

Can Emotional Support Be Paid Forward with Charitable Donations?

Undergraduate Research Thesis

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by

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### **Abstract**

Paying it forward refers to the tendency for people who receive help from one person to help others in general later. Past research shows that instrumental support, which provides tangible benefits, can lead to paying it forward because of gratitude. However, there are different types of support. We tested whether receiving emotional support, which communicates caring towards a person, increases the likelihood of paying it forward. We also tested whether receiving support in certain contexts could affect paying it forward. Because previous research has linked high compassionate goals with providing social support, we also hypothesized that compassionate goals might moderate this effect. Participants completed measures of compassionate goals. Afterwards, participants completed a stressful or non-stressful task, and either received or did not receive emotional support. Finally, we provided participants with the opportunity to donate as a measure of paying it forward. Analyses revealed that regardless of the stressfulness of the task, participants felt more gratitude when they received support. However, there was no effect of support or stress on donations. Furthermore, compassionate goals did not moderate this relationship. We discuss possible reasons for null findings and their implications.

## Introduction

When people receive a gift from another person it is a common expectation that the receiver will pay the giver back. This norm of reciprocity is common in exchanges between people (Diekmann, 2004). However, people who receive gifts may not only pay back these received benefits to the giver. They also may become more likely to provide benefits to others, a tendency called paying-it-forward (Gray, Ward, & Norton, 2014). Receiving help from others makes people more likely to spend time helping and sacrifice monetary gains for strangers (Bartlett & DeSteno, 2006; DeSteno, Bartlett, Baumann, Williams, & Dickens, 2010). Also, paying it forward is not based on a norm of reciprocity; people reminded of the help they received are less likely to pay forward than participants reminded of their support (Bartlett & DeSteno, 2006).

Most researchers examine paying forward in a positive context (Bartlett & DeSteno, 2006; DeSteno et al., 2010). In these studies, people receive support from someone and become more likely to help others in general. However, people also pay forward unfair treatment. For example, people who receive unfair monetary offers from others become more likely to give others unfair monetary offers and this effect is even stronger than paying forward generous behavior (Gray et al., 2014). Negative emotions in response to greedy offers increase the likelihood of paying forward greedy behavior (Gray et al., 2014). In contrast, gratitude towards received support predicts the likelihood that people pay- forward generous behavior (Bartlett & DeSteno, 2006; DeSteno et al., 2010), consistent with the idea that gratitude is an other-oriented emotion that serves as a moral motivator, leading grateful people to help others (McCullough, Kilpatrick, Emmons, & Larson 2001).

Current research on paying it forward has only examined the receipt and provision of instrumental support, i.e., tangible resources or relevant information that assists with problem solving (Morelli, Lee, Arnn, & Zaki, 2015). Research on paying forward other types of support is scant. People can receive two distinct types of support: emotional support and instrumental support (Morelli et al., 2015). Emotional support communicates a sense of caring or empathy to a person (Morelli et al., 2015).

To my knowledge, no studies have considered the role of emotional support in paying it forward. For the present study, we examined whether people pay forward emotional support by giving instrumental support.

### **Gratitude**

As noted, gratitude is an important factor in paying it forward (Bartlett & DeSteno, 2006; DeSteno et al., 2010). Gratitude can also affect the provision of emotional and instrumental support. Past research by Emmons & McCullough (2003) found that participants instructed to take a grateful mindset provided more emotional support and marginally more instrumental support. If receiving emotional support engenders gratitude it may increase the likelihood of paying forward instrumental support. While people often think of gratitude as a response to receiving tangible benefits (e.g. money), people may also feel increased gratitude from other types of benefits, such as emotional support.

One recent study found that actions that communicate affiliation (e.g., friendly touch) could engender gratitude in the recipient, regardless of whether the participant received a tangible benefit (Simão, & Seibt, 2015). Furthermore, there is a large body of literature showing that emotional support can increase closeness with others. Hays (1984) found that received emotional support distinguishes close and non-close friends. In addition, receiving emotional

support predicts increased closeness in romantic relationships (Gleason, Iida, Shrout, & Bolger, 2008). Based on this, it seems plausible that people receiving emotional support would feel more gratitude for the support they received and in turn, be more likely to pay it forward.

### **The Importance of Context**

While emotional support can engender benefits like closeness, it can also lead to negative effects. In one study, receiving emotional support increased closeness towards others and negative emotions (Gleason et al., 2008). If people feel more distressed at receiving support it seems likely that they would not appreciate the support and therefore not pay forward.

The reason that emotional support may increase negative reactivity is that it reduces the self-efficacy of the receiver (Bolger & Amarel, 2007). In addition, participants may feel increased negative reactivity towards support when they do not need the support. One study by Brock & Lawrence (2009) found that both under-provision and over-provision of emotional support led to higher rates of marital dissatisfaction in both husbands and wives. While this shows that emotional support is better when it meets the needs of the receiver, the question remains: under what conditions is emotional support needed? Cutrona (1990) suggested the type of support is best when it matches the context of the stressful event. Instrumental support can prevent controllable stressful situations, such as when a friend gives another friend money when they need to pay rent. However, emotional support can help another deal with stressful events that are uncontrollable, such as the comfort a person provides for a classmate who has just failed a test. In support of this hypothesis, provision of support that does not match what the receiver wants predicted increased marital dissatisfaction (Cutrona, Shaffer, Wesner, & Gardner, 2007)

Receiving emotional support can reduce stress in response to negative evaluations and going through a stressful task (Lepore, Allen, & Evans, 1993). Stress in reaction to

uncontrollable events can reduce the likelihood of providing instrumental support. Research by Vinkers et al. (2013) found that participants who completed an uncontrollably stressful task were less likely to donate to a charity. If emotional support buffers stress, it may reduce reluctance to donate and therefore lead a person to pay forward more in comparison to those who are stressed and do not receive support.

### **Compassionate and Self-Image Goals**

The interpersonal goals a person has may play a role in their decision to pay forward after receiving support. Compassionate goals are interpersonal goals that reflect the intention to be constructive and supportive of others, and not harm them (Crocker & Canevello, 2008). People with self-image goals want to promote a positive image of themselves in their own and others' eyes (Crocker & Canevello, 2008). Past research on these goals suggests that they predict the receipt and provision of social support (Crocker & Canevello, 2008). Specifically, people with high compassionate goals are more likely to give and receive social support, whereas having high self-image goals attenuates this effect (Crocker & Canevello, 2008). While previous studies on these goals have not differentiated between emotional and instrumental support, it seems likely that compassionate goals could affect whether a person who receives support would be willing to provide support to others. People with high compassion for others experience less stress after receiving emotional support during a stressful task. This suggests that having high compassionate goals may lead a person to pay forward more after receiving emotional support during a stressful task (Cosley, McCoy, Saslow, & Epel, 2010). We hypothesize that people who have high compassionate goals and receive emotional support will be more likely to pay forward.

### **Hypotheses**

- H1A: Participants who receive emotional support will feel more gratitude, which will increase the likelihood of paying it forward.
- H1B: Participants who receive emotional support will feel more gratitude and pay forward only when they receive support in a stressful context.
- H2: Compassionate goals will moderate this relationship such that those high in compassionate goals will donate more after receiving support

We sought to test these hypotheses using an experimental paradigm. The experiment was a 2 (Support: support vs no support) x 2 (Difficulty: hard vs easy task) between subjects design. Participants either received or did not receive emotional support from a confederate in the form of supportive messages before and after completing a hard or easy arithmetic task. After ostensibly completing the study, the experimenter asked the participant if they would like to donate any of the compensation they received for participating in the study. This donation served as a measure of paying it forward. A previous study by Jung, Nelson, Gneezy, & Gneezy (2014) found no differences between paying forward to one individual or multiple individuals.

## **Methods**

### **Participants**

Participants were 249 undergraduates participating in an introductory psychology course at The Ohio State University. We recruited participants through the Research Experience Program (REP) system. All participants received both \$4 and class credit for participating in the study.

### **Procedure**

Each session of the study involved 1 participant and 1 confederate. First, the participant and the confederate entered the lab. Participants believed that the study would require them to

work with a partner to complete different tasks. After receiving consent, the experimenter informed the participant and the confederate that they should get to know each other for 5 minutes since they would be working together for the experiment. The experimenter left the room during this time. After 5 minutes, the experimenter returned and told the participant and confederate they would participate in a random drawing to decide who would complete the tasks. Then both the participant and the confederate “randomly” drew a piece of paper to determine who would will complete a mental arithmetic activity and who would complete two writing tasks instead. The role assignments seemed random but were predetermined; Both pieces of paper had the words “arithmetic task” on them and confederates would verbally state they received the paper for the sentence selection task. After the drawing, the participant and the confederate completed measures of compassionate and self-image goals. After completing the measures, the experimenter informed the participant and confederate that it was time to start their tasks. The participant read instructions stating they would complete a difficult or easy mental arithmetic task. While the participant read the instructions for their task, the confederate ostensibly worked on the sentence selection task. The sentence selection task served as the manipulation for emotional support. The confederate always wrote down 5 predetermined supportive messages before the participant completed their arithmetic task. The confederate either gave these supportive messages to the participant before the arithmetic task or not at all. In addition, the experimenter told the confederate to observe the participant completing the arithmetic activity.

We used an adapted version of the Trier Social Stress Test as our stress manipulation (Kirschbaum, Pirke, & Hellhammer, 1993). During the hard mental activity, the experimenter asked the participant to count down by 17 from 1131 for 2 minutes. In addition, the experimenter asked the participant to count faster every 30 seconds and made the participant start over if they



made a mistake. For the easy task, the instructions were the same, except participants counted down by 2. Once the participant completed the arithmetic activity, the experimenter instructed the confederate to complete the second part of their sentence selection task. The confederate wrote down 5 more supportive messages. A confederate who provided support before the task once again gave supportive messages to the participant. A confederate who did not provide support before the task did not give the supportive messages to the participant after the task. Subsequently, the participant and confederate completed a variety of measures. Once the participant completed the survey, he or she read a fake debriefing, and the experimenter told the participant they completed the experiment. After leaving the lab, the experimenter gave the participant \$4. Once the participant received compensation, the experimenter informed the participant that our lab was collecting money for a student aid fund and that he or she could donate any of their compensation to the fund. Experimenters left the hallway, to avoid effects of social desirability. Before the participant left the hallway, a 3<sup>rd</sup> experimenter fully debriefed him or her.

## **Measures**

### **Pre-manipulation Variables**

We measured **compassionate goals** with a modified version the measure developed by Crocker & Canevello (2008). Items began with the phrase “In the past week in the area of friendships, how much did you want to or try to...” and included items like “Have compassion for your friends’ mistakes and weaknesses.” and “Be supportive of your friends”. ( $\alpha=.80$ ).

We measured **self-image goals** with a modified version of the measure developed by Crocker & Canevello (2008). Items began with the phrase “In the past week in the area of friendships, how

much did you want to or try to..." and included items like "Avoid showing your weaknesses to your friends" and "Get your friends to acknowledge your positive qualities." ( $\alpha=.78$ ).

### **Post- manipulation variables**

We measured **gratitude** using a 3-item scale developed by Bartlett & DeSteno (2006). We asked participants to "respond to the following items using the number that best reflects [their] own beliefs". The items were "How 'appreciative do you feel toward the other participant?" "How positive do you feel toward the other participant?" and "How grateful do you feel toward the other participant?". This measure had high reliability ( $\alpha = .87$ ).

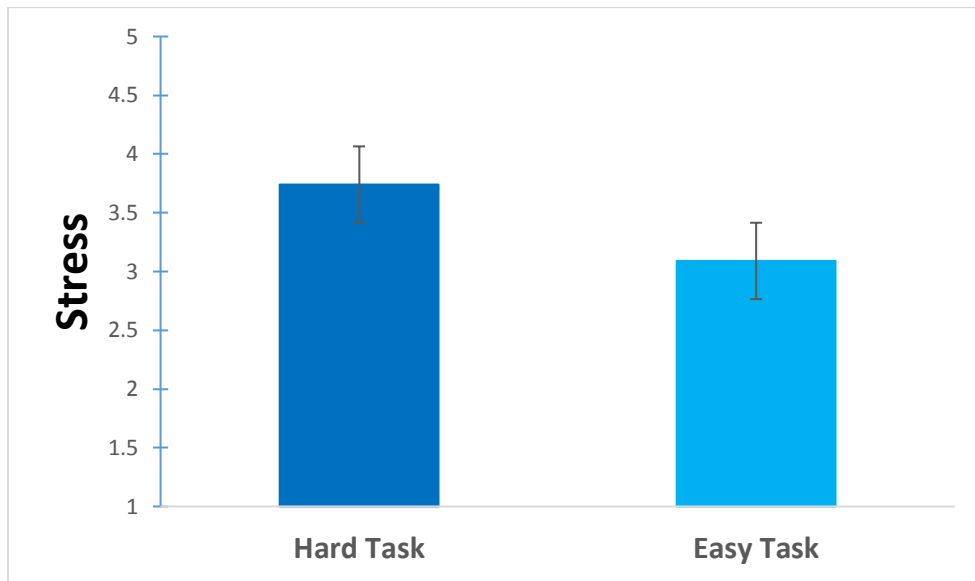
We combined the ego emotions developed by Crocker & Canevello, (2008), as well as the PANAS scale developed by Watson, Clark & Tellegen, (1988) to measure **Positive and Negative Affect**. We asked participants, "When you completed the tasks in this study with your partner today, to what extent did you feel...". Sample positive items included "proud," "happy," and "grateful." Sample items of negative emotions were "upset," "anxious," "confused," and "stressed." ( $\alpha=.92$ )

## **Results**

### **Manipulation Check**

A 2 (support vs no support) x 2 (hard vs easy task) ANOVA was performed to examine if the manipulation of task difficulty affected stress and whether emotional support buffered stress. The DV was the item "stressed" in the emotion measure. The main effect of difficulty on stress was significant,  $F(1,245) = 15.55, p<.001$ , indicating higher stress among participants who completed the difficult task ( $M=3.74, SD=1.24$ ) than those who completed the easy task ( $M=3.09, SD=1.32$ ) (see Figure 1). The main effect of support and the interaction between

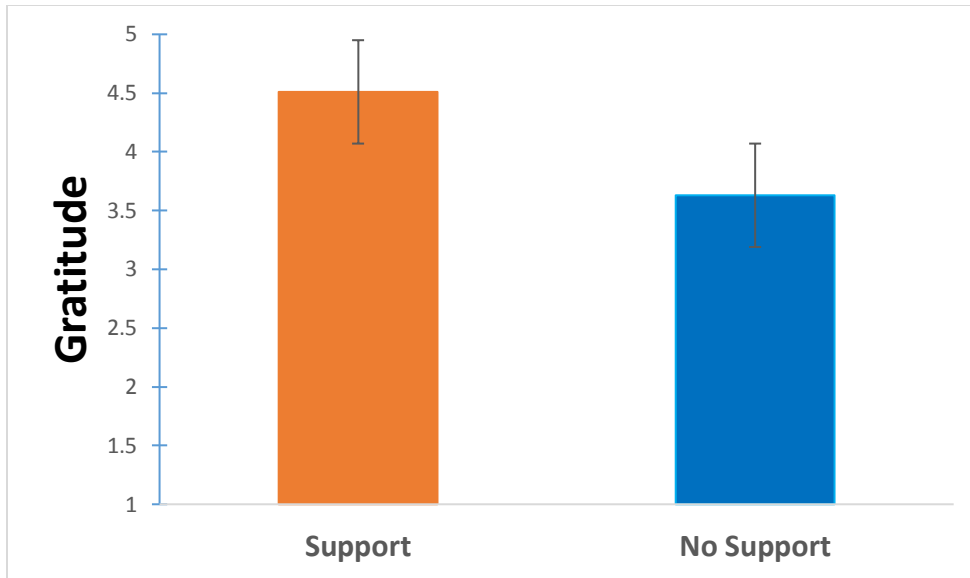
support and difficulty were not significant (all  $p$ 's > .05). Thus, emotional support did not significantly reduce stress for participants who completed the difficult task.



*Figure 1:* Main effect of task difficulty on the stress of participants, such that participants who completed the hard task felt more stress.

### **Gratitude**

A 2 (support vs no support) x 2 (hard vs easy task) ANOVA tested the main effects of support and difficulty and their interaction on gratitude. The main effect of support on gratitude was significant,  $F(1,245) = 91.68$ ,  $p < .001$ , indicating that participants who received support ( $M=4.51$ ,  $SD=.59$ ) felt more grateful than those who did not receive support ( $M=3.63$ ,  $SD=.85$ ) (see Figure 2). The main effect of difficulty and the Support X Difficulty interaction were not significant (all  $p$ 's > .3). These results are consistent with hypothesis 1A, that participants feel more gratitude at receiving emotional support regardless of task difficulty.



*Figure 2:* Main effect of support such that participants who received emotional support felt more gratitude than participants did not receive support.

### **Donations**

A 2 (support vs no support) x 2 (hard vs easy task) ANOVA tested the main effects of support and difficulty and their interaction on the amount donated. The main effect of support on donations was not significant  $F(1,245) = .360, p = .54$  indicating that participants who received support ( $M = 1.19, SD = 1.55$ ) did not donate more than those who did not receive support ( $M = 1.31, SD = 1.64$ ). The main effect of difficulty was not significant,  $F(1,245) = .909, p = .34$ ; participants who completed the difficult task ( $M = 1.35, SD = 1.66$ ) did not donate significantly more than those who completed the easier task ( $M = 1.16, SD = 1.52$ ). The interaction was not significant,  $F(1,245) = .060, p = .80$  (see Figure 3). This is inconsistent with both hypotheses that suggested receiving emotional support would increase paying forward.

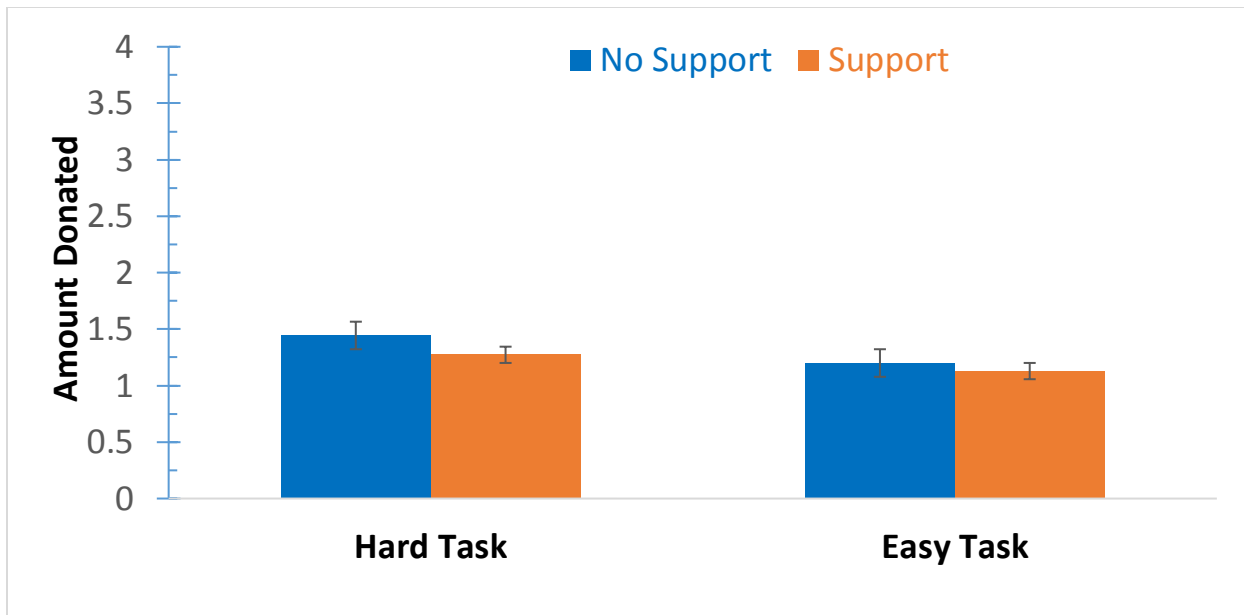


Figure 3: Amount donated as a function of task difficulty and support received

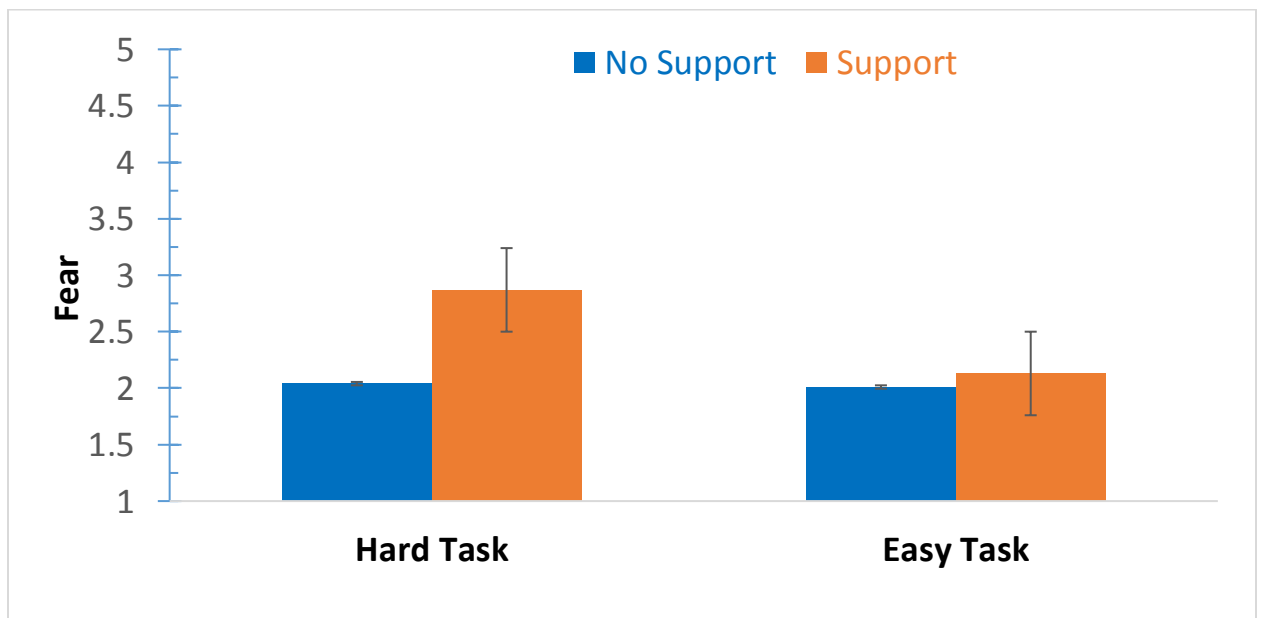
### Negative Affect

Because we did not replicate previous findings that gratitude predicts prosocial behavior, I explored whether received emotional support dampens the desire to pay it forward by increasing negative emotions. A 2 (support vs no support) x 2 (hard vs easy task) ANOVA found no effect of support,  $F(1,245) = 1.60, p=.20$ , on negative emotion. Unsurprisingly, there was a main effect of task difficulty,  $F(1,245) = 18.71, p<.001$ , such that participants who completed the difficult task ( $M=2.82, SD=.88$ ) felt more negative emotions than participants who completed the easy task ( $M=2.35, SD=.75$ ). The interaction between support and fear was not significant  $F(1,245)= 1.642, p=.20$ .

### Fear

To test whether fear, in particular, might dampen the effects of receiving support on donations, we created a composite of 3 items (fearful, scared, & afraid,  $\alpha= .90$ ). A 2 (support vs no support) x 2 (hard vs easy task) ANOVA revealed a main effect of support on fear,  $F(1,245)=$

10.75,  $p=.001$ , such that participants who received support felt more fear ( $M=2.49$ ,  $SD= 1.25$ ) than participants who did not receive support ( $M=2.02$ ,  $SD= 1.05$ ). The effect of difficulty on fear was significant,  $F(1,245)= 7.10$ ,  $p<.001$ , such that participants who completed the difficult task ( $M= 2.50$ ,  $SD=1.29$ ) felt more fear than participants who completed the easy task ( $M= 2.07$ ,  $SD=1.04$ ). There was also a significant interaction between support and difficulty  $F(1,245) =5.96$ ,  $p<.05$  (see Figure 4). Tukey's HSD test indicated that participants who received emotional support and completed the hard task ( $M=2.87$ ,  $SD=1.30$ ) felt significantly more fear in comparison to participants who received support and completed the easy task ( $M= 2.13$ ,  $SD=1.09$ ), participants who received no support and completed the easy task ( $M=2.01$ ,  $SD= .99$ ), and participants who did not receive support and completed the difficult task ( $M= 2.04$ ,  $SD=1.13$ ). No other conditions significantly differed from each other.



*Figure 4:* Support and task difficulty interact, such that participants completing the difficult task and receive support feel more fear than participants in any other condition.

### Compassionate Goals

To test whether compassionate goals interacted with the receipt of support, we used model 1 of PROCESS. There was not a significant interaction between support and compassionate goals (all  $p$ 's > .05). Participants high in compassionate goals did not pay forward significantly more than participants with low compassionate goals did. To test whether compassionate goals may further interact, we included a person's compassionate goals in the past week, receiving vs not receiving emotional support, and the stressful vs non-stressful task in PROCESS model 3. There was not a significant 3-way interaction between compassionate goals, support, and task difficulty (all  $p$ 's > .6). Participants both high and low in compassionate goals did not differ in their choice to pay forward in relation to the stressfulness of the task and the receipt of support.

### **Discussion**

Despite the fact that emotional support engenders gratitude, receiving emotional support does not increase paying forward. In addition, receiving emotional support did not significantly reduce stress for participants completing the stressful task. Compassionate goals did not affect paying forward and did not affect the likelihood paying forward regardless of receipt of support and task difficulty. Lastly, participants who completed a stressful task and received support felt more fear than participants in any other condition did.

It is odd that participants felt gratitude when they received support, but did not pay forward as this contradicts previous research (Bartlett & DeSteno, 2006; DeSteno et al., 2010). Some of our results may explain these contradictory findings. Past research shows that a positive mood manipulation reduces the desire to pay forward greedy behavior (Gray et al., 2014). While the present study only examined paying forward in a positive context, it seems plausible that the increased fear from receiving emotional support would blunt the desire to donate, even if the participant felt grateful. Since receiving emotional support increased fear for participants

completing a difficult task, this seems to explain why these participants did not pay forward. One possible reason emotional support increased fear for participants completing the stressful task is that they did not want to seem inferior to someone who just provided them with support. Another possible reason is that the emotional support provided to the participant was visible. Visible support is support that the receiver notices or perceives as support. Invisible support is support that is unnoticed or not perceived by receivers. An example of invisible support could be to state in a friend's presence that they have nothing to worry about on a difficult task without directly speaking to the friend. The friend may not construe this action as supportive even though it still conveys support to the friend. Past research indicates that visible emotional support is not as beneficial as invisible support. Visible support may actually increase negative reactivity because it may reduce the receiver's efficacy. In support of this, invisible support more effectively blunts negative reactivity than visible support (Bolger & Amarel, 2007). The fact that participants received visible support in our study could also explain why emotional support did not buffer the participants' stress. However, receiving support in the easy condition increased gratitude, but not fear, and these participants still did not pay forward the support they received more than any other condition. These results suggest that gratitude may not be as powerful of a determinant of paying it forward as previously thought. It could be that the features of emotional support do not motivate the receiver to pay forward with instrumental support. It seems that either the context in which people receive support (controlled vs uncontrollable) or the consequences of receiving one type of support vs another (emotional vs instrumental) could explain why participants did not pay forward in our study. However, I am unaware of any past research that has sufficiently examined how people perceive receiving emotional vs instrumental support in stressful situations. Only examining how receiving emotional and instrumental support affects stress is



not sufficient to understand this problem. Bolger & Amarel (2007) found no differences between receiving emotional and instrumental support and their effects on stress. Examining other variables to see what differentiates how people perceive the receipt of instrumental vs emotional support may better explain these effects.

In addition, compassionate goals did not predict paying it forward. One possible reason is our measure of compassionate goals was not strong enough to capture a person's compassionate mindset. We only asked participants about their compassionate goals towards their friends. However, a person's compassion towards their friends differs from their compassion towards others in general, which is what past research shows to be more beneficial when receiving emotional support (Sprecher & Fehr, 2005; Cosley et al., 2010). A person's general compassionate goals may be a better predictor of whether they will pay forward after receiving emotional support.

Furthermore, we did not replicate the previous finding by Vinkers et al. (2013) showing that participants completing a stressful task were less likely to donate to charity. Differences between our manipulation of stress and theirs may explain this discrepancy. Vinkers et al. (2013), both the stressful and non-stressful condition required participants to complete the same cognitively taxing tasks. However, the experimenter in Vinkers et al. (2013) told participants in the stress condition that a panel of judges would evaluate them while they complete the task. It could be that the socio-evaluative aspect of stress vs the cognitively demanding factor was the reason we failed to replicate the results of the previous study.

Future studies should examine the features of receiving emotional support vs instrumental support to explain why people pay forward instrumental support, but not emotional support, with instrumental support. Future research should also examine whether invisible

support could reduce the negative reactivity of receiving support and therefore increase paying it forward. In addition, future studies should manipulate stress in a socio-evaluative context as opposed to a cognitively demanding task to replicate the previous research by Vinkers et al (2013). Lastly, future research should test different variations on the role of emotional support and paying it forward. For example, do people pay forward emotional support with more emotional support? Can people pay forward instrumental support forward with emotional support? Both of these questions present useful avenues of analysis to further understand not only the results of this study, but also the underlying mechanisms of paying it forward.

Overall, the present research provides useful insight into the nature of both supportive exchanges and how people react to support. It appears that gratitude towards a received benefit is not sufficient to lead a person to pay it forward. In addition, receiving support in certain situations has negative consequences, such as increased fear. This research shows that the support we provide to others may not always motivate them to support people. In fact, providing support to others may even make them feel worse in stressful situations. Furthering our understanding of the antecedents and consequences of receiving and providing support is an important part of discovering the ways in which we can create both supportive and beneficial communities for all individuals.

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