Ask in person:

You're less persuasive than you think over email

M. Mahdi Roghanizad

University of Waterloo

Vanessa K. Bohns

Cornell University

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Send correspondence to:

M. Mahdi Roghanizad

University of Waterloo

200 University Avenue

Waterloo, ON Canada

mmroghan@uwaterloo.ca

Highlights

- People underestimate compliance when making requests of strangers in person
- In two studies, we found the opposite pattern of results for emailed requests
- Requesters *overestimated* compliance when making requests over email
- This error was driven by a perspective-taking failure
- Requesters failed to appreciate how untrustworthy their emails would seem to others

Abstract

Research has found people underestimate the likelihood strangers will comply with their direct requests (Bohns, 2016; Flynn & Lake, 2008). Here we argue this "underestimation-of-compliance effect" may be limited to requests made face-to-face. We find when making direct requests over *email*, requesters instead *overestimate* compliance. In two studies, participants asked strangers to comply with requests either face-to-face or over email. Before making these requests, requesters estimated the number of people they expected to say "yes". While requesters underestimated compliance in face-to-face contexts, replicating previous research, they *overestimated* compliance in email contexts. Analyses of several theorized mechanisms for this finding suggest that requesters, anchored on their own perspectives, fail to appreciate the suspicion, and resulting lack of empathy, with which targets view email requests from strangers. Given the prevalence of email and text-based communication, this is an extremely important moderator of the underestimation-of-compliance effect.

Key words: Compliance, egocentrism, email, help-seeking, perspective-taking, social influence, trust

Ask in person:

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A growing body of research finds people are underconfident in their ability to persuade others to comply with their requests (Bohns et al., 2011; Bohns et al., 2014; Bohns et al., 2016; Flynn & Lake, 2008; Newark et al., 2014). Across at least 12 studies in which participants collectively have asked over 14,000 strangers to comply with requests such as completing a questionnaire and borrowing a phone, participants appear consistently to underestimate—by a large margin—the likelihood people they approach will say "yes" (Bohns, 2016).

This phenomenon results from requesters' inability to appreciate the perspective of targets of their requests. Targets feel awkward and uncomfortable saying "no," both because of what it might insinuate about the requester (Bohns, 2016; Sah, 2012), and because it feels bad to let someone down (Newark et al., 2016). However, requesters are anchored on their own perspectives and fail to recognize the pressure targets feel to comply (Epley et al., 2004). Consequently, requesters wrongly assume it is easy—and therefore likely—for targets to say "no."

Here we propose a moderator of the underestimation-of-compliance effect. We theorize the tendency to underestimate compliance is limited to face-to-face interactions. Specifically, we hypothesize when making direct requests over *email*, requesters will *overestimate*, not underestimate, compliance. Given the prevalence of email and text-based communication, this would be an extremely important moderator of the original effect.

The hypothesis that requesters will *overestimate* compliance when making requests over email follows from a theorized perspective-taking failure similar to that underlying the original effect. However, due to the considerable differences between email and face-to-face communication, the specific mechanisms involved—and resulting prediction—are notably different.

Most relevant to the current research of the many ways in which email differs from face-to-face communication is its restriction of nonverbal cues that generate trust and empathy. Essentially, it is easier for an unfamiliar requester to appear well-meaning and sympathetic face-to-face than over email (Berry & McArthur, 1986; Brownlow, 1992; Burgoon, 1990; McGinley et al., 1975; Scharlemann et al., 2001; Sproull & Kiesler, 1986; Willis & Todorov, 2006). Indeed, requests made face-to-face are far more effective than those made otherwise (Constant, Sproull, & Kiesler, 1996; Dabbish, Kraut, Fussell & Kiesler, 2005; Gerber & Green, 2000; Ling et al., 2005; Zhu et al., 2016).

Yet requesters likely do not recognize the effect of these limitations of email. Anchored on the intimate knowledge they have of their own trustworthiness and circumstances, we theorize requesters will struggle to envision what their targets see: a suspicious email from a stranger that generates little empathy (Epley et al., 2004). This error should lead requesters to *overestimate* compliance over email.

We tested this hypothesis in two studies in which participants made actual requests of strangers face-to-face or over email after predicting the likelihood targets would comply. For both studies, we report all measures, conditions, data exclusions, and how we determined sample sizes.

Study 1

506 university students participated (49 requesters, 457 targets). Four requesters in the face-to-face condition did not complete the study, leaving 495 participants (45 requesters [31 female], 450 targets). Requesters received $10; targets received no compensation. Sample size was determined by the sample size used by Flynn and Lake (2008; Study 1; *N*=23 requesters) who originally identified the underestimation-of-compliance effect and whose paradigm we adapted. The original effect was large (*d*=1.096), so this sample size ensured >80% power.

Requesters were randomly assigned to "face-to-face" or "email" conditions and instructed to ask 10 strangers to complete a questionnaire (a 44-item personality inventory; John et al., 1991). First, requesters were provided with complete information about their task; no information was withheld. They then predicted how many of the 10 people they approached/emailed would comply with their requests. Because of the role of discomfort in previous research (Flynn & Lake, 2008), we also administered a measure of predicted discomfort (Appendix A).

Next, requesters in the face-to-face condition went onto the university campus with a stack of questionnaires and a tally sheet to record the responses of the 10 strangers they approached. In the email condition, requesters were given 10 email addresses from the university directory and asked if they recognized any addresses. They then sent emails with the request to complete an online questionnaire one at a time using their own university email accounts[1]. We recorded actual compliance in this condition through the online questionnaire.

To ensure the face-to-face and email conditions were comparable in all respects aside from communication medium, the scripts participants used when making their requests were written to be as similar as possible, while also conveying the same information in the email that would be implicitly conveyed in a face-to-face interaction on campus—namely, that the requester was a student asking a fellow student (Appendix A).

To determine whether participants in the face-to-face condition were strategically approaching participants in ways that would be impossible in the email condition, we analyzed targets' gender composition. Requesters may have approached slightly more female targets (54%) than would be expected had they been approaching targets randomly compared to the general campus population (45% female), $t(25)=-3.52$, $p=.002$, but not compared to the population of the social sciences campus where the study took place (60% female), $t(25)=1.73$, $p=.095$ (CUDO, 2015). Importantly, female targets were no more likely to comply (71.1%) than male targets (72.9%), $\chi^2(N=260)=.098$, $p=.75$, so any employed strategy was misguided.

Results

A 2×2 mixed-model ANOVA with repeated measures on the second factor revealed an interaction between Request Medium (face-to-face, email) and Compliance (predicted, actual), $F(1,43)=121.10$, $p<.001$, $\eta_p^2=.73$ (Figure 1)[2]. Requesters *underestimated* the likelihood targets would comply with their requests face-to-face (Predicted: $M=5.08$, $SD=2.23$; Actual: $M=7.15$, $SD=1.81$), $F(1,25)=17.45$, $p<.001$, $d=1.00$), replicating previous research. However, requesters *overestimated* the likelihood targets would comply with their emailed requests (Predicted: $M=5.53$, $SD=1.71$; Actual:

M=0.21,*SD*=.54),*F*(1,18)=185.47, *p*<.001, *d*=4.20). Although targets asked to complete a questionnaire face-to-face were 34 times more likely to comply than those asked over email, *F*(1,44) = 260.78, *p*<.001, *d*=5.20, requesters' predictions of compliance did not differ between the conditions, *F*(1,44)=0.53, *p*>.250, *d*=.21.

Requesters recognized it would be more difficult for targets to say "no" face-to-face *M*=3.14 (*SD*=1.08) than over email (*M*=1.75,*SD*=.87), *F*(1,44)=21.47, *p*<.001, *d*=1.42, suggesting that inaccurate assumptions about the discomfort of saying "no" were not driving our main finding.

Discussion

Despite finding a large effect of request medium on the direction of requesters' prediction error, we were unable to identify the mechanism underlying this reversal of the original effect. Further, the paradigm we used only allowed us to capture requesters', not targets', responses to our mechanism questions. Notably, collecting the latter measures would require questionnaire data both from targets who agreed to complete a questionnaire and those who *refused* to complete a questionnaire. In Study 2, we used a unique study design to collect this data. We also refined our procedure to address the possibility that participants in the face-to-face condition approached targets strategically. Finally, we included items to test the mechanism proposed earlier—namely, that requesters fail to appreciate the implicit trust granted in face-to-face interactions, but not over email, which leads to increased empathy towards the requester, and ultimately higher rates of compliance.

Study 2

480 university students participated (60 requesters [36 female] and 420 targets). Requesters received $10; targets received $1. Sample size was determined by the sample size of Flynn and Lake (2008), again ensuring >80% power.

Requesters were randomly assigned to "face-to-face" or "email" conditions. In order to collect mechanism data both from targets that said "yes" and those that said "no" to completing a questionnaire, requesters were instructed to ask strangers who had already agreed to fill out a one-page questionnaire for $1 to complete an additional task (editing a document for grammatical mistakes) for free. Before making these requests, requesters predicted the number of people (out of 7) who would agree to complete the free task and answered our mechanism questions. Requesters were again provided with complete task details before completing these measures.

In the face-to-face condition, requesters approached as many strangers as necessary to recruit 7 people to fill out a questionnaire for $1. When someone agreed to complete the paid questionnaire, requesters immediately asked the target to complete the additional task for no additional pay. To ensure requesters were approaching targets randomly, requesters were instructed to count six strangers and approach the sixth.

In the email condition, emails were sent to 7 university students who had previously registered to complete a questionnaire for $1. The email text mirrored the face-to-face script. Email recipients who agreed to complete a questionnaire for $1 were asked if they would complete the extra task for free. As requested by our university ethics board, to protect participants' privacy requesters no longer sent emails individually to targets after completing the initial materials. Instead, a university technician sent a batch

of 210 emails (7 for each of the 30 participants in the email condition) from a fictitious university email address. However, to increase perceptions of the authenticity of their requests, requesters were provided with 7 bogus email addresses ostensibly from our pre-registered list of targets and were asked if they recognized any addresses.

Targets in both conditions who agreed to complete the paid questionnaire said either "yes" or "no" to completing the unpaid task. They then completed the paid questionnaire, which comprised a series of questions about why they had said "yes" or "no" to completing the unpaid task. Thus, we have mechanism data from (a) requesters, (b) targets who said "yes" to the unpaid task, *and* (c) targets who said "no" to the unpaid task. This data includes how uncomfortable targets felt/would feel saying "no" to the unpaid task, how much targets trusted/would trust requesters, and how much targets empathized/would empathize with requesters (Appendix A).

Results

Overview

Although 210 pre-registered targets received emails, only 44 completed the paid questionnaire. For presentation clarity, we created a simulated sample of 210 targets for the email condition by drawing 30 samples of 7 respondents with replacement from the 44 targets who completed the paid questionnaire. The conclusions drawn from this simulated sample match those of the raw sample (see Appendix B for raw data analyses).

To be consistent with the analyses in Study 1, we modeled the data at the requester level (N=60). We assigned to each requester an "actual compliance" value comprising the total number of targets (out of 7) who completed the free task, as well as "actual" trust, empathy, and discomfort values comprising averages of those 7 targets'

responses to the mechanism items. We did not conduct multi-level analyses because requesters' predictions of compliance are continuous and the compliance measure for each individual target is necessarily binary (i.e., "yes" or "no").

ANOVAs

A 2×2 mixed-model ANOVA with repeated measures on the second factor revealed a significant interaction between Request Medium (face-to-face, email) and Compliance with the free task (predicted, actual), $F(1,58)=16.78$, $p<.001$, $\eta_p^2=.22$ (Figure 2). Requesters in the face-to-face condition *underestimated* the likelihood targets would comply (Predicted: $M=4.43$,$SD=1.70$; Actual: $M=5.43$,SD=1.81; $F(1,29)=4.49$, $p=0.043$, $d=.57$), while requesters in the email condition *overestimated* the likelihood targets would comply (Predicted: $M=4.10$,$SD=2.01$; Actual: $M=2.43$,$SD=1.31$; $F(1,29)=18.84$, $p<.001$, $d=.98$). Targets were again much more likely to comply in the face-to-face condition, $F(1,58)=54.10$, $p<.001$, $d=1.90$, but there was no difference between requesters' *predictions* of compliance between the two conditions, $F(1,58)=0.48$, $p>.250$, $d=.18$

Additional mixed-model ANOVAs on our mechanism indices revealed a significant interaction on discomfort, $F(1, 58)=5.79$, $p=.019$, $\eta_p^2=.09$. Requesters recognized targets would feel more uncomfortable saying "no" face-to-face ($M=3.59$, $SD=1.11$) than over email ($M=2.49$, $SD=1.15$), $F(1, 58)=14.38$, $p=<.001$, $d=.97$. Targets confirmed this intuition, reporting they would feel more uncomfortable saying "no" face-to-face ($M=3.35$, $SD=.43$) than over email ($M=2.98$, $SD=.47$), $F(1, 58)=10.07$, $p=.002$, $d=.82$. Thus, this mechanism again failed to explain our main finding.

However, there was a significant interaction on trust, $F(1,58)= 8.997$, $p=.004$, $\eta_p^2=.134$, which mirrored our compliance results. Targets trusted requesters more in the face-to-face condition ($M=5.66$,$SD=.43$) than the email condition ($M=4.37$,$SD=.47$), $F(1,58)=120.98$, $p<.001$, $d=2.86$, although requesters predicted no difference between the two conditions, $F(1,58)=2.36$, $p=.130$, $d=.397$.

A similar (though non-significant) interaction to that for trust emerged for empathy, $F(1,58)=2.35$, $p=.131$, $\eta_p^2=.039$. Targets felt more empathy towards requesters in the face-to-face condition ($M=4.63$,$SD=.56$) than the email condition ($M=3.96$,$SD=.46$), $F(1,58)=25.899$, $p<.001$, $d=1.31$. However, requesters predicted no difference between the two conditions, $F(1,58)=.17$, $p>.250$, $d=.106$.

Mediation

Mediation analysis confirmed that the error in requesters' predictions of the amount of *trust* and *empathy* targets would feel in response to emailed versus in-person requests explained the error in requesters' predictions of compliance between the two conditions. That is, the theorized path of *request medium →predicted minus actual trust →predicted minus actual empathy →compliance prediction error* was significant [CI: -.0378,-.0035]. (See Appendix C for complete details.)

Discussion

Overall, we find people are less influential than they think over email. Although requesters *underestimated* the likelihood people would comply with their requests in person, they *overestimated* the likelihood people would comply with their requests over email. These findings appear to result from requesters' failure to appreciate the implicit

trust conveyed in face-to-face interactions and lost over email, which activates targets' empathy towards requesters.

These findings contribute to a burgeoning area of research on people's perceptions of their influence over others (Bohns, 2016). While much research on social influence aims to identify effective influence techniques, we examine people's *assumptions* about how effective various influence tactics are likely to be.

This work also contributes a new perspective to a growing body of literature on trust in computer-mediated interactions (John, Acquisti, & Loewenstein, 2011; Roghanizad & Neufeld, 2015). Rather than focusing on users' willingness to trust computer-mediated content, our research has implications for how the *creators* of such content are likely to view its trustworthiness.

Practically, as computer-mediated communication becomes the dominant means of interacting with others (Dimmick et al., 2000), these findings suggest that users may not realize its limitations (cf., Kruger et al., 2005). It is often more convenient and comfortable to make requests over email. If people also overestimate email's effectiveness, they may choose inferior means of influence without recognizing the downsides. Our research suggests reflecting on the experience of receiving an email from a stranger before making a request in this manner may facilitate the practice of asking in person when possible.

Strengths of these findings include the fact that participants made actual requests of other people in these studies, and the large effects, ranging from d=.98 to d=4.20 for the overestimation-of-compliance effect over email and d=.57 to d=1.01 for the underestimation-of-compliance effect face-to-face. However, there are noteworthy

limitations. For one, the mechanism identified here differs from previous research on the underestimation-of-compliance effect. Thus, our explanation for these findings is still somewhat exploratory, necessitating replication by future studies. However, it is certainly possible that errors related to predicting compliance are multiply determined. Further, our findings are limited to the specific university population and types of requests we used in the current studies, as well as a paradigm in which requesters evaluated the effectiveness of email and face-to-face requests separately, rather than comparing them directly. Future research should explore the generalizability of these findings.

Footnotes

[1]Towards the end of Study 1, our university ethics board became concerned that university students were spamming other students. We were asked to stop collecting data and reassess the email condition of the study. Thus, there is a smaller number of participants in the email condition than the face-to-face condition, and some changes to our method were imposed in Study 2.

[2]Fluctuations in degrees of freedom within a study occur when a participant did not answer a question, thus reducing the sample size for that question.

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Figures

Figure 1. Actual vs. predicted compliance in the face-to-face and email conditions in Study 1.

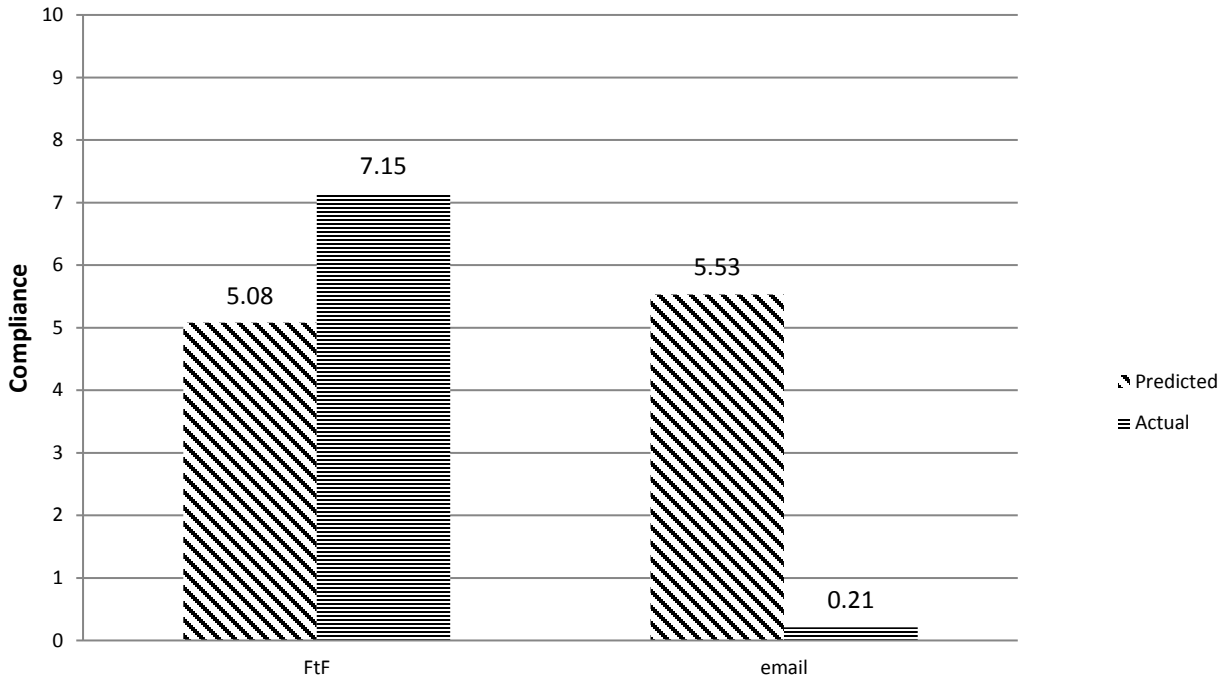

Figure 2. Actual vs. predicted compliance in the face-to-face and email conditions in Study 2.