

# 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 well-being, but concerns about a recipient's reaction could make people reluctant to express such support. 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: Expressers may focus on how competent their support seems, whereas recipients may 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, open data, open materials, preregistered

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Nobody gets along well in life alone. Receiving support from other people is critical for maintaining a happy, healthy, and successful life (Baumeister & Leary, 1995; Levin et al., 2011). Social support benefits recipients, however, only 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 in 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 other people (Wills, 1991), both providing 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 did not constrain the type of support being expressed and instead investigated the expected versus actual outcome of whatever efforts a person makes to help someone through a time of need.

Regardless of its form, social support is so critical to people's well-being 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

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when one is recovering from ailments such as 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 well-being, 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 someone is in genuine need (Gilovich et al., 1998; Staub, 1971) or whether another person is better equipped to intervene (Latané & 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 poorly 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 from *not at all worried* to *extremely worried*. The average response was significantly above the scale midpoint, one-sample  $t$  test,  $t(131) = 4.53$ ,  $p < .001$ ,  $d = 0.39$ . The more worried people were, the less satisfied they reported being with the amount of support they expressed 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 people needing support feel better simply knowing that support is available, their health and well-being 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.

### 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 who sent supportive messages to someone they knew and who expressed 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.

In contrast, we believe that 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 whereas 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, whereas 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 people 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 other people 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 this understanding 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' well-being.

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

All experiments were approved by The University of Chicago Institutional Review Board, and all participants gave informed consent. We report results for composite measures of highly correlated items in the main text for convenience. Analyzing items separately did not meaningfully change any conclusions. We report item-level analyses in the Supplemental Material available online (see Table S1). Preregistrations, experimental data, and materials have all been made publicly available via OSF and can be accessed at <https://osf.io/w2xu8/>.

## Study 1—Expectations and Interest in Expressing Support

### Method

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

**Procedure.** We asked participants to think about five 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 with 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 these questions. These four items were averaged into a composite measure of overall certainty about expressing support ( $\alpha = .81$ ). Finally, participants reported how likely they were to actually send a message to each target. Participants reported their response to each item on an 11-point scale from 0 (*not at all*) to 10 (*extremely*); the sole exception was the mood measure, which ranged 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: Participants reported being more likely to express support to the targets that they expected would respond more positively (Table 1). Note that our preregistered analyses used what we later learned is a suboptimal method for calculating these correlations that relied on averaging correlations across participants. These analyses also confirmed our hypotheses and are reported fully in the Supplemental Material.

Given the collinearity between our measures, we also conducted an exploratory linear mixed model with

**Table 1.** Repeated Measures Correlation Coefficients Between Measures in Study 1

Variable	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. Participants rated their expectations of how much five different recipients were in need of support, how awkward the recipients would feel after reading the message, how positively or negatively the message would make the recipients feel in terms of their mood, how supported their message would make the recipients feel, their certainty about each expectation, and finally, their likelihood of expressing support to each recipient. The 95% confidence intervals (shown in brackets) were estimated using the Fisher transformation.

\* $p < .05$ . \*\*\*  $p < .001$ .

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 about expressing support as predictors. Interestingly, participants' reported likelihood of expressing support was not significantly predicted by the recipients' perceived need,  $b = 0.09$ ,  $SE = 0.06$ ,  $t(441.5) = 1.57$ ,  $p = .118$ . It was, however, significantly predicted by expectations of the recipients' reactions: how awkward the recipients would feel,  $b = -0.23$ ,  $SE = 0.04$ ,  $t(480.1) = -6.40$ ,  $p < .001$ , how positive or negative the recipients would feel,  $b = 0.34$ ,  $SE = 0.06$ ,  $t(442.5) = 5.24$ ,  $p < .001$ , and how supported the recipients would feel,  $b = 0.21$ ,  $SE = 0.06$ ,  $t(465.1) = 3.50$ ,  $p < .001$ . Participants' reported likelihood of expressing support was also significantly related to how certain they were about their expectations,  $b = 0.40$ ,  $SE = 0.07$ ,  $t(437.0) = 5.93$ ,  $p < .001$ . We replicated this overall result in another experiment using only a subset of the same items (see Study S1 in the Supplemental Material). In sum, participants' expectations about how recipients would respond to expressions of support significantly predicted their likelihood of expressing support. We next tested our hypothesis that these expectations are systematically miscalibrated.

## Study 2—Messages of Support

### Method

**Participants.** Participants were recruited through online advertisements to University of Chicago students posted by our campus laboratory. On the basis of response rates

in a similar paradigm (Kumar & Epley, 2018), we targeted and recruited a 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:  $M = 21.13$  years,  $SD = 4.88$ ; 66% female) for the analyses reported below. We do not know how much this imperfect response rate stems from participants not actually sending their emails to the intended recipients, from recipients failing to notice or receive the email for any reason, or from recipients receiving the email but then not completing the follow-up survey reporting on their own experiences. Because of ethical requirements by our university's institutional review board, only the expressers were allowed to contact the recipients. Post hoc sensitivity analyses calculated using the *pwr* package (Version 1.3-0; Champely, 2020) in R (Version 4.0.2; R Core Team) suggested that this sample size would provide 80% power to detect effects ( $d$ s) as small as 0.40 for paired-sample  $t$  tests and correlations ( $r$ s) of .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 to this person expressing support and to complete a survey about how they expect the recipient to respond. Specifically, expressers rated how awkward the recipient would feel; two items measuring the amount of warmth conveyed by their message (how sincerely and how warmly their message would 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.

After sending their email, participants rated how they themselves felt about expressing support using two different items: how awkward they felt and how positive or negative they felt. Participants also rated how close their relationship with the recipient was. All items used 11-point scales from 0 (*not at all*) to 10 (*extremely*); the exception was 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 emails that participants sent to the recipients included a message from us (as researchers) explaining that we had asked the expressers to say something supportive to whomever they wanted and that the expressers had chosen them. The message also included a survey link that led to a web page where willing recipients reported their actual experience of receiving a supportive email on the same measures the expressers used. 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 was, using the same individual items described above for the expressers.

To diminish social-desirability or reputation-management concerns among both expressers and recipients, we emphasized on the informed-consent document that their responses would “remain strictly confidential and we will never share with anyone outside of our research team.” We further explained 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 significantly on any of our measures, including age,  $t(117) = 0.668,$

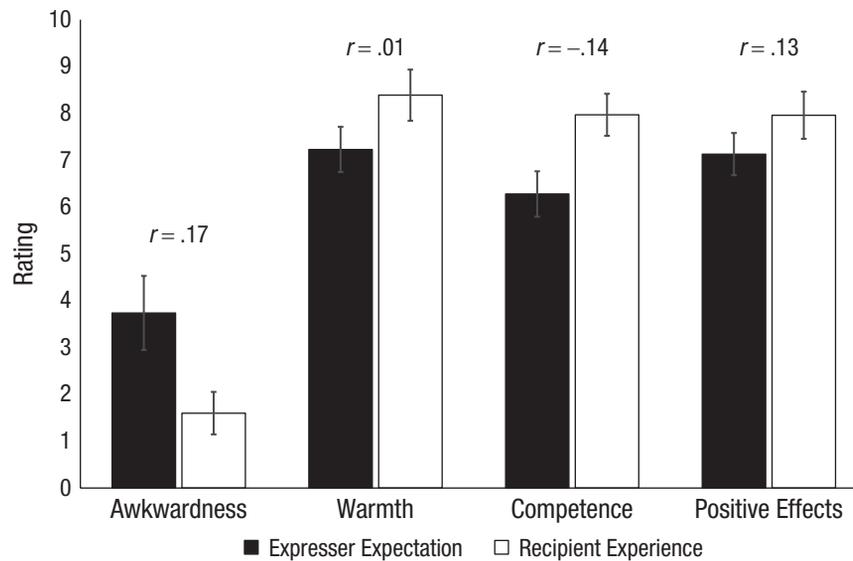
$p = .505$ ; gender,  $\chi^2(2, N = 120) = 5.56, p = .062$ ; how awkward they felt after sending the email,  $t(118) = -0.536, p = .593$ ; how positive they felt after sending the email,  $t(118) = -0.619, p = .537$ ; or how close they felt to the recipient,  $t(118) = 1.42, p = .158$ . Both groups also held similar expectations of how the recipient would respond to their email on all measures: awkwardness,  $t(118) = -0.928, p = .355$ ; warmth,  $t(118) = -0.500, p = .618$ ; competence,  $t(118) = -0.416, p = .678$ ; 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 comparing the mean with the scale midpoint,  $t(49) = 7.45, p < .001, d = 1.05$ . They also reported feeling somewhat awkward ( $M = 4.28, SD = 2.78$ ), one-sample  $t$  test comparing the mean with the scale floor,  $t(49) = 10.9, p < .001, d = 1.54$ .

Consistent with our main hypothesis, results showed that expressers underestimated how positively people receiving their support would feel (Fig. 1). Expressers expected that recipients would feel more awkward than recipients actually did, paired-samples  $t(49) = 4.99, p < .001, d = 0.71$ ; that their supportive message would convey less warmth, paired-samples  $t(49) = -3.12, p = .003, d = -0.44$ , and seem less competent, paired-samples  $t(49) = -4.69, p < .001, d = -0.66$ , than recipients perceived their message to be; and that the effects of receiving support would be less positive than recipients actually experienced, paired-samples  $t(49) = -2.58, p = .013, d = -0.36$ .

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' expectations and recipients' responses, revealing some discrimination accuracy even in the midst of mean-level miscalibration. However, we did not observe any significant correlations between expressers' expectations and recipients' reported experiences, all  $ps > .20$  (Fig. 1), suggesting that expressers had little unique insight into how the recipients of their support would respond to receiving a supportive message.

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



**Fig. 1.** Mean awkwardness of receiving a message of support, warmth conveyed by the message, competence of the message, and positive effects of receiving support, as expected by expressers and as actually experienced by recipients (Study 2). Error bars show 95% confidence intervals. The correlation between expected and actual ratings is presented for each item.

participants (range: 2–10). Interestingly, expressers were more pessimistic about how well their support would be received the more distant their relationship was to the recipient. Specifically, the more distant their relationship, the more awkwardness,  $r(48) = -.25$ ,  $p = .083$ , less warmth,  $r(48) = .36$ ,  $p = .011$ , less competence,  $r(48) = .35$ ,  $p = .013$ , 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 when 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 had 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 next recruited 51 pairs of people from the Chicago area to a campus-based laboratory to express their support

in person. Participants were recruited through online advertisements posted on our laboratory's website and to a participant database that includes both community members and students. We excluded one pair for skipping part of the study procedures, leaving us with a final sample of 50 pairs (age:  $M = 23.86$  years,  $SD = 9.34$ ; 42% female), which matched our preregistered sample size. These pairs were strangers to each other, which provided us with 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 expressers in Study 2 had more pessimistic expectations when expressing support to more distant others.

**Procedure.** We first asked each pair of participants to briefly introduce themselves to each other and then randomly assigned each participant to the role of expresser or recipient. We emphasized anonymity and confidentiality in the informed-consent document 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 the participants in each pair 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 four items measuring the severity of the situation or issue ( $\alpha = .80$ ): how serious it was, how upset it made them feel, how much they needed someone's support, and how much they would appreciate someone's support. These items were assessed on 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 rated how they expected recipients to respond to their attempt to express social support. Expressers were told that they would be answering the same questions again after the conversation and to provide their expectations 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 would be and how difficult and emotionally draining talking to recipients would be ( $\alpha = .72$ ). Two items measured how warm recipients would think expressers are: how sincere and how warm and friendly,  $r(48) = .73$ ,  $p < .001$ . Two items measured how competent recipients would think expressers 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 recipients would 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 recipients 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 min.

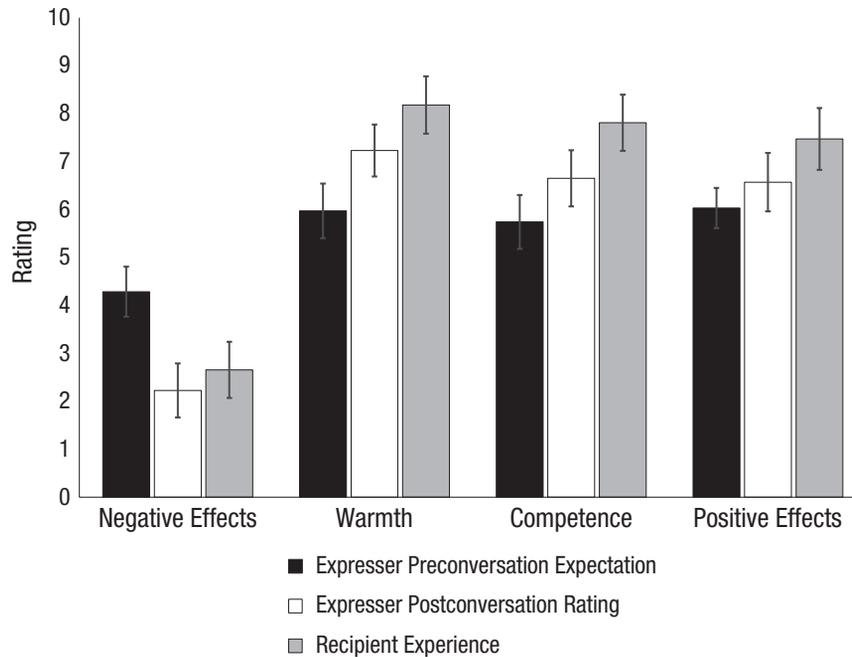
When the conversations finished, participants returned to private rooms to complete their surveys. Expressers rated how the recipient responded on the same items used before expressing their support (e.g., "how supported do you think he/she feels after your conversation?"), and recipients reported their 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:  $\alpha$ s = .80 and .77, warmth:  $r$ s = .78 and .86, competence:  $r$ s = .76 and .75, and positive effects:  $r$ s = .75 and .82, respectively. Expressers also reported the extent to which they tried to express support to the recipients, whereas recipients reported the extent to which they thought that the expressers tried to express support to them.

## Results

None of the baseline mood measures differed significantly at the beginning of the study, 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 recipients' mood:  $M = 6.22$ ,  $SD = 1.53$ ; recipients' estimation of expressers' mood:  $M = 6.18$ ,  $SD = 1.83$ ), paired-samples  $t$ s  $< 1.02$ , all  $p$ s  $> .310$ . 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 ( $Mdn = 6$ ). Expressers perceived the recipient's situation to be more severe ( $M = 7.20$ ,  $SD = 1.97$ ) than recipients themselves reported, paired-samples  $t(49) = 3.48$ ,  $p = .001$ ,  $d = 0.49$ .

To measure compliance with our experimental instructions, we asked participants in both roles to report the extent to which expressers tried to express support during the conversation. Expressers reported trying hard to express support, with 90% of responses falling above the midpoint 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-samples  $t(49) = 1.96$ ,  $p = .056$ .

Replicating the primary results from Study 2, analyses revealed that expressers again underestimated how positively recipients would respond to their expressions of support (Fig. 2). Even though they were complete strangers, recipients found the expressers' support to have fewer negative effects, paired-samples  $t(49) = 4.17$ ,  $p < .001$ ,  $d = 0.59$ ; to convey more warmth, paired-samples



**Fig. 2.** Mean negative effects of receiving support, warmth conveyed by the expresser's message, competence of the message, and positive effects of receiving support, as expected by expressers both before and after the conversation and as actually experienced by recipients (Study 3). Error bars show 95% confidence intervals.

$t(49) = -5.40, p < .001, d = -0.76$ ; to convey more competence, paired-samples  $t(49) = -4.99, p < .001, d = -0.71$ ; and to have more positive effects, paired-samples  $t(49) = -4.10, p < .001, d = -0.58$ , than the expressers expected. Expressers' reports after expressing support were also more positive than their initial expectations, suggesting that they recognized, at least to some extent, that recipients' reactions were genuinely positive. Compared with their preconversation expectations, expressers' postconversation reports revealed that they experienced fewer negative effects, paired-samples  $t(49) = 8.09, p < .001, d = 1.15$ ; thought they conveyed more warmth, paired-samples  $t(49) = -5.75, p < .001, d = -0.81$ ; thought they conveyed more competence, paired-samples  $t(49) = -3.31, p = .002, d = -0.47$ ; and thought that their support had more positive effects, paired-samples  $t(49) = -2.32, p = .025, d = -0.33$ .

Despite expressers feeling that their support was received more positively than expected, their 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, paired-samples  $t(49) = -1.11, p = .274, d = -0.16$ , expressers continued to underestimate how much warmth their support conveyed, paired-samples  $t(49) = -2.88, p = .006, d = -0.41$ ; how competent their support seemed, paired-samples  $t(49) = -3.04, p = .004, d = -0.43$ ; and the positive effects that expressing

support had, paired-samples  $t(49) = -2.77, p = .008, d = -0.39$ .

Beyond assessing whether expressers underestimated 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 and 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' expectations were highly correlated with their own ratings after they expressed support to recipients, all  $ps < .001$ . However, as in Study 2, expressers' expectations were all nonsignificantly 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 did not have great insight

**Table 2.** Correlation Coefficients Between Expressers' Preconversation Expectations, Expressers' Postconversation Ratings, and Recipients' Experiences in Study 3

Variable	Expressers' expectations and expressers' postconversation ratings	Expressers' expectations and recipients' experiences	Expressers' postconversation ratings and recipients' experiences
Negative effects	.58***	.05	.12
Warmth	.70***	.06	.36**
Competence	.56***	-.002	.19
Positive effects	.66***	.22	.49***

Note: Expressers (both before and after their conversations) and recipients rated the negative effects of receiving support, the amount of warmth conveyed by the expresser's message, the competence of the message, and the positive effects of receiving support.

\*\* $p < .01$ . \*\*\* $p < .001$ .

into how their recipients would uniquely respond to expressions of support.

## Study 4—Differing Perspectives on Support

### Method

**Participants.** We recruited 300 online participants (age:  $M = 28.3$  years,  $SD = 10.9$ ; 73% female) through a campus-based virtual laboratory operated through the Zoom video-conferencing platform. Participants were adults living in the United States who had access to a computer. This sample size was chosen a priori and preregistered. All participants passed preregistered 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 knew was going through, what kind of relationship they had with that person (family member, romantic partner, friend, someone from work, acquaintance, or stranger), how close they were to that person, and how much they thought that person needed support. Recipients answered the same questions about receiving support for an issue they were going through from a person they knew who, for whatever reason, had not yet expressed support.

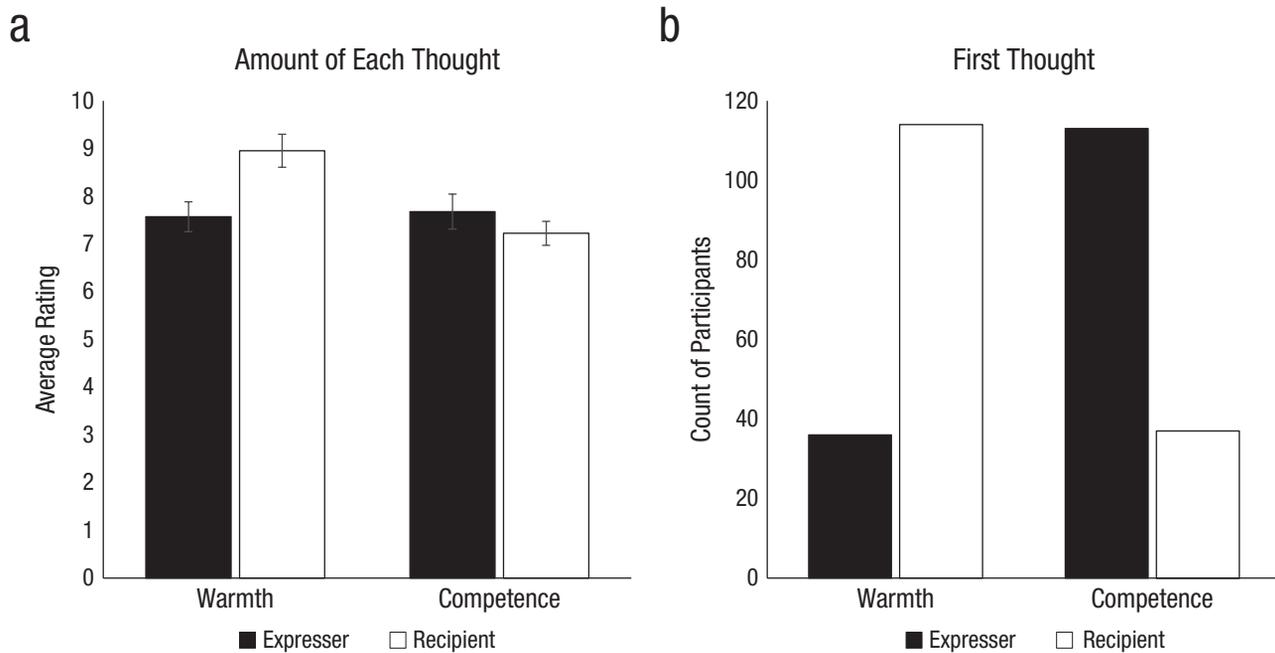
Expressers were then told to vividly imagine deciding whether or not to express support to the person they described. They rated the extent to which they would be thinking about six different things when expressing support. Three items measured thoughts related to warmth ( $\alpha = .78$ ): how genuine and sincere the recipient would think their support was, how caring and concerned about the recipient's situation they

would seem, and how grateful and appreciative the recipient would feel if the expressers expressed support to them. The other three items measured thoughts related to competence ( $\alpha = .65$ ): how useful the recipient would think their support was, how capable of solving or fixing the recipient's problem they were, and how exactly they would support the recipient—what they would actually do or say. Participants also indicated which of the six thoughts came to mind first when they imagined 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 had 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 three warmth- and three competence-related factors when receiving support, which of the six thoughts came to mind first, and the extent to which they were 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 significantly in age,  $t(298) = 0.612$ ,  $p = .541$ , or gender,  $\chi^2(2, N = 300) = 0.005$ ,  $p = .998$ . 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



**Fig. 3.** Average rating of the extent to which expressers and recipients were thinking about warmth and competence (a) and the number of expressers and recipients who reported that their first thought was a warmth or competence item (b; Study 4). Error bars in (a) show 95% confidence intervals.

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 ( $M = 8.07$ ,  $SD = 2.78$ ),  $t(298) = -0.433$ ,  $p = .665$ .

We predicted an asymmetry, expecting that expressers would be focused relatively more on competence compared with recipients and less on warmth compared with recipients. We tested this hypothesis by conducting a 2 (perspective: expresser, recipient)  $\times$  2 (thought type: warmth, competence) mixed-model analysis of variance on the extent to which participants reported focusing on different thoughts, treating perspective as a between-participants factor and thought type as a within-participants factor. We observed main effects of both thought type,  $F(1, 298) = 33.3$ ,  $p < .001$ ,  $\eta_p^2 = .100$ , and perspective,  $F(1, 298) = 6.28$ ,  $p = .013$ ,  $\eta_p^2 = .021$ . Critically, these main effects were qualified by the predicted interaction,  $F(1, 298) = 42.7$ ,  $p < .001$ ,  $\eta_p^2 = .125$ . Expressers reported thinking about competence to a similar extent as warmth,  $t(148) = 0.463$ ,  $p = .644$ , and thought about competence marginally more than recipients thought about competence,  $t(298) = 1.91$ ,  $p = .057$ ,  $d = 0.22$  (Fig. 3a). In contrast, recipients thought about warmth significantly more than competence,  $t(150) = -10.8$ ,  $p < .001$ ,  $d = -0.88$ , and thought about warmth significantly more than expressers did,  $t(298) = -6.10$ ,  $p < .001$ ,  $d = -0.70$ . 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 we analyzed participants' reports of the first thought that came to their minds (Fig. 3b). 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  $V = .513$ .

## General Discussion

Whether facing a global pandemic or dealing with life's tribulations, people rely on support from others to manage adversity. Our studies 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 with regard to both friends and strangers (Studies 2 and 3). This underestimation may relate to a perspective gap: Expressers focused relatively more on how competent

their support might seem, whereas recipients focused relatively more on the warmth it conveyed (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 whom they can support. The relationship between expresser and recipient strongly influences expectations of how effective and appropriate support is (Lahey & Orehek, 2011; Rafaeli & Gleason, 2009; Veenstra et al., 2011), but Studies 2 and 3 suggest that these expectations may be misleading. In Study 2, people were more pessimistic about the reactions of relatively distant acquaintances than 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 those of 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 well-being 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 included only people from the United States who responded to our online campus advertisements and were willing to participate in a survey or experiment about social support. People struggling with severe or chronic issues may not have been 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 because of 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 containing expressions of 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 that our results may also be useful for understanding cross-cultural differences in expressions of social support. Interdependent or collectivist cultures with low relational mobility appear to have more negative views of social support (Taylor et al., 2004). Also, compared with people from the United States, people from Asian cultures provide support less frequently (Miller et al., 2017) and are more reluctant to ask for support (Kim et al., 2008). Future research should test whether these social norms stem from cultural differences in expectations and beliefs or from meaningful differences in people's experiences 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 because of 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.

## Transparency

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*Author Contributions*

All the authors generated the ideas for the study and contributed to the study design. J. A. Dungan and D. M. Munguia Gomez collected, analyzed, and interpreted the data under the supervision of N. Epley. J. A. Dungan drafted the manuscript, and D. M. Munguia Gomez and N. Epley provided edits and revisions. All the authors approved the final version of the manuscript for submission.

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The author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

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*Open Practices*

All data and materials have been made publicly available via OSF and can be accessed at <https://osf.io/w2xu8/>. The

design and analysis plans for all the studies were preregistered on AsPredicted.org (copies of the preregistration are available at <https://osf.io/w2xu8/>). This article has received the badges for Open Data, Open Materials, and Preregistration. More information about the Open Practices badges can be found at <http://www.psychologicalscience.org/publications/badges>.



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## Supplemental Material

Additional supporting information can be found at <http://journals.sagepub.com/doi/suppl/10.1177/09567976221082942>

## References

- Bakdash, J. Z., & Marusich, L. R. (2017). Repeated measures correlation. *Frontiers in Psychology*, *8*, Article 456. <https://doi.org/10.3389/fpsyg.2017.00456>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497–529.
- Boothby, E. J., & Bohns, V. K. (2021). Why a simple act of kindness is not as simple as it seems: Underestimating the positive impact of our compliments on others. *Personality and Social Psychology Bulletin*, *47*(5), 826–840.
- Brown, S. L., Nesse, R. M., Vinokur, A. D., & Smith, D. M. (2003). Providing social support may be more beneficial than receiving it: Results from a prospective study of mortality. *Psychological Science*, *14*(4), 320–327. <https://doi.org/10.1111/1467-9280.14461>
- Champely, S. (2020). *pur: Basic functions for power analysis* (R Package Version 1.3-0) [Computer software]. <https://CRAN.R-project.org/package=pwr>
- Cohen, S., & Syme, S. L. (Eds.). (1985). *Social support and health*. Academic Press.
- Collins, N. L., & Feeney, B. C. (2004). Working models of attachment shape perceptions of social support: Evidence from experimental and observational studies. *Journal of Personality and Social Psychology*, *87*(3), 363–383.
- Cutrona, C. E. (1990). Stress and social support: In search of optimal matching. *Journal of Social and Clinical Psychology*, *9*, 3–14.
- Epley, N., & Schroeder, J. (2014). Mistakenly seeking solitude. *Journal of Experimental Psychology: General*, *143*(5), 1980–1999.
- Fiske, S. T., Cuddy, A. J., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences*, *11*, 77–83.
- Gilovich, T., Savitsky, K., & Medvec, V. H. (1998). The illusion of transparency: Biased assessments of others' ability to read one's emotional states. *Journal of Personality and Social Psychology*, *75*(2), 332–346.
- Gleason, M. E. J., & Iida, M. (2015). Social support. In M. Mikulincer & P. R. Shaver (Eds.), *APA handbook of personality and social psychology: Vol. 3. Interpersonal relations* (pp. 351–370). American Psychological Association.
- Gleason, M. E. J., Iida, M., Shrout, P. E., & Bolger, N. (2008). Receiving support as a mixed blessing: Evidence for dual effects of support on psychological outcomes. *Journal of Personality and Social Psychology*, *94*(5), 824–838.
- Horowitz, L. M., Krasnoperova, E. N., Tatar, D. G., Hansen, M. B., Person, E. A., Galvin, K. L., & Nelson, K. L. (2001). The way to console may depend on the goal: Experimental studies of social support. *Journal of Experimental Social Psychology*, *37*(1), 49–61.
- Inagaki, T. K., & Orehek, E. (2017). On the benefits of giving social support: When, why, and how support providers gain by caring for others. *Current Directions in Psychological Science*, *26*(2), 109–113. <https://doi.org/10.1177/0963721416686212>
- Kim, H. S., Sherman, D. K., & Taylor, S. E. (2008). Culture and social support. *The American Psychologist*, *63*(6), 518–526.
- Kumar, A., & Epley, N. (2018). Undervaluing gratitude: Expressers misunderstand the consequences of showing appreciation. *Psychological Science*, *29*(9), 1423–1435. <https://doi.org/10.1177/0956797618772506>
- Kumar, A., & Epley, N. (2020). A little good goes an unexpectedly long way: Underestimating the positive impact of kindness on recipients. In J. Argo, T. M. Lowrey, & H. J. Schau (Eds.), *NA - advances in consumer research* (Vol. 48, pp. 968–973). Association for Consumer Research.
- Lakey, B., & Orehek, E. (2011). Relational regulation theory: A new approach to explain the link between perceived social support and mental health. *Psychological Review*, *118*(3), 482–495. <https://doi.org/10.1037/a0023477>
- Latané, B., & Nida, S. (1981). Ten years of research on group size and helping. *Psychological Bulletin*, *89*(2), 308–324.
- Levin, D. Z., Walter, J., & Murnighan, J. K. (2011). Dormant ties: The value of reconnecting. *Organization Science*, *22*(4), 923–939.
- Maisel, N. C., & Gable, S. L. (2009). The paradox of received social support: The importance of responsiveness. *Psychological Science*, *20*(8), 928–932. <https://doi.org/10.1111/j.1467-9280.2009.02388.x>
- McClure, M. J., Xu, J. H., Craw, J. P., Lane, S. P., Bolger, N., & Shrout, P. E. (2014). Understanding the costs of support transactions in daily life. *Journal of Personality*, *82*(6), 563–574.
- Miller, J. G., Akiyama, H., & Kapadia, S. (2017). Cultural variation in communal versus exchange norms: Implications for social support. *Journal of Personality and Social Psychology*, *113*(1), 81–94.
- Rafaeli, E., & Gleason, M. E. (2009). Skilled support within intimate relationships. *Journal of Family Theory & Review*, *1*(1), 20–37.
- Rand, D. G., Peysakhovich, A., Kraft-Todd, G. T., Newman, G. E., Wurzbacher, O., Nowak, M. A., & Greene, J. D. (2014). Social heuristics shape intuitive cooperation. *Nature Communications*, *5*, Article 3677. <https://doi.org/10.1038/ncomms4677>

- R Core Team. (2020). *R: A language and environment for statistical computing* (Version 4.0.2) [Computer software]. <http://www.R-project.org>
- Sandstrom, G. M., & Dunn, E. W. (2014a). Is efficiency over-rated? Minimal social interactions lead to belonging and positive affect. *Social Psychological and Personality Science*, 5(4), 437–442.
- Sandstrom, G. M., & Dunn, E. W. (2014b). Social interactions and well-being: The surprising power of weak ties. *Personality and Social Psychology Bulletin*, 40(7), 910–922.
- Small, M. L. (2017). *Someone to talk to*. Oxford University Press.
- Staub, E. (1971). Helping a person in distress: The influence of implicit and explicit “rules” of conduct on children and adults. *Journal of Personality and Social Psychology*, 17(2), 137–144.
- Stroebe, W., & Stroebe, M. (1996). The social psychology of social support. In E. T. Higgins & A. W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 597–621). Guilford Press.
- Taylor, S. E., Sherman, D. K., Kim, H. S., Jarcho, J., Takagi, K., & Dunagan, M. S. (2004). Culture and social support: Who seeks it and why? *Journal of Personality and Social Psychology*, 87, 354–362.
- Uchino, B. N. (2009). Understanding the links between social support and physical health: A life-span perspective with emphasis on the separability of perceived and received support. *Perspectives on Psychological Science*, 4(3), 236–255. <https://doi.org/10.1111/j.1745-6924.2009.01122.x>
- Uchino, B. N., Cacioppo, J. T., & Kiecolt-Glaser, J. K. (1996). The relationship between social support and physiological processes: A review with emphasis on underlying mechanisms and implications for health. *Psychological Bulletin*, 119(3), 488–531.
- Veenstra, A. L., Lakey, B., Cohen, J. L., Neely, L. C., Orehek, E., Barry, R., & Abeare, C. A. (2011). Forecasting the specific providers that recipients will perceive as unusually supportive. *Personal Relationships*, 18(4), 677–696.
- Warneken, F., & Tomasello, M. (2009). The roots of human altruism. *British Journal of Psychology*, 100(3), 455–471.
- Wills, T. A. (1991). Social support and interpersonal relationships. In M. S. Clark (Ed.), *Prosocial behavior* (pp. 265–289). SAGE.
- Wojciszke, B. (1994). Multiple meanings of behavior: Construing actions in terms of competence or morality. *Journal of Personality and Social Psychology*, 67(2), 222–232.
- Zaki, J., & Mitchell, J. P. (2013). Intuitive prosociality. *Current Directions in Psychological Science*, 22(6), 466–470. <https://doi.org/10.1177/0963721413492764>
- Zhao, X., & Epley, N. (2021). Insufficiently complimentary? Underestimating the positive impact of compliments creates a barrier to expressing them. *Journal of Personality and Social Psychology*, 121(2), 239–256.