort benefits you), the participant imagined that she was applying for a job for which she would write a letter in support of her own candidacy.

After imagining their respective scenarios, participants estimated how much effort the letter writer would spend on the letter of support by answering two questions. First, participants answered, on a scale from 1=Very little to 7=A great deal, "How much effort would [your former colleague/you] put into the letter supporting [your/his or her] candidacy?" Then, participants answered, on a scale from 1=Not at all to 7=Extremely, "How hard would [your former colleague/you] work at the letter supporting [your/his or her] candidacy?" Finally, participants were asked to report their age and gender.

Results

To test whether the underestimation of effort effect we found in our first study was particular to people estimating how much effort a potential helper would expend *on them*, or

whether people underestimated how much effort others would expend in general, we analyzed the data from this study and found a significant interaction of Letter-Writer Condition with Beneficiary Condition, $F(1, 220)=12.69, p<.001, \eta_p^2=0.06$. Consistent with Study 1, we found that participants asked to estimate how much effort another person would put into helping them predicted significantly less expenditure of effort compared to participants asked to estimate how much effort they would put into helping someone else (help-seekers: $M=5.15, SD=1.09$; helpers: $M=5.74, SD=1.15$), $F(1, 112)=7.92, p=.006, d=0.53$. However, when we examined participants' predictions of how much effort someone else would expend on the support letter for themselves to their reports of how much effort they would expend on their own support letter, we found no significant difference between the two estimations (predicted effort you would spend on you: $M=5.88, SD=1.20$; reported effort I would spend on me: $M=6.12, SD=1.21$), $F(1, 108)=1.14, p=.289, d=0.20$.

Discussion

In our second study, we found that individuals do not always underestimate the effort that others will expend. Rather, the underestimation of effort is particular to helping situations in which help-seekers estimate how much effort helpers will spend *on them*. In our third study, participants imagined a series of four helping scenarios in order to increase the generalizability of our results and explore the mechanism driving this underestimation of help effort effect.

Study 3: Discomfort as a Mechanism for the Underestimation of Help Effort in a Scenario Study

In our third study, we sought to identify the psychological mechanism through which help-seekers tend to underestimate the effort that helpers will put into their assistance. Drawing on previous research on help-seekers' underestimations of the likelihood of request compliance

(Bohns, 2016; Bohns et al., 2011; Bohns et al., 2016; Bohns, Roghanizad, & Xu, 2014; Flynn & Lake (Bohns), 2008; Newark et al., 2014), we hypothesized that help-seekers' failure to appreciate helpers' discomfort may play a key role. However, in testing this established mechanism, we also wanted to consider other potential mechanisms that have not been examined and to better specify what drives the discomfort that has been identified in previous research. In particular, (a) we wanted to test whether help-seekers' failure to appreciate the *positive feelings* helpers associate with assistance may mediate the underestimation of help effort effect (Andreoni, 1990; Cialdini & Kenrick, 1976; Cunningham, Steinberg, & Grev, 1980) and (b) should it indeed turn out that discomfort mediated the underestimation of help effort effect, we wanted to examine the source of that discomfort. Specifically, we sought to distinguish between two types of discomfort: discomfort about how the helper would look if he or she did a bad job helping (i.e., how embarrassed he or she would feel; Bohns et al., 2011; Grant & Mayer, 2009), and discomfort about the situation the help-seeker would be in if the helper did a bad job helping (i.e., how guilty he or she would feel; Baumeister, Stillwell, & Heatherton, 1994; Bohns & Flynn, 2013; Carlsmith & Gross, 1969; Lindsey, Yun, & Hill, 2007).

Participants

One hundred ninety-six participants (128 women, $M_{Age}=36.20$, $SD_{Age}=11.62$) from Amazon's Mechanical Turk took part in this study in exchange for \$0.50.

Procedure and Materials

Participants were assigned to one of only two conditions: help-seeker or helper. Participants in the help-seeker condition read exactly four scenarios in which they imagined asking a colleague for assistance and then having that colleague agree to help. The scenarios involved asking for help with an upcoming presentation, learning a new computer software, the

stuffing and addressing of envelopes, and the preparation of a client report (for complete scenarios, see Appendix C). Helpers read about the same scenarios, but instead of imagining asking for and receiving help, they imagined being asked for and giving help.

After each scenario, participants were asked a series of questions about the extent to which the helper would feel discomfort and positive emotions, depending on how helpful she was. These questions were further divided into discomfort and positive emotions stemming from how the helper expected to be perceived by the help-seeker (helper's concern about his or her self-image) and discomfort and positive emotions stemming from the position the help-seeker would be in (helper's concern about the help-seeker's situation). The three questions pertaining to each of the four potential mechanisms (i.e., discomfort from self-image, discomfort from the help-seeker's situation, positive feelings from self-image, and positive feelings from the help-seeker's situation) are presented in Table 1. Participants were asked to indicate the extent to which they agreed with each of the 12 statements on a scale from 1=Disagree strongly to 7=Agree strongly.

-----Insert Table 1 About Here-----

Next, participants were asked three questions about how much effort the helper would put into helping. These questions were, (a) "How much effort will [your colleague/you] be willing to put into helping [you/your colleague]?", answered on a scale from 1=Very little to 7=A great deal, (b) "Chances are [your colleague/you] will...", answered on a scale from 1=Do the bare minimum [he or she/you] can to help to 7=Do everything [he or she/you] can to help, and (c)

“How much time will [your colleague/you] be willing to spend helping [you/your colleague]?,” answered on a scale from 1=Very little to 7=A great deal.

For each scenario, the six questions pertaining to discomfort (α for each scenario $\geq .94$), the six questions pertaining to positive feelings (α for each scenario $\geq .92$), and the three questions pertaining to helper effort (α for each scenario $\geq .90$) were combined into a single index.

Results

We conducted a 2(Perspective: Help-seeker, Helper) X 4(Individual Scenarios) mixed-model ANOVA with repeated measures on the second factor to test whether the pattern of results was the same across all four scenarios. The interaction of Perspective and Scenario was not significant with either of our mediating mechanisms [Discomfort: $F(1, 194)=1.03, p=.31, \eta_p^2=0.005$; Positive Emotions: $F(1, 194)=0.31, p=.58, \eta_p^2=0.002$] or helper effort [$F(1, 194)=0.15, p=.70, \eta_p^2=0.001$] as the dependent variable, indicating that the pattern of results was consistent across scenarios. Noting this, we collapsed the data across all four scenarios, creating a single variable for each potential mediating mechanism and a single variable for helper effort.

Consistent with our first two studies, help-seekers' expectations of helper effort ($M=5.09, SD=1.00$) were significantly lower than the effort helpers reported they would provide ($M=5.36, SD=0.98$), $F(1, 194)=3.97, p=.048, d=0.27$.

When examining our potential mediating mechanisms, we found that help-seekers significantly underestimated the discomfort helpers would feel if they did not do enough to help (help-seekers: $M=3.71, SD=1.30$; helpers: $M=4.28, SD=1.37$), $F(1, 194)=9.12, p=.003, d=0.43$. They did not, however, underestimate the positive feelings that helpers would experience if they did do enough to help (help-seekers: $M=5.30, SD=0.90$; helpers: $M=5.48, SD=0.98$), $F(1,$

194)=1.69, $p=.20$, $d=0.19$. This result suggests that, consistent with prior research, it is perceptions of discomfort, rather than positive emotions, that are more likely to mediate the relationship between perspective and expectations of helper effort. To test whether this was the case, we conducted a 1,000 bootstrap samples mediation analysis using the PROCESS macro for SPSS (Preacher & Hayes, 2008) with perspective as the IV, helper effort as the DV, and discomfort as the mediator. In this analysis, the 95% bias-corrected confidence interval for the indirect effect of discomfort on help effort did not include zero, Indirect Effect=-0.13, $SE=0.06$, 95% CI [-0.30, -0.05] (Table 2). This result was replicated when we added positive emotions as a parallel mediator: The 95% bias-corrected confidence interval for the indirect effect of discomfort on help effort still did not include zero, Indirect Effect=-0.04, $SE=.03$, 95% CI [-0.13, -0.001] (Table 2). However, the 95% bias-corrected confidence interval for the indirect effect of positive emotions on help effort did include zero, Indirect Effect=-0.12, $SE=.09$, 95% CI [-0.30, 0.07] (Table 2).

Having found support for discomfort's mediating role in help-seekers' underestimations of help effort (a finding consistent with previous work on help-seekers' underestimations of request compliance), we next sought to identify the source of this discomfort. To do this, we divided our discomfort variable in two. The first variable, capturing helpers' discomfort about how they would look (i.e., how embarrassed they would feel; Grant & Mayer, 2009), consisted of participants' answers to questions about how embarrassed, ashamed, and bad the helper would feel about how she looked to her colleague if she did a bad job helping ($\alpha=.96$). The second variable, capturing helpers' discomfort about the help-seekers' situation (i.e., how guilty they would feel), consisted of participants' answers to questions about how guilty, uncomfortable, and

bad helpers would feel about the situation help-seekers would be in if helpers did a bad job helping ($\alpha=.96$).

Independent-samples t-tests revealed that help-seekers significantly underestimated both helpers' image-based discomfort (help-seekers: $M=3.57$, $SD=1.32$; helpers: $M=4.13$, $SD=1.42$), $t(194)=2.83$, $p=.005$, $d=0.41$, as well as helpers' situation-based discomfort (help-seekers: $M=3.85$, $SD=1.29$; helpers: $M=4.43$, $SD=1.39$), $t(194)=3.05$, $p=.003$, $d=0.43$. However, when we tested both of these potential mechanisms as mediators, only situation-based discomfort was significant. Specifically, we conducted a 1,000 bootstrap samples mediation analysis (Preacher & Hayes, 2008) with perspective as the IV, helper effort as the DV, and discomfort about the helper's self-image and discomfort about the help-seeker's situation as parallel mediators. In this analysis, the only 95% bias-corrected confidence interval that did not include zero was the indirect effect of discomfort over the situation the help-seeker would be in if the helper did not do enough to help, Indirect Effect=-.14, $SE=.09$, 95% CI [-.370, -.007] (Table 2).

-----Insert Table 2 About Here-----

Discussion

As in our first two studies, we found that help-seekers significantly underestimated the effort that helpers would put into their assistance across four different scenarios. Consistent with research on help-seekers' underestimation of request compliance, we found that this underestimation is driven by help-seekers' failure to appreciate the discomfort that helpers may feel if they did not do enough to help. This was the case even when we tested an alternative potential mechanism that had not been examined in this context before, namely the possibility

that underestimation of help effort was driven by help-seekers' failure to appreciate the positive emotions that helpers anticipated feeling if they were helpful. Furthermore, we were able to specify that the potential discomfort driving helpers' effort is not discomfort about how they might look to help-seekers if they did not do enough to help; rather, it is discomfort about the situation help-seekers would be in if they did not do enough to help.

Study 4: Discomfort as a Mechanism for the Underestimation of Help Effort in a Behavioral Study

In our final study, we sought to replicate our main finding once again, and to test our proposed mediator, in a different behavioral context.

Participants

One hundred two participants (65 women, $M_{Age}=23.97$, $SD_{Age}=7.47$) were paid between \$10.75 and \$12 to participate in this live interaction study.

Procedure and Materials

Participants arrived to an American university's behavioral lab, where they were paired with another participant whom they did not know. After being welcomed by the experimenter, each pair of participants was asked to read the following study description:

Welcome and thank you for taking part in this study. Today, one of you will be assigned the role of quiz-taker and one of you will be assigned the role of note-taker. The person assigned the role of note-taker will receive \$12 for participating in this study. The person assigned the role of quiz-taker will receive \$7, plus an additional amount between \$0 and \$4.25, depending on his or her performance on the quiz.³

³ We note that these incentives mean that the helper will always earn between \$0.75 and \$5 more than the help-seeker. Needing to choose a particular payoff structure, we chose this one as opposed to others (e.g., the helper always making less than the help-seeker, or the helper making more than the help-seeker before the help-seekers' bonus was factored in but potentially less after) to reflect the reality that often when we ask another for help it is to improve our situation, but not to improve it so much that it then surpasses the helper's own situation. Perhaps putting helpers in an advantageous position relative to help-seekers in this way might predispose them to be more helpful than they would be otherwise, thereby biasing our results. But recall that all participants were informed of the payoff structure at the beginning of the experiment. If being in

The person assigned the role of quiz-taker will be quizzed on a 10-minute TED Talk video on public speaking. For each of the 17 quiz questions the quiz-taker answers correctly, he or she will receive an additional \$0.25. However, the quiz-taker will not be allowed to watch this video. Instead, the note-taker will watch the video and take notes on a laptop. The quiz-taker will then use these notes to take the quiz. The note-taker will receive \$12 regardless of how many quiz questions the quiz-taker answers correctly.

We will flip a coin to randomly decide who takes the quiz and who watches the video and takes notes. If you have any questions, please ask the experimenter at this time.

After participants read the study description, the experimenter summarized its contents verbally and asked if there were any questions. Participants then signed a consent form, before being randomly assigned to either the role of quiz-taker (help-seeker) or note-taker (helper).

At this point, the quiz-taker remained seated while the experimenter escorted the note-taker to a separate room. Once in the room, the note-taker found an iPad with the TED Talk video⁴, a laptop (with internet disabled) open to a clean Word document for taking notes, a piece of paper with instructions and a series of questions, and a pen. The experimenter drew the note-taker's attention to the piece of paper, at the top of which was written, "Before beginning the video and note-taking, please answer the following questions." This instruction was followed by three questions about the discomfort helpers would feel regarding the quiz-taker's situation in the event they put little effort into helping. These questions, which note-takers answered on a scale from 1=Not at all to 7=Extremely, were, "How guilty/bad/uncomfortable would you feel about the situation the person taking the quiz would be in if you didn't put much effort into your

an advantageous position predisposes helpers to be more helpful, help-seekers had the opportunity to account for this in their estimations, but failed to do so. That said, it would be worthwhile for future research to examine whether the relationship between helping behavior and expectations differs if the help is intended to leave the help-seeker (a) better off than she was before but still worse off than the helper, (b) just as well off as the helper, or (c) better off than the helper.

⁴ The video is entitled "Julian Treasure: How to speak so that people want to listen," and is available at <https://www.youtube.com/watch?v=eIho2S0ZahI>

notes?” We chose these questions based on the results of Study 3, which showed that discomfort about the help-seeker’ situation is what drives the underestimation of help effort. We combined the three measures of discomfort into a single composite variable ($\alpha=.91$). After these questions, the remaining text on the paper read, “When you are ready to begin the video and take notes, please press play. You may pause, rewind, or advance the video whenever you’d like. Once you have completed your notes, please open your door to signal that you are done.”

After escorting the note-taker to the separate room, the experimenter returned to the quiz-taker and gave her a copy of the quiz she would be taking, as well as a piece of paper with exactly nine questions. First, quiz-takers were asked to answer (on a scale from 1=Not at all to 7=Extremely) the same three questions about note-takers’ discomfort that note-takers had answered: “How guilty/bad/uncomfortable would the person taking notes feel about the situation you would be in if he or she didn’t put much effort into his or her notes?” Next on the sheet of paper, quiz-takers were asked, “How much effort will the person taking notes put into his or her notes?” (answered on a scale from 1=Very little to 7=A large amount) and “How hard will the person taking notes work at his or her notes?” (answered on a scale from 1=Not at all to 7=Extremely). After answering these questions, quiz-takers were asked on the sheet of paper to look at the 17-question quiz they would be taking (Appendix D) and estimate how many of the questions they would be able to answer correctly based on the notes they would be given. Finally, quiz-takers filled in their age, gender, and relationship to the note-taker. The experimenter then gathered the completed questionnaires.

When the note-taker opened the door to signal she had completed her notes, the experimenter collected the sheet she had filled out previously and handed her a second sheet with exactly six questions. First, note-takers were asked, “How much effort did you put into your

notes?” (answered on a scale from 1=Very little to 7=A large amount) and “How hard did you work at your notes?” (answered on a scale from 1=Not at all to 7=Extremely). Next, the sheet contained the quiz questions that the quiz-taker would be asked to answer and the note-taker was asked to estimate how many of the 17 questions the quiz-taker would be able to answer correctly based on the note-taker’s notes.⁵ Finally, the note-taker was asked her age, gender, and relationship to the quiz-taker.

Note-takers were given approximately two minutes to fill out this questionnaire, while the experimenter went to fetch the quiz-taker. When the experimenter returned with the quiz-taker, he took the second questionnaire from the note-taker, took the iPad with the video from the room, left the quiz-taker with the notes to take the quiz, and escorted the note-taker to the front of the laboratory to receive her \$12 payment. When the quiz-taker finished the quiz, it was graded, and the quiz-taker was paid accordingly.

Results

Help-seekers underestimated help effort according to each of the three measures we collected. Specifically, help-seekers underestimated how much effort helpers would put into their assistance (Predicted: $M=5.10$, $SD=1.12$; Actual: $M=6.27$, $SD=0.67$), paired $t(50)=-6.21$, $p<.001$, $d=0.87$ as well as how hard helpers would work (Predicted: $M=4.96$, $SD=1.22$; Actual: $M=6.18$, $SD=0.77$), paired $t(50)=-5.50$, $p<.001$, $d=0.77$. Help-seekers also underestimated our behavioral measure of help effort. Whereas help-seekers predicted that the effort helpers put into their notes would allow them to answer, on average, 11.2 ($SD=2.38$) of the 17 quiz questions

⁵ Though we asked this question, we did not end up finding it relevant to any of our subsequent analyses. However, we note here that helpers accurately predicted the number of quiz questions that help-seekers would be able to answer correctly based on their notes (helpers’ predicted: $M=16.61$, $SD=1.08$; actual: $M=16.73$, $SD=0.49$), paired $t(50)=-0.75$, $p=.46$, $d=0.11$.

correctly, in reality they were able to answer, on average, 16.74 ($SD=0.49$) of the 17 quiz questions correctly, paired $t(49)=-16.99$, $p<.001$, $d=2.40$.

In addition to underestimating help effort, we found that, as predicted, help-seekers also failed to capture the discomfort that helpers would feel concerning the help-seeker's situation if they did not do enough to help. Help-seekers significantly underestimated the discomfort (i.e., guilt, bad feelings, and uncomfortableness) about their situation helpers would feel if helpers did not put much effort into their assistance (help-seekers: $M=4.75$, $SD=1.34$; helpers: $M=5.71$, $SD=1.17$; paired $t(50)=-3.72$, $p=.001$, $d=0.52$).

Finally, we note that all of our dyads reported being strangers except for one, which reported being acquaintances. In addition, a help-seeker's tendency to underestimate help effort or discomfort did not depend significantly on his or her gender.

Mediation Analysis

To test whether discomfort about the help-seeker's situation in the case of poor effort once again mediated help-seekers' underestimation of help effort, we combined our three measures of help effort (amount of effort, amount of work, and number of questions answered correctly) into a single composite variable. Since our measures of help-effort were taken on different scales, we first converted them to z -scores before combining them into a single index of help effort ($\alpha=.86$). As expected, a paired samples t -test showed that help-seekers ($M=-0.65$, $SD=0.77$) underestimated the effort that helpers ($M=0.62$, $SD=0.42$) would put into their assistance according to this composite variable, paired $t(49) = -9.85$, $p<.001$, $d=1.39$.

Next, we conducted a 1,000 bootstrap samples mediation analysis using the PROCESS macro for SPSS (Preacher & Hayes, 2008). With perspective as the IV, help effort as the DV, and discomfort about the help-seeker's situation as mediator, the 95% bias-corrected confidence

interval for the indirect effect of discomfort did not include zero, Indirect Effect=-.25, $SE=.10$, 95% CI [-.483, -.085].

Discussion

In this behavioral study, help-seekers again underestimated the effort that helpers would expend to assist them. We also found evidence supporting the mechanism we identified in Study 3: Help-seekers' tendency to underestimate helpers' effort stems from their failure to appreciate the discomfort (the guilt of letting someone down) that helpers would feel should they not do enough to help, thereby leaving help-seekers in an undesirable situation.

General Discussion

Across four studies, help-seekers underestimated the effort that helpers would expend. In Study 1, help-seekers underestimated how much effort helpers would put into a trivia/scavenger hunt task in which their chances of winning an Amazon certificate were directly tied to helpers' efforts. In Study 2, we found evidence that this underestimation of effort is particular to scenarios in which help-seekers estimate the effort of those who will help them rather than a general tendency for people to underestimate the effort of others. Studies 3 and 4 explored the psychological mechanism driving this behavior. Consistent with previous research on request compliance, in Study 3 we found that help-seekers tend to underestimate helper effort because they fail to appreciate the discomfort that helpers associate with being unhelpful. Seeking to further clarify this mechanism, we found that this discomfort stems specifically from concerns about the situation the help-seeker would be in absent meaningful aid, rather than concerns about how the helper would appear in the eyes of the help-seeker should she fail to provide assistance. Study 4 replicated our main effect and the mechanism we identified in Study 3 in a behavioral study in which one person took notes on a TED Talk video that another person then relied on to

take a quiz. The quiz-taker received financial compensation for each question answered correctly, while the note-taker had no financial incentive to help.

The finding that help-seekers underestimate help effort provides an important complement to extant findings that help-seekers underestimate the likelihood that others will comply with their requests for help (Bohns, 2016; Bohns et al., 2011; Bohns et al., 2016; Flynn & Lake (Bohns), 2008; Newark et al., 2014; Roghanizad & Bohns, 2017). Estimations of the likelihood of compliance only tell half the story. To understand help-seekers' willingness (and reluctance) to ask for help, we must understand not only how likely they think their requests are to be rejected, but also how valuable or beneficial they think it would be for their requests to be accepted.

The current findings about help effort are notable because research on the anticipated quality of help has been so scant. One can imagine at least two reasons for this oversight. First, studies on helping behavior have rarely involved actual help. Concerned chiefly with when a potential helper would say "yes" to a request, researchers often have not focused on how a task, once agreed to, would be carried out (e.g., Cialdini et al., 1975; Freedman & Fraser, 1966). As a result, opportunities to observe help effort have been limited. Second, in studies where helpers actually performed help tasks, often those tasks (e.g., lending a cellphone, completing a questionnaire, or giving money) have not allowed for much variance in help quality (Burger, 1986; Cialdini et al., 1999; Epley & Dunning, 2000; Flynn & Lake (Bohns), 2008; Newark et al., 2014), thus limiting the chance to gauge the caliber of help people tend to give, much less the caliber of help people anticipate receiving. Though it is true that some helping tasks are more binary, in that they are either completed or they are not (e.g., a ride to the airport), many helping tasks can be performed more or less well, with more or less effort (e.g., providing feedback on a

report or presentation a colleague is preparing, advocating on someone's behalf, or helping someone learn a new task at work).

The present studies further our understanding of how discomfort accounts for erroneous estimations of helping behavior. Though past research had identified discomfort as a key driver of helping behavior (Bohns et al., 2011; Flynn & Lake (Bohns), 2008; Newark et al., 2014), the source of that discomfort was unclear. Our findings suggest that it is helpers' guilt about putting a help-seeker in a bad situation, rather than their shame about appearing unhelpful that help-seekers fail to understand. We also confirmed empirically that it is helpers' desire to avoid these negative emotions associated with being unhelpful more than their desire to experience the positive emotions associated with being helpful that help-seekers seem not to appreciate.

Limitations and Future Directions

We note that greater effort on the part of helpers does not necessarily translate into higher quality help. For example, a talented letter writer may be able to provide a more persuasive letter of recommendation with less effort than a less talented letter writer. In addition, one could argue that if the applicant did not receive the position she seeks, the letter was not helpful at all, regardless of how much talent or effort went into it. Despite these exceptions, effort is, on average, a key determinant of help quality. All else being equal, the harder helpers work, the more helpful they are likely to be. As a result, these studies suggest that the consequences of not asking for help are graver than was previously thought. Not only are people more willing to help than we expect, but the quality of help they are ready to provide is also likely to be higher than we anticipate.

Nonetheless, the implications of our main finding are complicated somewhat by the mechanism behind it. Though some may be more inclined to ask for assistance upon learning

that they may be underestimating its value, others may be less inclined to ask for assistance upon learning that the reason they underestimate its value is that they underestimate the potential discomfort they expose helpers to with their request. One possibility is a segmented effect across people. Perhaps for those most sensitive to the burden they place on others, this information would decrease their willingness to seek help. For those more focused on their own self-interest or otherwise less concerned about making others uncomfortable, the information could have the opposite effect. This insight could also influence behavior within, not just across, people. For example, some people may be less inclined to make relatively unimportant requests because they do not want to risk making others uncomfortable; they may pause before taking an “it can’t hurt to ask” attitude. However, the same people may also be more inclined to make relatively important requests because they realize the kind of help that is at stake.

Going forward, it would be valuable to conduct research in which those in need of help had more freedom to decide how to ask for it and even whether to ask for it. In our first behavioral study we provided help-seekers with a script to use when approaching helpers. And, in all of our studies, we did not give help-seekers the option of whether to ask for help. Having established this baseline effect, future studies could ease some of this control by letting help-seekers ask for help however they wish, or by giving them the option of not asking for help, and then seeing how these forms of agency impact expectations.

Future studies could also examine how expectations of more objective components of help quality studied here interact with expectations of more subjective components. When attempting to determine the expected value of another person’s help, an individual is likely to consider relatively objective measures of help effort. In our studies, this means considering questions like, How many questions will this person choose to answer?, or, How hard will this

person work at taking notes? However, there are likely other, more subjective, factors that contribute to the value of help beyond these objective considerations. For example, How has this helping exchange affected my relationship with the helper? Or, How does this exchange affect the helper's perception of me? Research in the domain of advice seeking suggests that help-seekers may similarly underestimate these other, more subjective, contributors to the value of provided help. For instance, Brooks, Gino, and Schweitzer (2015) found that people were reluctant to seek advice for fear of appearing incompetent, while, in fact, seeking advice made them appear more competent in the eyes of advice-givers. Combining these lines of research to explore, in tandem, help-seekers' estimations of both objective benefits as well as more subjective, relational, and reputational benefits of receiving help would provide a fuller picture of help-seekers' expectations and their likelihood of seeking assistance.

Future research could also investigate potential boundary conditions to our findings. For example, in both of our behavioral studies, participants received help from members of their community they did not know. In our scenario studies, participants imagined situations between colleagues. Perhaps our pattern of results would have been different had participants instead received help from strangers, friends and family, or people of different social or professional status. In addition, the help being requested and provided in our experiments was likely not seen as routine. It would be important to examine whether predictions of help effort are more accurate when they pertain to a kind of help that one frequently gives or receives. Lastly, the help being provided in our experiments was likely seen as legitimate by both parties. If one or both people in a helping situation believe the favor to be illegitimate, the relationship between actual effort and expected effort may change. A help-seeker who poses a help request that a helper agrees to but fundamentally sees as illegitimate may overestimate help effort.

Another direction for subsequent work would be to examine potential mechanisms, besides discomfort, that may be driving this effect. One possibility is that expected and actual helper effort depend, respectively, on how much help-seekers think they are liked and how much help-seekers actually are liked by the person helping them. This mechanism may be particularly relevant in helping situations between people with established relationships.

Finally, our findings may contribute to other research literatures, such as organizational citizenship behavior (Podsakoff, MacKenzie, Paine, & Bachrach, 2000), feedback seeking (Ashford, Blatt, & Walle, 2003), and (as described above) advice seeking (Brooks et al., 2015). Each of these behaviors has the potential to be seen as a helpful act in which one person can benefit from another's behavior, suggesting the potential for psychological mechanisms and behavioral tendencies similar to those documented here. At the same time, there are interesting potential differences between these behaviors. For example, while advice is a form of help, it is a form of help that can be sought, received, and then ignored in a way that a ride to the airport cannot. This gives help-seekers looking for advice an additional layer of agency—they can choose whether to ask for advice and then choose whether to follow it (and those who give advice generally know this). In addition, it can be more acceptable or otherwise easier to seek help from multiple people simultaneously when the help being sought is advice rather than other kinds of assistance. A help-seeker's ability to ignore help or easily seek help from multiple people may influence her decision to ask for it. Understanding these kinds of dynamics and the extent to which organizational citizenship behavior, feedback seeking, and advice seeking are distinct from helping situations, an unremarkable subset of them, or a unique subset with particular properties could help broaden the relevance of the current work considerably.

Conclusion

Previous research has shown that help-seekers assume people who agree to help are generally “helpful people,” which would suggest a tendency to accurately predict or overestimate the effort that helpers are likely to expend. However, we find that help-seekers tend to underestimate help effort because they discount the discomfort helpers would feel if they did not do enough to help and thereby left help-seekers in a predicament. This tendency to underestimate help effort has important implications, especially in conjunction with the tendency help-seekers have to underestimate compliance with help requests. If help-seekers underestimate the effort helpers are likely to put into assisting them, they may undervalue help and therefore be less likely to ask for—and benefit from—a helping hand.

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Table 1: Potential mechanisms in Study 3

	Positive	Negative
Helper's Self-Image	[My colleague/I] would feel happy/good/proud about how [he or she/I] would look to [me/my colleague] if [he or she/I] was helpful.	[My colleague/I] would feel embarrassed/ashamed/bad about how [he or she/I] would look to [me/my colleague] if [he or she/I] didn't do enough to help.
Help-Seeker's Situation	[My colleague/I] would feel happy/good/proud about the situation [I/my colleague] would be in if [he or she/I] was helpful.	[My colleague/I] would feel guilty/uncomfortable/bad about the situation [I/my colleague] would be in if [he or she/I] didn't do enough to help.

Table 2. Mediation analyses in Study 3.

		Estimated Indirect Effect	SE	<u>Bias Corrected</u> <u>95% CI</u>	
				Lower	Upper
Analysis 1	Discomfort only	-0.1296	0.0577	-0.2993	-0.0481
Analysis 2	Discomfort with positive emotions in model	-0.0410	0.0307	-0.1338	-0.0012
	Positive emotions with discomfort in model	-0.1225	0.0910	-0.2992	0.0662
Analysis 3	Discomfort about self-image with discomfort about situation in model	0.0087	0.0777	-0.1683	0.1525
	Discomfort about situation with discomfort about self-image in model	-0.1441	0.0926	-0.3696	-0.0065

N=196; 1000 Bootstrap Resamples

Appendix A

People need help every day, in matters big and small. Sometimes when people need help, they choose to ask for it, either from friends, family members, colleagues, acquaintances, or even strangers. Other times, people need help but decide not to ask for it.

In this study, we are interested in what people think about when deciding whether or not to ask someone for help. On the following page, you will be asked about what determines whether you ask someone for help.

Appendix B — Sample Trivia Questions

- Which of the following is a country? (Answer choices: Paris, India, Tokyo, Beijing)
- Who is the founder of Microsoft? (Answer choices: Steve Jobs, Larry Ellison, Jim Clark, Bill Gates)
- Who wrote *Hamlet*? (Answer choices: Christopher Marlowe, Francis Bacon, William Shakespeare, Molière)
- Which of the following individuals is currently a professional basketball player? (Answer choices: Pele, Chris Evert, Rosalind Franklin, Lebron James)
- What is $73 - 15$? (Answer choices: 56, 58, 60, 61)

Appendix C

Imagine that [you have/a colleague of yours has] an important presentation coming up at work. [One of your colleagues tends/you tend] to give excellent presentations, and since [you want/your colleague wants] to make sure [your/the] presentation goes well, [you ask this

colleague/he or she asks you] to review [your/the] presentation slides and give [you/] feedback. [Your colleague agrees/You agree].

Imagine that [you are/a colleague of yours is] having a difficult time figuring out a new computer software at work. [You want/Your colleague wants] to be able to use this software and you have [a colleague with/] strong computer skills, so [you decide/he or she decides] to ask [this colleague/you] for a brief tutorial of the program. [Your colleague agrees/You agree].

Imagine that [you are/a colleague of yours is] an event manager preparing to mail out information about an important upcoming event. [You are/Your colleague is] running behind schedule, and so [you ask a colleague if he or she would help you/asks you if you would help him or her] stuff and address envelopes. [Your colleague agrees/You agree].

Imagine [you are new to your company and preparing your/you have a colleague who is new to your company and who is preparing his or her] first report for a client. [You feel/Your colleague feels] unsure about how the report should be structured and what it should contain, so [you decide/he or she decides] to ask [a colleague/you] who has a lot of experience to read over a draft and give [you/] some feedback. [Your colleague agrees/You agree].

Each scenario was then followed by the following text:

Think about what it would be like to [ask your colleague this favor and to have your colleague agree to your request/be asked this favor by your colleague and to agree to his or her request]. What would you think? How would you feel?

Appendix D

1. Please name as many of the seven bad habits of speaking as you can.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

2. What are the four foundations of powerful or effective speech?

1. _____
2. _____
3. _____
4. _____

3. What are six voice tools that powerful or effective speakers use?

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____