Too Reluctant to Reach Out:

Receiving Social Support is More Positive Than Expressers Expect

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Abstract

Receiving social support is critical for wellbeing, but concerns about a recipient's reaction could make people reluctant to express it. Our studies indicate that people's expectations about how their support will be received predict their likelihood of expressing it (Study 1, N = 100 online adults), but these expectations are systematically miscalibrated. Participants who sent messages of support to others they knew (Study 2, N = 120 students), or who expressed support to a new acquaintance in person (Study 3, N = 50 adult pairs), consistently underestimated how positively their recipients would respond. A systematic perspective gap between expressers and recipients may explain miscalibrated expectations, such that expressers focus on how competent their support seems while recipients focus on the warmth it conveys (Study 4, N = 300 adults). Miscalibrated concerns about how to express support most competently may make people overly reluctant to reach out to someone in need.

Keywords: social support; prosocial behavior; social judgment; interpersonal relationships; decision making

Statement of Relevance

People rely on support from others to manage adversity. Although people may want to support those in need, they may be somewhat hesitant to express it. We document a psychological barrier impeding people from expressing support that they might otherwise be willing to offer.

Specifically, our research indicates that people's interest in expressing support is guided by expectations of the recipient's response, but that these expectations are overly pessimistic.

People sending supportive messages to someone they knew, and expressing support to a stranger face-to-face, underestimated how positively their support was received. Our research also indicates that expressers focus relatively more on their competency in providing support rather than fully appreciating the warmth and compassion that expressing support conveys to recipients, providing one possible explanation for their overly pessimistic expectations. Underestimating the positive impact of expressing support could lead people to miss opportunities to help others more often in daily life.

Too Reluctant to Reach Out:

Receiving Social Support is More Positive Than Expressers Expect

Nobody gets along well in life alone. Receiving support from others is critical for maintaining a happy, healthy, and successful life (Baumeister & Leary, 1995; Levin et al., 2011). Social support only benefits recipients, however, to the extent that someone is willing to express it. We suggest that people who notice someone in need, and are inclined to express support, may nevertheless experience psychological barriers that keep them from doing so. Specifically, we suggest that expressers' expectations of how recipients might respond to receiving support guide their decisions about whether or not to express it, but that expressers' expectations are systematically pessimistic such that they underestimate how positively recipients will respond.

Social support can take many forms. Broadly construed, its expression leads recipients to feel cared for and valued by others (Wills, 1991), providing both material support and satisfying a basic need for belonging (Baumeister & Leary, 1995). Researchers sometimes categorize support by the content of its expression. For example, conveying empathy is emotional support, offering financial assistance is instrumental support, and providing evaluative feedback is appraisal support (Cutrona, 1990). Because no precise categorization has been adopted (Gleason & Iida, 2015), we do not constrain the type of support being expressed and instead investigate the expected versus actual outcome of whatever efforts a person takes to help someone through a time of need.

Regardless of its form, social support is so critical to people's wellbeing that simply believing social support would be available if needed can reduce negative psychological outcomes, including depression and anxiety (Stroebe & Stroebe, 1996). Receiving social support

is even associated with better physical health outcomes when recovering from ailments like cancer, stroke, and heart disease (Cohen & Syme, 1985; Uchino et al., 1996). Having supportive people in one's life benefits both mental and physical health.

Fortunately for people's wellbeing, those who notice another in need are often automatically inclined to help in some way to alleviate suffering (Rand et al., 2014; Zaki & Mitchell, 2013). Even toddlers spontaneously help when they see someone in need, a tendency that grows stronger with age (Warneken & Tomasello, 2009). Having an automatic inclination to help does not, however, mean that someone will necessarily act on that inclination. For instance, bystanders may question whether another person is in genuine need (Gilovich et al., 1998; Staub, 1971), or whether another person is better equipped to intervene (Latane & Nida, 1981).

We suggest that expressing social support may present people with an approach/avoidance conflict between satisfying their inclination to offer help and avoiding the risk that their support will be ill-received. To examine potential barriers to expressing support, we asked an online sample ($N = 132$) to answer a series of questions about their experience of support in daily life, including how worried they thought they would feel about doing or saying the wrong thing when expressing support, on an 11-point scale ranging from *not at all worried* to *extremely worried*. The average response was significantly above the scale mid-point, *one sample t-test*, $t(131) = 4.53$, $p < .001$, $d = .39$. The more worried people were, the less satisfied they reported being with the amount of support they express to others, $r(130) = -.20$, $p = .019$. This suggests that fears about how others would respond could keep people from expressing support they are otherwise inclined to provide.

If decisions to express support are guided by expectations of a recipient's reaction, then this raises an important question about the extent to which expressers' expectations are

calibrated. Although those needing support feel better simply knowing that support is available, their health and wellbeing do not as reliably benefit from actually receiving support from others (Gleason & Iida, 2015; Maisel & Gable, 2009; Uchino, 2009). Expressers may struggle with providing good advice, adequate emotional support, or enough tangible assistance. Expressing support that does not match a recipient's specific needs could cause recipients further distress (Cutrona, 1990; Horowitz et al., 2001; Uchino, 2009), especially for recipients suffering from low self-esteem or more chronic stressors (Maisel & Gable, 2009; Rafaeli & Gleason, 2009). Providing effective support could therefore be a difficult skill to master, meaning that people's concerns that a recipient might respond negatively to receiving support could be appropriately calibrated.

In contrast, we believe there are clear theoretical reasons to predict that people consistently underestimate how positively others respond to receiving social support. Because people tend to construe their own interpersonal actions in terms of competence while observers tend to construe the same actions in terms of warmth (Fiske et al., 2007; Wojciszke, 1994), we predict that there is a systematic gap between how expressers and recipients perceive the same supportive act (see also Boothby & Bohns, 2021; Kumar & Epley, 2018; Zhao & Epley, 2021). Expressers may be primarily thinking about how effectively they are supporting another person or how competently they are expressing their concern, while recipients may focus more on the warmth and kindness conveyed by sincere expressions of support. These differing perspectives could lead expressers to systematically underestimate how positively recipients would respond to expressed support.

Our hypotheses are also supported by existing research suggesting that those performing prosocial acts tend to underestimate the positive impact they will have on recipients. For

instance, those who receive letters of gratitude (Kumar & Epley, 2018), random acts of kindness (e.g., a cup of hot chocolate on a winter day; Kumar & Epley, 2020), or compliments from strangers and even spouses (Boothby & Bohns, 2021; Zhao & Epley, 2021) tend to feel more positive than the people performing the prosocial acts anticipate. Underestimating how positively others respond to prosocial acts could create an undue reluctance to behave prosocially in daily life. To the extent that support is also received in a surprisingly positive fashion, suppressing an inclination to express social support to someone in need may be unwarranted.

None of these existing findings, however, involve a prosocial act done for a recipient who is currently in some genuine need, and whose needs may not be effectively satisfied by attempts to reach out and connect. Understanding decisions to express support could therefore provide a critical theoretical contribution to the emerging literature on barriers to prosocial actions, as it could provide evidence for a key boundary condition on an otherwise robust psychological tendency. It could also be of meaningful practical value, given that decisions to express or withhold support likely happen when recipients are most in need, and hence may be especially beneficial for recipients' wellbeing.

We test three hypotheses about the expected and actual consequences of expressing social support. First, Study 1 tests the extent to which decisions to express support are guided by expectations about the recipients' reactions. Second, Studies 2 and 3 test the extent to which expressers' expectations are calibrated when actually expressing support to friends or strangers. Finally, Study 4 tests a prediction from our theory that a perspective gap is one mechanism for why expressers underestimate the positive impact of their support. Specifically, we test whether expressers tend to focus on how competently they can express support while recipients focus relatively more on the warmth their support conveys.

All experiments were approved by the IRB. All participants gave informed consent. We report results for composite measures of highly correlated items in the main text to ease presentation. Analyzing items separately does not meaningfully change any conclusions. We report item-level analyses in Supplemental Materials (Table S1). Pre-registrations, experimental data, and materials have all been made publicly available via the Open Science Framework and can be accessed at https://osf.io/w2xu8/?view_only=b0cd381c6c944f1d9324ecbb9e7444d1.

Study 1—Expectations and Interest in Expressing Support

Methods

Participants. We recruited participants from Amazon’s Mechanical Turk platform, excluding participants who completed the survey in under 120 seconds or failed to follow instructions, until we obtained our pre-registered sample size of 100 participants (age: $M = 36.59$, $SD = 12.01$; 33% female).

Procedure. We asked participants to think about 5 specific people they might be able to express support to who were going through a complicated time, facing a tough situation, or enduring a difficult moment in their lives: a family member, friend, someone they know from work, a member of their community, and an acquaintance. We randomized the order of recipients across participants. For each recipient, participants listed their initials, indicated the precise nature of their relationship (e.g., parent, sibling, teacher), and described why this person could need support. They also reported the extent to which each recipient needed support on an 11-point scale from (0) *not at all* to (10) *extremely*.

Participants then imagined what it would be like to send a supportive message to each person and what they would say. For each message, participants reported how awkward the

recipient would feel after reading the message, how positively or negatively the message would make the recipient feel (compared to how they normally feel), and how supported their message would make the recipient feel. Participants also rated how certain they were about their answers to the need, awkwardness, mood, and supported questions. These 4 items were averaged into a composite measure of overall certainty about expressing support ($\alpha = .81$). Finally, participants reported how likely they are to actually send a message to each target. Participants reported their response to each item on 11-point scales from (0) *not at all* to (10) *extremely*, with the exception of the mood measure which was rated from (-5) *much more negative than normal* to (5) *much more positive than normal*, with the midpoint labeled as (0) *no different from normal*. Finally, participants reported their age and gender.

Results

To examine the extent to which participants' expectations about the recipients' responses were related to their reported likelihood of expressing support, we used repeated measures correlations (Bakdash & Marusich, 2017). This allowed us to use each participant's responses for the five targets to determine the common within-participant association between our measures. The overall correlations between our measures were all significant such that participants reported being more likely to express support to the targets that they expected would respond more positively (Table 1). Note that our pre-registered analyses used what we later learned to be a suboptimal method for calculating these correlations that relied on averaging correlations across participants. These analyses also confirm our hypotheses, which we report fully in Supplemental Materials.

Table 1. Repeated measures correlation coefficients between measures in Study 1.

	Need	Awkward	Mood	Supported	Certainty
Likelihood	.21*** [.11, .30]	-.54*** [-.60, -.47]	.49*** [.41, .56]	.48*** [.40, .55]	.47*** [.39, .55]
Need	--	-.13* [-.22, -.03]	.12* [.02, .21]	.20*** [.10, .29]	.22*** [.12, .31]
Awkward		--	-.41*** [-.49, -.33]	-.45*** [-.52, -.37]	-.38*** [-.46, -.30]
Mood			--	.48*** [.40, .55]	.32*** [.23, .40]
Supported				--	.42*** [.34, .50]
Certainty					--

Note: Correlation coefficients are the overall within-participant association between measures.

The 95% confidence intervals shown in brackets are estimated using the Fisher transformation.

* $p < .05$, ** $p < .01$, *** $p < .001$

Given the collinearity between our measures, we also conducted an exploratory linear mixed model with likelihood of expressing support as the outcome variable, participant- and target-specific intercepts as random effects, and need, awkwardness, mood, how supported recipients would feel, and certainty as predictors. Interestingly, participants' reported likelihood of expressing support was not significantly predicted by the recipients' perceived need, $b = 0.09$, $SE = .06$, $t(441.5) = 1.57$, $p = .118$. It was, however, significantly predicted by expectations of the recipients' reactions: how awkward the recipients would feel, $b = -0.23$, $SE = .04$, $t(480.1) = -6.40$, $p < .001$, how positive or negative the recipients would feel, $b = 0.34$, $SE = .06$, $t(442.5) = 5.24$, $p < .001$, and how supported the recipients would feel, $b = 0.21$, $SE = .06$, $t(465.1) = 3.50$, $p < .001$. The reported likelihood of expressing support was also significantly related to how

certain they were about their predictions, $b = 0.40$, $SE = .07$, $t(437.0) = 5.93$, $p < .001$. We replicated this overall result in another experiment using only a subset of the same items, reported in Supplemental Materials (Supplemental Study 1). In sum, participants' expectations about how recipients would respond to expressions of support significantly predict their likelihood of expressing support or not. We next test our hypothesis that these expectations are systematically miscalibrated.

Study 2—Messages of Support

Method

Participants. Based on response rates in a similar paradigm (Kumar & Epley, 2018), we recruited our targeted sample size of 120 participants to send an email expressing support to someone they know on campus. We received responses from 50 recipients of the emails (42% response rate), leaving 50 pairs of participants (age: $M = 21.13$, $SD = 4.88$; 66% female) for the analyses below. We do not know how much this imperfect response rate stems from participants not actually sending their email to the intended recipient, to recipients failing to notice or receive the email for any reason, or to recipients receiving the email but then not completing the follow-up survey reporting on their own experiences. For ethical reasons required by our university's IRB, only the expressers were allowed to contact the recipients. Post-hoc sensitivity analyses calculated using the pwr package in R (Champely, 2020) suggest this sample size provides 80% power to detect effects as small as $d = .40$ for *paired t*-tests and correlations of $r = .38$.

Procedure. We asked participants recruited to a university campus laboratory to think of someone on campus who was facing a difficult time in their lives for which they could use some social support, but who they have not reached out to already. We then asked participants to write

an email expressing support to this person, and to complete a survey predicting how the recipient would respond to their message. Specifically, expressers rated how awkward the recipient would feel, two items measuring the amount of warmth conveyed by their message (how sincere and how warm their message will be perceived, $r(118) = .77, p < .001$), two items measuring the competence of their message (how articulate the message is and the extent to which the message used words that were “just right,” $r(118) = .43, p < .001$), and two items measuring positive effects of receiving support (how positive or negative the recipient will feel and how supported they will feel, $r(118) = .74, p < .001$). We created composite measures for warmth, competence, and positive effects by averaging the two items measuring each construct together.

After sending their email, participants rated how they themselves felt about expressing support on two different items: how awkward they felt and how positive or negative they felt. Participants also rated how close their relationship with the recipient is. All items used 11-point scales from (0) *not at all* to (10) *extremely*, with the exception of the items asking how participants felt, which used scales from *much more negative than normal* to *much more positive than normal*, with the midpoint marked as *no different from normal*.

The email that participants sent to the recipient included a message from us (as researchers) explaining that we asked the expresser to say something supportive to whomever they wanted, and the expresser chose them. The message also included a survey link where willing recipients reported their actual experience of receiving a supportive email on the same measures as expressers. Specifically, recipients rated how awkward they felt, the warmth conveyed by the email, $r(48) = .77, p < .001$, the competence conveyed by the email, $r(48) = .50, p < .001$, the positive effects of receiving the email, $r(48) = .63, p < .001$, and how close their

relationship with the expresser is, using the same individual items described above for the expressers.

To diminish social desirability or reputation management concerns among both expressers and recipients, the informed consent document emphasized that their responses would “remain strictly confidential and we will never share with anyone outside of our research team,” further explaining that their responses would be “kept separate from your email address, both in password-protected documents, and your email address will be deleted at the conclusion of this study.”

Results

Because we did not receive responses from all of the recipients in this experiment, it is possible that selective responding could be contributing to our results (see also Kumar & Epley, 2018). One way we can assess this is by examining whether expressers who received a response differed from expressers who did not receive a response. The two groups did not differ on any of our measures, including age, $t(117) = .668, p = .505$, gender, $\chi^2(2, N = 120) = 5.56, p = .062$, how awkward they felt after sending the email, $t(118) = -.536, p = .593$, how positive they felt after sending the email, $t(118) = -.619, p = .537$, or how close they felt to the recipient, $t(118) = 1.42, p = .158$. Both groups also held similar expectations of how the recipient would respond to their email on all measures: awkwardness, $t(118) = -.928, p = .355$, warmth, $t(118) = -.500, p = .618$, competence, $t(118) = -.416, p = .678$, and positive effects, $t(118) = -1.48, p = .140$. Although these results do not rule out concerns about selective responding, they do suggest that expressers did not anticipate any differences beforehand between the recipients who responded to the surveys and those who did not.

After expressing support, expressers reported feeling more positive than normal ($M = 7.04$, $SD = 1.94$), *one-sample t-test* from the scale midpoint, $t(49) = 7.45$, $p < .001$, $d = 1.05$, and also reported feeling somewhat awkward ($M = 4.28$, $SD = 2.78$), *one-sample t-test* from the scale floor, $t(49) = 10.9$, $p < .001$, $d = 1.54$.

Consistent with our main hypothesis, expressers underestimated how positively people receiving their support would feel (Figure 1). Expressers expected that recipients would feel more awkward than recipients actually did, *paired t*(49) = 4.99, $p < .001$, $d = .71$, that their supportive message would convey less warmth, *paired t*(49) = -3.12, $p = .003$, $d = -.44$, and seem less competent, *paired t*(49) = -4.69, $p < .001$, $d = -.66$, than recipients perceived their message to be, and that the effects of receiving support would be less positive than recipients actually experienced, *paired t*(49) = -2.58, $p = .013$, $d = -.36$.

Although expressers underestimated the positive effects of expressing support, it is still possible that expressers had some accurate insight into how the particular person they reached out to would respond. This unique insight would be revealed by a significant correlation between expressers' predictions and recipients' responses, revealing some discrimination accuracy even in the midst of mean-level miscalibration. However, we observed no significant correlations between expressers' expectations and recipients' reported experiences, all $ps > .20$ (Figure 1), suggesting that expressers had little unique insight into how the recipients of their support would respond to receiving a supportive message.

Figure 1: Expressers' predictions compared to the actual experience of recipients in Study 2.

Error bars show 95% confidence intervals around the means. The correlation between predicted and actual ratings is presented for each item (all correlations were non-significant).

We also explored how relationship closeness affected expressers' expectations of how their support would be received. Although expressers chose to express their support to someone they felt moderately close to on average ($M = 6.96$, $SD = 2.36$), this varied across participants (range: 2 – 10). Interestingly, expressers were more pessimistic about how well their support would be received the more distant their relationship was with the recipient. Specifically, the more distant their relationship, the more awkward, $r(48) = -.25$, $p = .083$, less warm, $r(48) = .36$, $p = .011$, less competent, $r(48) = .35$, $p = .013$, and fewer positive effects, $r(48) = .49$, $p < .001$, the expressers expected from their recipients. However, these effects occurred only in the minds of expressers, as we observed no significant relationship between how close expressers were to recipients and how positively or negatively recipients reported feeling upon receiving support on any measure: awkwardness, $r(48) = -.08$, $p = .590$, warmth, $r(48) = .06$, $p = .665$, competence,

$r(48) = -.01, p = .969$, and positive effects, $r(48) = .07, p = .612$. Although expressers expected the strength of their relationship to affect recipients' responses, recipients actually felt similarly positive whether it was a friend or a more distant acquaintance who reached out to them.

Study 3— In-person Support

Method

Participants. Instead of relying on responses from people receiving a supportive message as in Study 2, we recruited 51 pairs of people from the Chicago area to a campus-based laboratory to express their support in person. We excluded one pair for skipping part of the study procedures, leaving us with a pre-registered final sample of 50 pairs (age: $M = 23.86$, $SD = 9.34$; 42% female). These pairs were strangers to each other, providing a particularly strong test of the extent to which expectations about expressing support might create a misplaced barrier to expressing support more often, especially given that expectations in Study 2 were even more pessimistic when expressing support to more distant others.

Procedure. We first asked each pair of participants to briefly introduce themselves to each other, then randomly assigned participants to the role of Expresser or Recipient. We emphasized anonymity and confidentiality in the informed consent, and when explaining the study procedures, to mitigate any motivation for socially desirable responding or reputation management among both Expressers and Recipients. We then separated them into private rooms to begin an online survey. Participants reported their mood and what they thought the other participant's mood was on 11-point scales from *much more negative than normal* to *much more positive than normal*, with the midpoint marked as *no different from normal*.

After the mood measures, Recipients provided a typed description of a difficult situation or issue they were currently going through for which they could use some support. They also rated 4 items measuring the severity of the situation or issue ($\alpha = .80$): how serious it is, how upset it makes them feel, how much they need someone's support, and how much they would appreciate someone's support (11-point scales from (0) *not at all* to (10) *extremely*).

After Recipients had finished describing their situation or issue, a research assistant opened the typed description on the Expressers' computer. Expressers read the description and rated its severity on the same measures just described for Recipients ($\alpha = .90$). Expressers then predicted how recipients would respond to their attempt to express social support. Expressers were told they would be answering the same questions again after the conversation and to make their predictions as accurately as possible. Expressers reported their expectations on 11-point scales ranging from (0) *not at all* to (10) *extremely*. Four items measured the negative effects of expressing support: how awkward and how uncomfortable the conversation will be, and how difficult and emotionally draining talking to them will be ($\alpha = .72$). Two items measured how warm recipients will think they are: how sincere and how warm and friendly, $r(48) = .73, p < .001$. Two items measured how competent recipient will think they are: how articulate, and how clearly they expressed their thoughts and feelings, $r(48) = .56, p < .001$. Finally, two items measured the positive effects of receiving support: how positive or negative and how supported the recipient will feel after the conversation, $r(48) = .54, p < .001$. We created composite measures of negative effects, warmth, competence, and positive effects by averaging together the items comprising each construct.

We then brought participants together in the same room so that Expressers could have a conversation with the Recipients. Expressers were free to express support to the Recipient however they wanted. Specifically, they received the following instruction:

During this conversation, we would like you to do your best to express your support to him/her for the issue he/she described. You could express empathy, give advice, share something from your own life, offer some kind of assistance, or anything else. We only ask that you try to express your support in whatever way makes sense to you.

We asked that the conversations wrap up after approximately 15 minutes.

When the conversations finished, participants returned to private rooms to complete their surveys. Expressers rated how the recipient responded on the same items used before expressing their support (e.g., “how supported do you think he/she feels after your conversation?”) and Recipients reported their actual experience (e.g., “how supported do you feel after your conversation?”). Items within the composite measures for expressers and recipients, respectively, were again highly correlated: negative effects (α s = .80 & .77), warmth (r s = .78 & .86), competence (r s = .76 & .75), and positive effects (r s = .75 & .82). Expressers also reported the extent to which they tried to express support to the recipient, while Recipients reported the extent to which they think that the Expresser tried to express support to them.

Results

None of the baseline mood measures differed at the beginning of the experiment, whether Expressers and Recipients were rating their own mood (Expressers: $M = 6.42$, $SD = 1.93$; Recipients: $M = 5.94$, $SD = 2.40$) or estimating their partner’s mood (Expressers’ estimation of Recipient’s mood: $M = 6.22$, $SD = 1.53$; Recipients’ estimation of Expresser’s mood: $M = 6.18$, $SD = 1.83$), *paired ts* < 1.02, all *ps* > .310. Recipients reported needing support for a wide range

of issues, including struggling with classes, job uncertainty, financial problems, dating life, family disputes, and illness. They self-reported that these issues were moderately severe on average ($M = 5.84$, $SD = 2.21$), with 62% of the ratings above the midpoint of the scale (median = 6). Expressers perceived the Recipient's situation to be more severe ($M = 7.20$, $SD = 1.97$) than Recipients themselves reported, $paired\ t(49) = 3.48$, $p = .001$, $d = .49$.

To measure compliance with our experimental instructions, participants in both roles reported the extent to which expressers tried to express support during their conversation with the Recipients. Expressers reported trying hard to express support with 90% of responses over the mid-point of the scale. Recipients agreed. If anything, Recipients reported that their Expressers tried harder ($M = 8.78$, $SD = 2.12$) than the Expressers themselves did ($M = 7.07$, $SD = 2.19$), $paired\ t(49) = 1.96$, $p = .056$.

Replicating the primary results from Study 2, expressers again underestimated how positively recipients would respond to their expressions of support (Figure 2). Even though they were complete strangers, Recipients found the Expressers' support to have fewer negative effects, $paired\ t(49) = 4.17$, $p < .001$, $d = .59$, to convey more warmth, $paired\ t(49) = -5.40$, $p < .001$, $d = -.76$, to convey more competence, $paired\ t(49) = -4.99$, $p < .001$, $d = -.71$, and have more positive effects, $paired\ t(49) = -4.10$, $p < .001$, $d = -.58$, than the Expressers expected. Expressers' reports after expressing support were also more positive than their initial expectations, suggesting they recognized, at least to some extent, that recipients' reactions were genuinely positive. Compared to their pre-conversation expectations, Expressers reported experiencing fewer negative effects, $paired\ t(49) = 8.09$, $p < .001$, $d = 1.15$, thought they conveyed more warmth, $paired\ t(49) = -5.75$, $p < .001$, $d = -.81$, and competence, $paired\ t(49) =$

-3.31, $p = .002$, $d = -.47$, and that their support had more positive effects, $\text{paired } t(49) = -2.32$, $p = .025$, $d = -.33$.

Despite feeling that expressing support went more positively than expected, Expressers' evaluations after the conversation were still not quite as positive as the recipients' evaluations. Although Expressers and Recipients did not differ in their evaluations of negative effects, $\text{paired } t(49) = -1.11$, $p = .274$, $d = -.16$, Expressers continued to underestimate how much warmth their support conveyed, $\text{paired } t(49) = -2.88$, $p = .006$, $d = -.41$, how competent their support seemed, $\text{paired } t(49) = -3.04$, $p = .004$, $d = -.43$, and the positive effects that expressing support had, $\text{paired } t(49) = -2.77$, $p = .008$, $d = -.39$.

Figure 2: Expressers' predictions before expressing support compared to both their own ratings after expressing support and the recipients' ratings of their experience in Study 3. Error bars show 95% confidence intervals around the means.

Beyond Expressers underestimating how positively recipients responded to their support, we were also interested in the extent to which Expressers may have had some unique insight into how their own personal effort would be perceived by the recipient. As in Study 2, this would be revealed by significant correlations between expectations before versus after expressing support, indicating some discrimination accuracy. To investigate this, we calculated the correlation between ratings made by Expressers and Recipients before and after their conversation (Table 2). Not surprisingly, Expressers' predictions were highly correlated with their own ratings after expressing support to Recipients, all $ps < .001$. However, as in Study 2, Expressers' predictions were all non-significantly correlated with Recipients' actual experiences, all $ps > .12$. After having an in-person conversation, Expressers showed evidence of learning something about their own recipients' reactions. The correlations between evaluations made by Expressers and Recipients were generally more positive after their conversations than before their conversations. They were significantly larger than zero for evaluations of warmth and positive effects but were nonsignificant for evaluations of competence and negative effects. Overall, these results again suggest that expressers do not have great insight into how their recipients will uniquely respond to expressions of support.

Table 2: Correlation coefficients between Expresser Predictions, Expresser Postdictions, and Recipient Experiences in Study 3.

	Expresser Pre & Expresser Post	Expresser Pre & Recipient Exp	Expresser Post & Recipient Exp
Negative Effects	.58***	.05	.12
Warmth	.70***	.06	.36**
Competence	.56***	-.002	.19
Positive Effects	.66***	.22	.49***

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Study 4—Differing Perspectives on Support

Method

Participants. We recruited 300 online participants (age: $M = 28.3$, $SD = 10.9$; 73% female) through a campus-based “virtual laboratory” operated through the Zoom video conferencing platform. This sample size was chosen a priori and pre-registered. All participants passed pre-registered attention and commitment checks.

Procedure. Participants completed an online survey from the perspective of someone either expressing support or receiving support. As in Studies 2 and 3, Expressers described an issue that someone they know is going through, what kind of relationship they have with that person (family, romantic partner, friend, someone from work, acquaintance, or stranger), how close they are to that person, and how much they think that person needs support. Recipients answered the same questions about receiving support for an issue they are going through from a person they know who, for whatever reason, has not yet expressed their support.

Expressers were then told to vividly imagine deciding whether or not to express support to the person they described. They rated the extent to which they would be thinking about 6 different thoughts when expressing support. Three items measured thoughts related to warmth ($\alpha = .78$): how genuine and sincere the recipient will think their support is, how caring and concerned about the recipient’s situation they will seem, and how grateful and appreciative the recipient would feel if they expressed support to them. The other three items measured thoughts related to competence ($\alpha = .65$): how useful the recipient will think their support is, how capable of solving or fixing the recipient’s problem they are, and how exactly they will support the recipient – what they will actually do or say. Participants also indicated which of the six thoughts came to their mind first when imagining expressing support. Finally, Expressers rated how

interested they would be in actually reaching out and expressing support in the next week to the person they described.

Recipients received the corresponding task of vividly imagining what it would be like if the person they identified actually expressed support to them. They rated the extent to which they would be thinking about the 3 warmth and 3 competence related factors when receiving support, which of the 6 thoughts came to their mind first, and the extent to which they are interested in the person they identified actually reaching out and expressing support to them in the next week. As in previous studies, all items were rated on 11-point scales from *not at all* to *extremely*.

Results

Participants in the Expresser and Recipient perspective conditions did not differ in age, $t(298) = .612, p = .541$, or gender, $X^2(2, N=300) = .005, p = .998$. They also imagined similar targets to express support to or receive support from (Expresser: 34% family member, 12% romantic partner, 48% friend, 7% work, acquaintance, and stranger; Recipient: 31% family member, 17% romantic partner, 45% friend, 7% work, acquaintance, and stranger), and rated these targets as being in a similarly close relationship to them, $t(298) = -1.31, p = .193$. Expressers' interest in expressing support ($M = 7.93, SD = 2.54$) also did not differ from Recipients' interest in receiving support ($M = 8.07, SD = 2.78$), $t(298) = -.433, p = .665$.

We predicted an asymmetry such that expressers would be focused relatively more on competence compared to recipients, and less on warmth compared to recipients. We tested this hypothesis by conducting a 2 (perspective: expresser, recipient) x 2 (thought type: warmth, competence) mixed-model ANOVA on the extent to which participants reported focusing on different thoughts, treating perspective as a between-subjects factor and thought type as a within-subjects factor. We observed both main effects of thought type, $F(1, 298) = 33.3, p < .001$,

partial $\eta^2 = .100$, and perspective, $F(1, 298) = 6.28, p = .013$, partial $\eta^2 = .021$. Critically, these main effects were qualified by the predicted interaction, $F(1, 298) = 42.7, p < .001$, partial $\eta^2 = .125$. Expressers reported thinking about competence to a similar extent as warmth, $t(148) = .463, p = .644$, and thought about competence marginally more than Recipients thought about competence, $t(298) = 1.91, p = .057, d = .22$ (Figure 3, left graph). In contrast, Recipients thought about warmth significantly more than competence, $t(150) = -10.8, p < .001, d = -.88$, and thought about warmth significantly more than Expressers did, $t(298) = -6.10, p < .001, d = -.70$. These results indicate a strong asymmetry in the extent to which the two perspectives were focused on competence and warmth-related thoughts, with expressers attending relatively more to competence and less to warmth than recipients.

This asymmetry was even more stark when analyzing participants' reports of the first thought that came to their minds (Figure 3, right graph). Out of 149 Expressers, only 36 (24%) reported that a warmth-related thought came to mind first. Recipients showed the inverse pattern: 114 out of 151 (75%) reported that a warmth-related thought came to mind first, $\chi^2(1, N=300) = 79.1, p < .001$, Cramer's $V = .513$.

Figure 3: The left panel shows average ratings of the extent to which Expressers and Receivers were thinking about warmth and competence factors. Error bars show 95% confidence intervals around the means. The right panel shows the count of Expressers and Receivers who reported that their first thought was a warmth or competence item.

General Discussion

Whether facing a global pandemic or dealing with life's tribulations, people rely on support from others to manage adversity. Our experiments suggest that even when people recognize that support is needed, they may be overly reluctant to express it because they hold miscalibrated expectations of their recipients' response. Expectations of how their support would be received predicted expressers' willingness to express it (Study 1), but these expectations were overly pessimistic when expressing support to both friends and strangers (Studies 2 & 3). This underestimation may relate to a perspective gap whereby expressers focus relatively more on how competent their support might seem, while recipients focus relatively more on the warmth it conveys (Study 4). Agonizing over what to say or do may mistakenly keep people from expressing a sentiment whose value to a recipient also comes from the warmth it conveys.

These results further suggest that people may think too narrowly about who they can support. The relationship between expresser and recipient strongly influences expectations of how effective and appropriate support is (Lakey & Orebek, 2011; Rafaeli & Gleason, 2009; Veenstra et al., 2011), but Experiments 2 and 3 suggest that these expectations may be misleading. In Study 2, people were more pessimistic about the reactions of relatively distant acquaintances versus close friends, but recipients responded surprisingly positively regardless of relationship closeness. Even receiving support from a complete stranger in Study 3 was a positive experience for recipients and was unexpectedly positive to expressers. These results are consistent with recent work demonstrating that rewarding social interactions are not confined to close others. Mere acquaintances are surprisingly effective at providing support (Small, 2017) and increasing wellbeing more generally (Epley & Schroeder, 2014; Sandstrom & Dunn, 2014a, 2014b). Because reaching out to strangers may feel risky or awkward, people may be missing opportunities to widen the reach of their prosocial impact.

Although we expect these results to generalize across a wide range of expressers and recipients, our studies necessarily included people willing to participate in a survey or experiment about social support. People struggling with severe or chronic issues may not be included in our samples and could find receiving support to be less positive in ways expressers might not anticipate (Collins & Feeney, 2004; Gleason et al., 2008; McClure et al., 2014). Our theory, however, predicts that more extreme cases are likely to lead expressers to anticipate even more negative reactions due to the severity of the need, likely maintaining the gap between expressers' expectations and recipients' experiences. Future research should investigate more extreme cases of need, as well as track longer-term consequences of receiving support beyond a single interaction.

Because we did not manipulate the kind of support expressers offered, we were unable to investigate how results varied across forms of support. In addition to expressing empathy and warmth, support can include material support of financial assistance or physical aid (Cutrona, 1990; Gleason & Iida, 2015). Our account suggests that concerns about competency lead to overly negative expectations. To the extent that expressers perceive material support to be more effective, we predict more calibrated expectations about expressing this form of support. Examining expectations and experiences of material support will be an important test of the mechanisms we focused on.

We believe our results may also help to explain cross-cultural differences in expressions of social support. In particular, interdependent or collectivist cultures with low relational mobility appear to have more negative views of social support (Taylor et al., 2004). Compared to Americans, Asians provide support less frequently (Miller et al., 2017) and are also more reluctant to ask for support (Kim et al., 2008). Future research should test if these social norms stem from cultural differences in expectations and beliefs rather than meaningful differences in people's experience of actually receiving social support.

Each day offers opportunities to reach out and show some form of support, however large or small, to a person in need. Our experiments suggest that undervaluing the positive impact of expressing support could create a psychological barrier to expressing it more often. Withholding support due to misguided fears of saying or doing the wrong thing could leave both recipients and expressers of support less happy than they could be (Brown et al., 2003; Inagaki & Orehek, 2017). Understanding how these psychological barriers restrain prosocial behavior could help to encourage more routine expressions of social support, to everyone's benefit.

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Supplemental Material for

Authors, *Too Reluctant to Reach Out:*

Receiving Social Support is More Positive Than Expressers Expect

Table S1: Results for individual items included in composite ratings for Studies 2-4.

Study	Item	Comparison <i>M (SD)</i>		<i>t</i>	<i>p</i>	<i>d</i>
		Expresser Prediction	Recipient Experience			
	Warmth					
2	Sincere	6.96 (2.32)	8.52 (2.00)	-3.69	<.001	-0.52
2	Warm	7.28 (2.12)	8.26 (2.19)	-2.07	.044	-0.29
	Competence					
2	Articulate	5.97 (2.08)	7.92 (1.66)	-4.71	<.001	-0.67
2	Words just right	6.42 (2.12)	8.02 (2.08)	-3.83	<.001	-0.54
	Positive					
2	Feel	7.30 (1.59)	8.32 (1.77)	-2.50	.016	-0.35
2	Supported	6.40 (2.17)	7.60 (2.26)	-2.18	.034	-0.31
		Expresser Rating	Recipient Rating			
	Seriousness					
3	Serious	8.46 (2.33)	7.48 (2.54)	2.08	.043	0.29
3	Upset	7.88 (2.34)	6.68 (2.87)	3.00	.004	0.42
3	Need	7.90 (2.36)	5.70 (3.00)	4.10	<.001	0.58
3	Appreciate support	8.56 (1.93)	7.52 (2.81)	2.13	.039	0.30
		Expresser Prediction	Recipient Experience			
	Negative Effects					
3	Awkward	5.76 (2.57)	4.04 (2.95)	3.29	.002	0.47
3	Uncomfortable	5.74 (2.63)	4.12 (2.87)	2.95	.005	0.42
3	Difficult	5.56 (2.62)	3.58 (2.95)	3.84	<.001	0.54
3	Draining	4.08 (2.39)	2.88 (2.13)	2.72	.009	0.39
	Warmth					
3	Sincere	7.18 (2.22)	9.3 (2.26)	-4.59	<.001	-0.65
3	Warm	6.76 (2.2)	9.06 (2.23)	-5.66	<.001	-0.80
	Competence					
3	Articulate	6.9 (2.32)	8.64 (2.43)	-3.75	<.001	-0.53
3	Clearly	6.58 (2.27)	8.98 (1.95)	-5.47	<.001	-0.77
	Positive					
3	Positive or neg	7.6 (1.31)	8.8 (2.1)	-3.82	<.001	-0.54
3	How supported	6.46 (2.11)	8.14 (2.78)	-3.68	<.001	-0.52

Study	Item	Comparison <i>M</i> (<i>SD</i>)		<i>t</i>	<i>p</i>	<i>d</i>
		Expresser Prediction	Expresser Postdiction			
	Negative Effects					
3	Awkward	5.76 (2.57)	3.3 (2.46)	7.10	< .001	1.00
3	Uncomfortable	5.74 (2.63)	3.5 (2.7)	4.92	< .001	0.70
3	Difficult	5.56 (2.62)	3.72 (3.01)	4.37	< .001	0.62
3	Draining	4.08 (2.39)	2.38 (2.01)	5.19	< .001	0.73
	Warmth					
3	Sincere	7.18 (2.22)	8.3 (2.22)	-4.16	< .001	-0.59
3	Warm	6.76 (2.2)	8.16 (1.92)	-5.90	< .001	-0.83
	Competence					
3	Articulate	6.9 (2.32)	7.54 (2.3)	-1.82	.074	-0.26
3	Clearly	6.58 (2.27)	7.76 (2.2)	-3.89	< .001	-0.55
	Positive					
3	Positive or neg	7.6 (1.31)	8.06 (1.97)	-2.07	.043	-0.29
3	How supported	6.46 (2.11)	7.08 (2.72)	-2.07	.044	-0.29
		Expresser Postdiction	Recipient Experience			
	Negative Effects					
3	Awkward	3.3 (2.46)	4.04 (2.95)	-1.42	.163	-0.20
3	Uncomfortable	3.5 (2.7)	4.12 (2.87)	-1.28	.208	-0.18
3	Difficult	3.72 (3.01)	3.58 (2.95)	0.29	.776	0.04
3	Draining	2.38 (2.01)	2.88 (2.13)	-1.17	.246	-0.17
	Warmth					
3	Sincere	8.3 (2.22)	9.3 (2.26)	-2.60	.012	-0.37
3	Warm	8.16 (1.92)	9.06 (2.23)	-2.87	.006	-0.41
	Competence					
3	Articulate	7.54 (2.3)	8.64 (2.43)	-2.68	.010	-0.38
3	Clearly	7.76 (2.2)	8.98 (1.95)	-3.06	.004	-0.43
	Positive					
3	Positive or neg	8.06 (1.97)	8.8 (2.1)	-2.62	.012	-0.37
3	How supported	7.08 (2.72)	8.14 (2.78)	-2.47	.017	-0.35
		Expresser	Recipient			
	Warmth					
4	Genuine	7.78 (2.84)	8.78 (2.24)	-3.40	< .001	-0.39
4	Caring	7.74 (2.50)	8.74 (1.89)	-3.92	< .001	-0.45
4	Grateful	7.19 (2.80)	9.33 (1.87)	-7.78	< .001	-0.90
	Competence					
4	Useful	8.09 (2.51)	7.77 (2.67)	1.05	.297	0.12
4	Capable	6.48 (3.12)	6.16 (3.04)	0.91	.363	0.11
4	How exactly	8.46 (2.23)	7.74 (2.43)	2.70	.007	0.31

Study 1 pre-registered analyses

In our pre-registered analyses, we examined the extent to which participants' expectations about the recipients' responses were related to their reported likelihood of expressing support by first calculating the correlation between our measures across the five imagined targets for each individual participant. We then used those correlations as an index variable and tested whether the resulting distributions differed significantly from an average correlation of zero using one-sample *t*-tests. Replicating the results presented in the main text, the average correlations between our measures were all significantly larger than zero, such that participants reported being more likely to express support to the targets that they expected would respond more positively (Table S2).

Table S2. Correlation coefficients between measures and their significance.

	Need	Awkward	Mood	Supported	Certainty
Likelihood	.22***	-.51***	.41***	.48***	.39***
Need	--	-.13***	.12***	.22***	.18***
Awkward		--	-.35***	-.47***	-.34***
Mood			--	.49***	.40***
Supported				--	.42***
Certainty					--

Note: Correlation coefficients reflect the average correlation between measures for all participants' ratings of the five targets. *P*-values are based on a *one-sample t*-test. **p* < .05, ** *p* < .01, *** *p* < .001

Supplementary Study S1

In a replication of Study 1 in the main text, we again test if expectations of a recipient's response guide people's interest in expressing support to that person.

Methods

Participants. We recruited participants from Amazon's Mechanical Turk platform. Per our preregistration, we excluded participants who completed the survey in under 120 seconds or failed to follow instructions, yielding a final sample of 100 participants (age: $M = 33.42$, $SD = 10.25$; 47% female).

Procedure. The procedure was identical to Study 1 in the main text, though we included fewer dependent measures. We again asked participants to think about 5 specific people they might be able to express support to who were going through a complicated time, facing a tough situation, or enduring a difficult moment in their lives: a family member, friend, someone they know from work, a member of their community, and an acquaintance. We randomized the order of recipients across participants. For each recipient, participants listed their initials, indicated the precise nature of their relationship (e.g., parent, sibling, teacher), and described why this person needs support.

Participants then imagined what it would be like to send a supportive message to each person and what they would say. For each message, participants reported the extent to which each recipient needed support, how awkward the recipient would feel after reading the message and how positively or negatively the message would make the recipient feel (compared to how they normally feel). Finally, participants reported how likely they are to actually send a message to each target. Participants reported their response to each item on 11-point scales from (0) *not at all* to (10) *extremely*, with the exception of the mood measure which was rated from (-5) *much*

more negative than normal to (5) *much more positive than normal*, with the midpoint labeled as (0) *no different from normal*. Finally, participants reported their age and gender.

Results

To examine the extent to which participants' expectations about the recipients' responses were related to their likelihood of expressing support, we again used repeated measures correlations (Bakdash & Marusich, 2017). Replicating the findings of Study 1 in the main text, significant correlations indicated that participants reported being more likely to express support to the targets that they expected would respond more positively (Table S3).

Table S3. Correlation coefficients between measures and their significance in Study S1.

	Need	Awkward	Mood
Likelihood	.28*** [.18, .37]	-.61*** [-.67, -.54]	.54*** [.47, .61]
Need	--	-.06 [-.16, .04]	.11* [.01, .21]
Awkward		--	-.58*** [-.64, -.51]
Mood			--

Note. Correlation coefficients are the overall within-participant association between measures.

The 95% confidence intervals shown in brackets are estimated using the Fisher transformation.

* $p < .05$, ** $p < .01$, *** $p < .001$

As in Study 1, our pre-registered analyses for this replication used what we later learned to be a suboptimal method for calculating these correlations that relied on averaging correlations across participants. Specifically, we calculated the correlation between our measures across the

five imagined targets for each individual participant and then used those correlations as an index variable. We tested whether the resulting distributions differed significantly from an average correlation of zero using one-sample *t*-tests. Calculating the correlations between our measures in this way replicated the results of the analysis method above. Likelihood was significantly correlated with need, $r = .27$, *one-sample t*(84) = 4.89, $p < .001$, awkward, $r = -.57$, *one-sample t*(87) = -11.23, $p < .001$, and mood, $r = .53$, *one-sample t*(87) = 10.64, $p < .001$. Additionally, mood was significantly correlated with both need, $r = .16$, *one-sample t*(89) = 2.70, $p = .004$, and awkward, $r = -.55$, *one-sample t*(92) = -12.09, $p < .001$. Need was not significantly correlated with awkward, $r = -.04$, *one-sample t*(91) = -0.75, $p = .228$.

Given the collinearity between our measures, we also conducted an exploratory linear mixed model with likelihood of expressing support as the outcome variable, participant- and target-specific intercepts as random effects, and need, awkwardness, and mood as predictors. Critically, expectations of the recipients' reactions again predicted participants' reported likelihood of expressing support: how awkward the recipients would feel, $b = -0.32$, $SE = .04$, $t(466.0) = -8.30$, $p < .001$, and how positive or negative the recipients would feel, $b = 0.43$, $SE = .06$, $t(473.8) = 6.98$, $p < .001$. Unlike in Study 1 in the main text, judgments of the recipient's need also predicted likelihood of expressing support, $b = 0.35$, $SE = .05$, $t(447.1) = 7.08$, $p < .001$. Together, these results provide further evidence for our first hypothesis that expectations of how positively recipients will respond guide people's decisions to express support or not.