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# Effects of benefactor type on gratitude and indebtedness

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EFFECTS OF BENEFACTOR TYPE ON GRATITUDE AND INDEBTEDNESS

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A Thesis

Presented To

Eastern Washington University

Cheney, Washington

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In Partial Fulfillment of the Requirements

For the Degree

Master of Science in Psychology

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By

Trese Janette McLaughlin

Spring 2018

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### **Abstract**

Gratitude can be a strong emotion, as can be indebtedness. Although historically in the social sciences gratitude and indebtedness have been equated with each other, situations may differentially affect these emotions. One situational aspect that may impact these emotions differentially is the type of benefactor; an individual, independent institution, or a related institution. Does the type of benefactor impact gratitude responses? The primary purpose of this study was to evaluate this question. Using a scenario methodology, I manipulated type of benefactor and cost of the benefit to the benefactor. With this study, I hope to gain more knowledge of gratitude and indebtedness and how different situations affect the levels of these emotions. Because well-being has a strong link to gratitude, this study provides additional information about factors that may enhance gratitude. A main effect for type of benefactor was found, such that participants in the individual benefactor condition reported higher gratitude responses compared to the independent and related institution benefactor conditions. This difference was explained by appraisals of whether individuals felt that the benefactor exceeded their obligations: they felt that the individual benefactor exceeded their obligations more than did the university. However, cost to the benefactor did not have an impact on gratitude in any of the conditions. As in past studies, there was a large main effect for type of emotion, such that participants reported far more gratitude than indebtedness in response to the benefit. Indebtedness followed the similar trend as gratitude, though not at a significant level.

*Keywords:* gratitude, benefactor, indebtedness, individual, institution, well-being

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## BENEFACTOR TYPE ON GRATITUDE AND INDEBTEDNESS

### **Effects of Benefactor Type on Gratitude and Indebtedness**

In the past, gratitude was overlooked by many psychologists and was not a main focus for research. Recently, gratitude has been brought into the spotlight as a focus of research all over the world. In light of this new research, gratitude has been found to be a key predictor of well-being (Emmons, & McCullough, 2003). Thus, finding ways to increase gratitude and therefore help promote well-being should be of great importance to researchers (Elosúa, 2015; O' Leary & Dockray, 2015; Watkins, Woodward, Stone, & Kolts, 2003). One example of situations when individuals experience feelings of gratitude is when they receive a gift, or someone does them a favor. Often indebtedness is a feeling that can also come up in these situations (Mathews & Green, 2010).

The purpose of this study was to examine whether having a benefactor who is an individual, an independent institution, or a related institution would have an impact on the beneficiary's levels of gratitude and indebtedness. I also investigated if the cost to the benefactor has any effect on the beneficiary's levels of gratitude and indebtedness. Because some studies have found that cost to the benefactor enhances gratitude (e.g., Tesser, Gatewood, & Driver, 1968) and this is typically felt to be one of the three appraisals important to gratitude responses (Wood, Maltby, Stewart, Linley, & Joseph, 2008), I included a manipulation of cost to further investigate the importance of this appraisal.

### **Importance of Gratitude to Well-Being**

Gratitude is an important aspect of well-being. When we experience feelings of happiness or joy one can say our well-being is at a higher level. Individuals who have a higher disposition of gratitude, those who feel grateful more often, are likely to also

experience positive emotions more often (McCullough, Emmons, & Tsang, 2002). Those with higher dispositional gratitude also experience higher satisfaction with life. Thus, psychological well-being is a positive side effect of gratitude, as well as physical and spiritual well-being (Elosúa, 2015).

Individuals high in trait gratitude have also been shown to have higher levels of happiness and well-being (e.g., Watkins, Woodward, Stone, & Kolts, 2003). Trait gratitude is simply one's disposition for gratitude; individuals high in this trait experience gratitude frequently over a wide diversity of situations. In this particular study, participant self-report measures showed a strong relationship between dispositional gratitude, happiness, and well-being. It was also found that gratitude interventions can improve one's immediate mood state. From this research it was unclear if gratitude causes happiness, or if happiness causes gratitude, but a clear connection between the two were found. Since this study has been published, many other studies have also shown a strong relationship between trait gratitude and subjective well-being (for a review, see Watkins, 2014).

Gratitude has also been found to reduce feelings of depression and stress during a life transition (Wood, Maltby, Gillet, Linley, & Joseph, 2008). Wood, Maltby, Gillet et al. used the Gratitude Questionnaire-6 (GQ-6: McCullough et al., 2002) to examine participants' gratitude. This measure also assesses trait gratitude and has been found to strongly correlate with well-being (e.g., McCullough et al., 2002). The results from Wood, Maltby, Gillet et al.'s study indicated that participants feeling gratitude during a life transition over a three-month period showed lower levels of depression and stress over time. These prospective findings offer stronger evidence in support to the theory that

gratitude causes improvements in subjective well-being.

To provide more definitive support for the idea that gratitude enhances well-being, true experimental studies are needed. O'Leary and Dockray (2015) conducted a gratitude intervention study for three consecutive weeks. For participants in the gratitude condition, they were asked to list up to five things they were grateful for. They were also asked to complete a gratitude reflection, which was to write about one thing they were grateful for. Listing five grateful things and writing a gratitude reflection were completed four times a week. Compared to a control condition, the gratitude intervention showed an increase in participant happiness. Results also indicated protective factors of negative feelings, such as showing reduced stress of participants, even after five weeks. This is only one example of many studies that have used an experimental manipulation to show that gratitude actually causes increases in well-being (e.g., Seligman, Steen, Park, & Peterson, 2005, Emmons & McCullough, 2003, Watkins et al., 2015, for a review, see Watkins, 2014). Thus, evidence now strongly supports the idea that gratitude is not merely associated with happiness, it actually causes increases in subjective well-being.

While gratitude has been found to improve well-being directly through enhancing positive feelings and beneficial cognitive processes, it is possible that gratitude can also help protect against negative emotions. Some studies have shown negative correlations between gratitude and negative emotions (e.g., Nelson, 2009). In one particular study that showed gratitude interventions increased subjective well-being, gratitude also appeared to decrease depression (Watkins, Uher, & Pichinevskiy, 2015). Another noteworthy study is that of grateful processing (Watkins, Cruz, Holben, & Kolts, 2008). Participants were asked to reflect on an unpleasant memory and to write about the positives that resulted

from the situation that they can now be grateful for. The results indicated that these participants experienced less emotional discomfort around the memory after thinking of it in a more positive way. This further supports the positive affects gratitude can have on overall life satisfaction and improving well-being. Gratitude being strongly correlated with improved well-being is very important, and with the possibility of gratitude being a buffer against negative emotions, it is clear that gratitude is very significant to overall well-being.

### **Indebtedness**

Some researchers have explored the idea that gratitude and indebtedness are synonymous (Komter, 2004), and in the past many researchers have treated them as one construct. For example, in Tesser et al.'s (1968) seminal study of gratitude, he combined their gratitude and indebtedness measures into one composite dependent variable. Indebtedness has been defined as "feeling obligated to repay" in response to a benefit (Greenberg & Shapiro 1971). Some speculate that when someone has feelings of gratitude they may act in a prosocial way, or they may be likely to reciprocate the favor (McCullough, Kilpatrick, Emmons, & Larson, 2001), which would appear to support the notion that gratitude and indebtedness are synonymous.

Recent research however, has shown that gratitude and indebtedness are two distinct emotions, but can both be felt in response to a benefit (e.g., Watkins, Scheer, Ovnicek, & Kolts, 2006). In the simplest terms, gratitude can be seen as a positive emotion (Lazarus & Lazarus, 1994; Mayer, Salovey, Gomberg-Kaufman, & Blainey, 1991, as cited in Tsang, 2006) and indebtedness as a negative emotion (Greenberg, 1980, as cited in Tsang, 2006). Indeed, in a large-scale poll, Gallup found that whereas people

feel that gratitude is a very pleasant emotion, overwhelmingly people said that indebtedness was unpleasant (Watkins et al., 2006). For example, individuals with feelings of indebtedness may work to repay the favor to the benefactor of equaling value to no longer feel obligated to repay, because the feeling of obligation is unpleasant. Those who are feeling gratitude may act in a way to do a favor for the benefactor that is above the perceived value of the original favor as to show their gratitude to the benefactor, and potentially continue the relationship (Tsang, 2006).

Other researchers have found that gratitude and indebtedness are distinct (e.g., Watkins, Scheer, Ovnicek, & Kolts, 2006). Watkins et al. found that as the benefactor's expectation of reciprocity from the beneficiary increased, indebtedness increased while gratitude decreased, showing that these two states may be dissociated. Moreover, gratitude and indebtedness were associated with distinct thought/action tendencies—gratitude was clearly a prosocial emotion whereas indebtedness was more ambivalent. Others such as Gray, Emmons, and Morrison (as cited in Watkins et al., 2006) also found that gratitude and indebtedness were distinct. Although both gratitude and indebtedness may be experienced in response to a benefit, these states are only minimally correlated ( $<.20$ , Watkins et al., 2006), and more recent work has shown that the *traits* of gratitude and indebtedness are actually negatively correlated (e.g., Watkins, Bell, Scheibe, & McLaughlin, 2017). Taken together, research has shown that gratitude and indebtedness are two separate distinct emotions.

Mathews and Green's (2010) study of indebtedness and gratitude has given more insight to these two emotions. The focus of the study was to examine how personal characteristics such as social anxiety and self-consciousness affected gratitude and

indebtedness. Results indicated that those individuals who have higher social anxiety and higher self-consciousness were more likely to have feelings of indebtedness, but lower feelings of gratitude. This study offers great insight of how individual differences, such as social anxiety, can affect the way individuals feel about receiving a benefit. Thus, more research needs to investigate the similarities and differences of gratitude and indebtedness.

### **Appraisals of Gratitude**

What causes a grateful response? To have feelings of gratitude toward a benefactor, there are certain aspects of the benefactor that the beneficiary has to consider that can affect how much gratitude one feels. Three appraisals have been identified that are important to experiencing gratitude after a person has received a benefit: *value* of the benefit, *altruism* of the benefactor, and the *cost* of the benefit to the benefactor (Tesser, Gatewood, & Driver, 1968; Wood, Maltby, Stewart, Linley, & Joseph, 2008). The value appraisal is how valuable the benefit is to the beneficiary, as perceived by the beneficiary. The altruism appraisal refers to how much the beneficiary feels that the benefactor was motivated by enhancing the beneficiary's well-being. Cost refers to how costly the benefit was to the benefactor. Other studies have also since used these three appraisals. In one such study, these three appraisals were shown to affect gratitude levels (Wood et al., 2008), and people high in trait gratitude were more likely to engage in these appraisals.

In a number of studies, value has been the strongest predictor of gratitude. Algoe, Haidt, and Gable (2008) investigated how the value appraisal impacted levels of gratitude in a sorority setting. Participants who were already participating in the Big Sister, Little Sister event in their sorority were asked to fill out questionnaires about their experience

during Big Sister Week (four days of Big Sisters anonymously giving gifts to their new Little Sisters). During this time the Little Sisters were unaware of who their Big Sister was that was giving them gifts. It was found that when Little Sisters reported liking the gift/benefit and perceived the Big Sister as being more thoughtful, they were likely to experience more gratitude. In these situations, the Little Sister was unaware of who their gift giving Big Sister was, and the appraisal of the gift alone drove their feelings and view of the Big Sister. This study also included an evaluation of the cost appraisal. When the Big Sister spent more money on the gift, the Little Sister reported higher levels of gratitude, but the benefactor's thoughtfulness about the gift more strongly predicted gratitude. In this study, the financial cost to the benefactor played a role in gratitude responses from the beneficiary, even when the beneficiary did not know who exactly the benefactor was.

Recently, a study investigated these three appraisals of gratitude (Watkins, Wood, and Shields, 2016). In this study, participants were professors of a university. The professors had just received a significant raise administered over three years. Professors completed a survey responding to questions that asked about how costly the raise was to the university, the altruistic motivations of the university for the raise, and how valuable the individual viewed the raise to be. As in past studies, appraisals of the value of the benefit and the altruism of the university predicted greater gratitude, but one interesting finding from this study was that the perceived cost of the raise to the university had little impact on gratitude. Indeed, in a simultaneous multiple regression, only value and altruism appraisals independently predicted gratitude for the raise – cost appraisals did not significantly predict gratitude. Several other studies have also failed to find that

appraisals of cost to the benefactor significantly predicted gratitude (e.g., Watkins, McCurrach, & Timbrook, 2016; Watkins, Sparrow, Pereira, & Suominen, 2013).

Although in these previous studies it could be questioned as to whether there actually was any cost to the benefactor – thus limiting the predictive value of the cost appraisal – in the more recent study with faculty, the faculty raise was clearly costly to the university. Taken together, these findings led the researchers to question if cost is only important to gratitude when it is an individual who is the benefactor, versus an institution. Thus, it is possible that if the benefactor were an individual rather than an institution like a university, cost appraisals would impact gratitude. There are many things a beneficiary thinks of when they receive a benefit, but the type of benefactor may have a significant impact on gratitude levels of the beneficiary. To my knowledge, very few studies have manipulated type of benefactor when investigating gratitude responses.

It is also interesting to consider whether the cost appraisal impacts indebtedness. It is quite possible that while not impacting gratitude, appraisals of cost to the benefactor could increase indebtedness. It seems reasonable to propose that if the beneficiary is focusing on how much the benefit cost to the benefactor, they might be more prone to guilt and feeling obligated to repay. Including measures of indebtedness as well as gratitude in the current study will allow me to investigate this possibility.

### **Type of Benefactor**

While gratitude research has recently increased, one aspect that has not been of a main focus is who the actual benefactor is. However, one article, nearly forty years ago, did address the differences of benefactor type and how that impacted beneficiaries level of gratitude and indebtedness (Bar-Tal, Bar-Zohar, Greenberg, & Hermon, 1977). These

researchers investigated how participants would respond to scenarios of asking for a ride from an individual they have a preexisting relationship with (parent, sibling or close friend), or a stranger or acquaintance. Results indicated that participants believed those they had a preexisting relationship with had the highest obligation to give them a ride. Participants also felt the least gratitude toward a parent or sibling if they were given a ride. On the other hand, participants believed the stranger or acquaintance had the least obligation to provide the ride and had the highest levels of gratitude toward these individuals. Higher levels of indebtedness were experienced for participants receiving the ride from a parent, sibling, or close friend, and slightly lower levels of indebtedness when it was a stranger or acquaintance. This study shows how much perceived obligation of the benefactor plays a role in levels of gratitude and indebtedness in social relationships. Unfortunately, this study did not investigate the three common appraisals of gratitude explained above. This study is also hard to generalize the results as it depicts a situation in which the beneficiary is requesting the benefit instead of a benefactor freely choosing to give a benefit.

### **Study Preview and Hypotheses**

In this study, I replicated and extended the institutional gratitude study by Watkins et al. (2016) using a scenario methodology. Thus, I created a base scenario that depicts a situation similar to that of the participants in the Watkins et al. study. The amount of the raise was the same for all scenarios, but I manipulated benefactor type in that the benefactor in each scenario was either an individual, an independent institution, or a related institution. I also manipulated the cost to the benefactor, with all three conditions having a high or low cost to the benefactor. Participants were asked to read the

scenario and report on how they would emotionally respond to the situation. I hypothesized that participants in the scenario with an individual benefactor at a high cost to the benefactor would experience the greatest levels of gratitude as well as higher levels of indebtedness compared to participants who receive the scenarios with an institutional benefactor with low cost to the benefactor.

### **Method**

The main purpose of the present study was to evaluate the response of gratitude when the benefactor is an individual, a relevant institution (in this case, the university), or an independent institution. To measure this response, I asked current undergraduate college students to read one of six scenarios reflecting the three different benefactor types, and high and low cost of the benefit to the benefactor. Participants were then asked to respond to appraisal measures of gratitude and indebtedness.

### **Design and Overview**

The current study is a mixed factorial design: 2 (Type of Emotion: Gratitude, Indebtedness)  $\times$  3 (Benefactor: Individual, Institution, Known Individual)  $\times$  2 (Cost: High, Low). Type of Benefactor and Cost were between subject variables and Type of emotion was within subjects. The primary dependent variable was level of emotional response of gratitude and indebtedness. Participants were randomly assigned to read one of six scenarios. Participants were asked to imagine themselves in the scenario and imagine how they would respond emotionally in this situation. Participants reported on how they would respond to a number of different emotions, including gratitude and indebtedness.

## **Participants**

Participants were 244 undergraduate students ranging in age from 18-42 ( $M = 21.0$ ,  $SD = 3.9$ ) at Eastern Washington University. Validity checks were included in the packets that participants completed. When participants missed two or more validity checks they were removed from the final analysis. For this reason, 16 participants were removed which left 228 participants for the final analysis. Participants were recruited from undergraduate psychology courses during fall quarter 2017 and winter quarter 2018. Their participant in this study was exchanged for extra credit in their psychology course, or to partially fulfill specific course requirements. The majority of the participants self-identified as White (68.9%). The majority of the participants were also female (72.8%). Forty participants read the “University, High Cost”, 40 read the “University, Low Cost”, 37 read the “Individual, High Cost”, 38 read the “Individual, Low Cost”, 38 read the “Corporation, High Cost”, and 34 read the “Corporation, Low Cost.” This study was conducted in accord with the ethical principles of the American Psychological Association and the Internal Review Board of Eastern Washington University.

## **Materials**

### *Scenarios*

All participants were randomly assigned to read one of six scenarios. The first scenario, “University, High Cost” condition, participants read the following: “Imagine yourself as a professor at EWU. You have been at the university for eight years. Because of various financial difficulties in the economy, your salary and that of your colleagues has fallen somewhat behind what those in other similar universities are making. The university would like to remedy this situation, so over the course of three

years your salary goes up by \$16,800 per year. The university brings in a total of about \$60 million per year, and it will require the university to contribute about 5-6 million for this salary raise for faculty. Please imagine yourself in this situation and think carefully about how you would respond.” See Appendices A for prompt and scenario specific measures.

In the second scenario, “University, Low Cost” condition, participants read the following: “Imagine yourself as a professor at EWU. You have been at the university for eight years. Because of various financial difficulties in the economy, your salary and that of your colleagues has fallen somewhat behind what those in other similar universities are making. The university would like to remedy this situation, so over the course of three years your salary goes up by \$16,800 per year. The university brings in a total of about \$215 million per year, and it will require the university to contribute about 5-6 million for this salary raise for faculty. Please imagine yourself in this situation and think carefully about how you would respond.” See Appendices B for prompt and scenario specific measures.

In the third scenario, “Individual, High Cost” condition, participants read the following: “Imagine yourself as a professor at EWU. You have been at the university for eight years. Because of various financial difficulties in the economy, your salary and that of your colleagues has fallen somewhat behind what those in other similar universities are making. An individual would like to remedy this situation, so over the course of three years your salary goes up by \$16,800 per year. This individuals’ business brings in a total of about \$60 million per year, and it will require the business to contribute about 5-6 million for this salary raise for faculty. Please imagine yourself in this situation and think

carefully about how you would respond.” See Appendices C for prompt and scenario specific measures.

In the fourth scenario, “Individual, Low Cost” condition, participants read the following: “Imagine yourself as a professor at EWU. You have been at the university for eight years. Because of various financial difficulties in the economy, your salary and that of your colleagues has fallen somewhat behind what those in other similar universities are making. An individual would like to remedy this situation, so over the course of three years your salary goes up by \$16,800 per year. This individuals’ business brings in a total of about \$215 million per year, and it will require the business to contribute about 5-6 million for this salary raise for faculty. Please imagine yourself in this situation and think carefully about how you would respond.” See Appendices D for prompt and scenario specific measures.

In the fifth scenario, “Corporation, High Cost” condition, participants read the following: “Imagine yourself as a professor at EWU. You have been at the university for eight years. Because of various financial difficulties in the economy, your salary and that of your colleagues has fallen somewhat behind what those in other similar universities are making. A corporation would like to remedy this situation, so over the course of three years your salary goes up by \$16,800 per year. This corporation brings in a total of about \$60 million per year, and it will require the corporation to contribute about 5-6 million for this salary raise for faculty. Please imagine yourself in this situation and think carefully about how you would respond.” See Appendices E for prompt and scenario specific measures.

In the sixth scenario, “Corporation, Low Cost” condition, participants read the following:

“Imagine yourself as a professor at EWU. You have been at the university for eight years. Because of various financial difficulties in the economy, your salary and that of your colleagues has fallen somewhat behind what those in other similar universities are making. A corporation would like to remedy this situation, so over the course of three years your salary goes up by \$16,800 per year. This corporation brings in a total of about \$215 million per year, and it will require the corporation to contribute about 5-6 million for this salary raise for faculty. Please imagine yourself in this situation and think carefully about how you would respond.” See Appendices F for prompt and scenario specific measures.

## **Measures**

### ***Reported Emotions***

After reading the vignette to which they were randomly assigned, participants were asked to rate how they thought they would feel in this situation. Participants rated each given anticipated emotion on a scale from 0, *none*, to 6, *very strong*. Items from the scale included: “How proud would you feel?” “How grateful would you feel?” “How joyful would you feel?” “How indebted (feeling obligated to repay) would you feel?” “How contented would you feel?” “How guilty would you feel?” “How anxious would you feel?” “How irritated or annoyed would you feel?” “How obligated would you feel?” “How uneasy would you feel?” “How thankful would you feel?” “How ashamed would you feel?” Participants’ ratings on these items were used to determine the level of each anticipated emotion used as the dependent variables.

### *Appraisals*

Next, participants reported on questions regarding the actual raise and the intention of the benefactor. Sample questions included: “To what extent do you think the salary increase was intended to benefit you versus benefit the corporation (individual/university, depending on scenario)?” and “How long ago do you feel you should have received this recent salary increase?”

### *Thought/Action Tendencies*

Participants were then asked to report on thought/action tendencies in response to the scenario (Fredrickson & Branigan, 2005). This prompted participants to again imagine themselves as the professor in the scenario and imagine how they would feel. They were asked to respond to the prompt of “I would like to...” for all the things they felt like doing right now. This included twenty blank lines to complete the sentence “I would like to...” See Appendices G.

### *PANAS-X*

Participants were then asked to fill out the Positive and Negative Affect Schedule – Expanded Form (PANAS-X; Watson, Clark, & Tellegen, 1988) The PANAS-X is designed to measure immediate emotional state, and items range on a scale from 1 *very slightly or not at all*, to 5 *extremely*. Sample items include “cheerful”, “disgusted”, “attentive”, and “bashful”. I modified the PANAS-X by including items from the Gratitude Adjectives Scale (GAS; McCullough et al., 2002): “grateful”, “thankful”, and “appreciative.” I also included two items representing indebtedness: “feeling indebted” and “feeling obligated to repay others.” See Appendices H.

***GRAT-S and GQ-6***

Next, participants were prompted to complete the Gratitude Resentment and Appreciation Test – Short Version (GRAT-S; Watkins, Woodward, Stone, & Kolts, 2003) and the GQ-6. Both are measures of trait gratitude. The GRAT-S items range on a scale from *I strongly disagree* 1, to *I strongly agree with that statement* 9. Sample items include, “I couldn’t have gotten where I am today without the help of many people” and “Life has been good to me.” Cronbach’s alpha for the GRAT-S was .818. See Appendices I for GRAT-S. The GQ-6 items range on a scale from *1 strongly disagree*, to *7 strongly agree*. Sample items for the GQ-6 include, “I have so much in life to be thankful for” and “If I had to list everything that I felt grateful for, it would be a very long list.” Cronbach’s alpha for the GQ-6 was .748. See Appendices J for GQ-6.

***IS-R***

Participants then completed the indebtedness scale (IS-R; Elster, Maleki, McLeod, & Watkins, 2005), which assess for trait indebtedness. This scale ranges from *-3 strongly disagree*, to *3 strongly agree*. Sample items include, “Owing someone a favor makes me uncomfortable”, “One should not borrow money from a friend unless it is absolutely necessary”, and “As a rule, I don’t accept a favor if I can’t return the favor.” I also included a validity check, “If you have read the instructions carefully, please circle the bold IS at the top of this page.” Cronbach’s alpha was .909. See Appendices K.

***PES***

Next participants were prompted to complete the Psychological Entitlement Scale (PES; Campbell, Bonacci, Shelton, Exline, & Bushman, 2004), which assesses for entitlement. This scale ranges from *1 strong disagreement*, to *7 strong agreement*. Sample

items include, “Great things should come to me” and “I demand the best because I’m worth it.” I also included a validity check, question seven read as “Mark 7 for this question.” See Appendices L.

### ***SJS and DJS***

The last scales participants were prompted to complete were the State Joy Scale (SJS) and Dispositional Joy Scale (DJS; Watkins, Emmons, Greaves, & Bell, 2017) which assess for state and trait joy. On the SJS, the first two scales range from 1 *not at all*, to 6 *frequently*. The rest of the scales range from 1 *completely disagree*, to 7 *strongly agree*. Sample questions include “This week I found myself enjoying something so much that I lost track of time” and “This week I felt free.” See Appendices M for SJS. The scale for the DJS ranged from 1 *strongly disagree*, to 7 *strongly agree*. Sample items include “I often feel bursts of joy” and “My life is always improving.” I also included a validity check, question ten read as “Please mark 1 for this statement”. See Appendices N.

Finally, participants were asked how well they were able to imagine themselves as the professor in the scenario. This was followed by a short demographic questionnaire regarding gender, age, ethnicity, grade level, and family household income. The demographics was used for the purpose of gathering information about the participants. See Appendices O.

### **Procedure**

Participants were given a study description/announcement informing them of the nature of the study and some questions they will be asked (see Appendices P). Participants were informed that by participating in this study they were giving their consent to participate and were also informed their identity would be anonymous. . This

study description/announcement was given to potential participants at least one day before administering the measures. The principal investigator or the designated researcher again read through the study description/announcement verbally before administering the study. Participants were randomly assigned one of six scenario studies. After reading the assigned scenario, participants then reported on various emotions they believe they would experience in response to this situation, including gratitude and indebtedness. They then reported on their appraisals of the scenario, including dimensions of benefit value, benefactor altruism, and cost to the benefactor. Also, participants reported on thought/action tendencies in response to the scenario. Participants then reported on their immediate emotional state (via the PANAS-X), followed by trait and dispositional gratitude (Gratitude Resentment and Appreciation Test – Short version GRAT-S and GQ-6) and indebtedness (IS-R), entitlement (PES), and state and trait joy (SJS and DJS). Finally, participants responded to a personal demographic survey.

### **Results**

My initial data analysis used the General Linear Model (GLM) in a mixed 3 (benefactor type) x 2 (cost) x 2 (emotion type; gratitude and indebtedness ANOVA. A large main effect for type of emotion was found,  $F(1, 221) = 494.80, p < .0009$ , such that individuals tended to report far more gratitude than indebtedness across all conditions. Because of this large effect, an analysis of gratitude and indebtedness was done separately, see Tables 1 and 2.

When analyzing gratitude as the dependent variable, a significant main effect for Benefactor Type was found,  $F(2, 222) = 6.36, p = .002$ . This effect was the result of people reporting more gratitude when the benefactor was an individual independent from

the university than when the benefactor was the university itself, see Figure 1. No significant interactions were found between benefactor type and cost for gratitude (benefactor,  $F(2, 228) = 6.232, p = .002, \eta^2 = .053$ , cost,  $F(1, 228) = 1.052, p = .306, \eta^2 = .005$ , and benefactor x cost,  $F(2, 228) = 1.009, p = .366, \eta^2 = .009$ ) or indebtedness (all  $p$  values are above .2).

Table 1

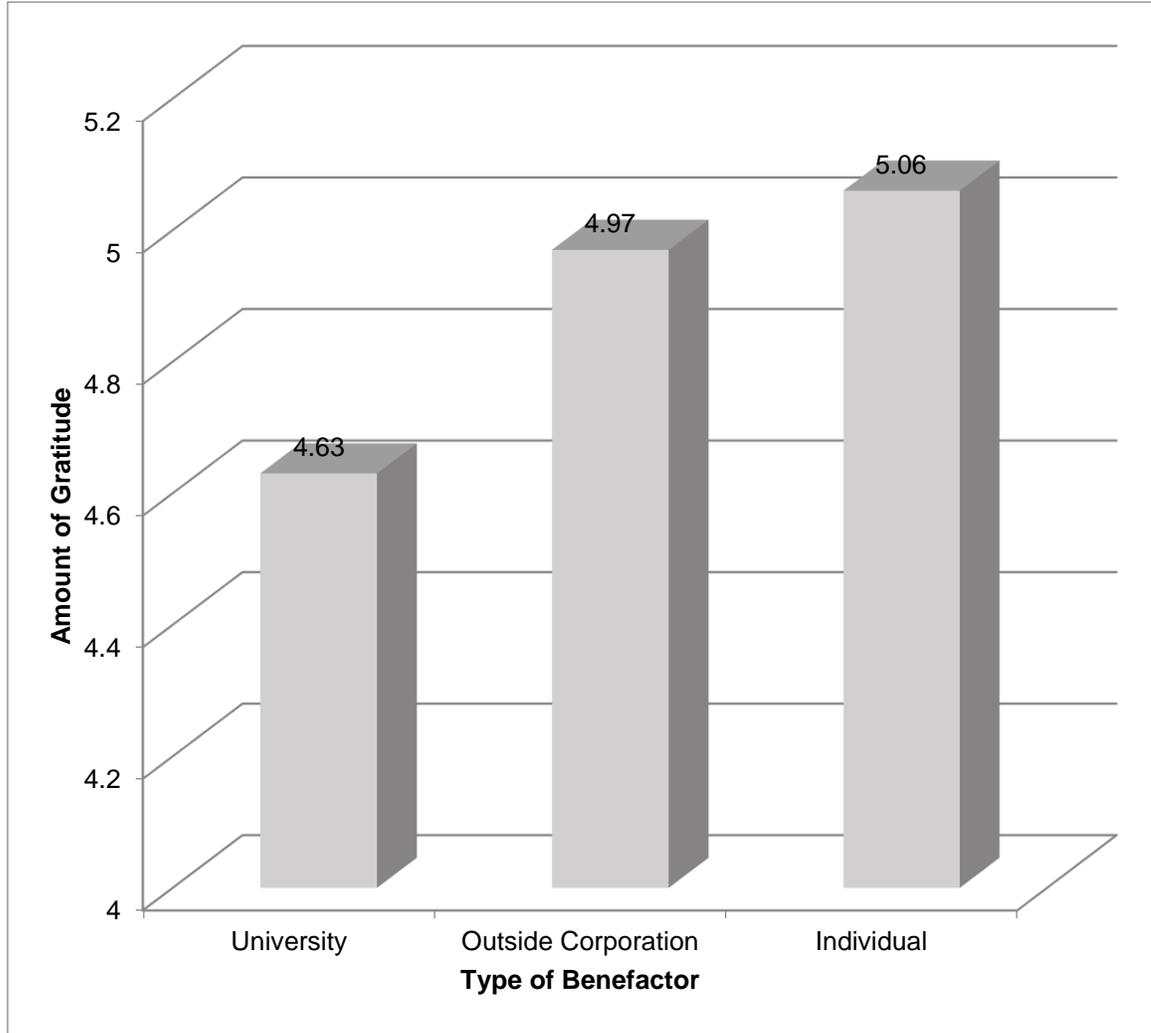
*Descriptive Statistics for felt Gratitude of Raise in the Scenario*

Benefactor Condition	High Cost	Low Cost
	<i>M (SD)</i>	<i>M (SD)</i>
University	4.4 (1.3)	4.8 (1.0)
Individual	5.1 (1.0)	5.1 (1.0)
Corporation	5.1 (0.7)	5.1 (0.8)

Table 2

*Descriptive Statistics for felt Indebtedness of Raise in the Scenario*

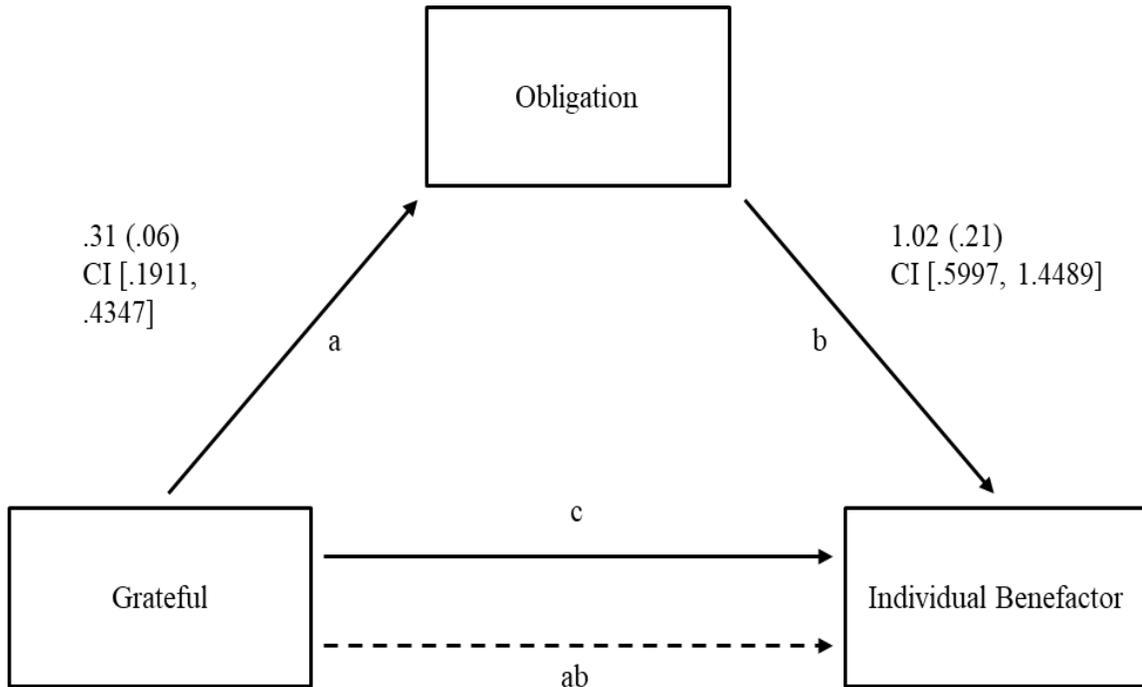
Benefactor Condition	High Cost	Low Cost
	<i>M (SD)</i>	<i>M (SD)</i>
University	2.3 (1.8)	2.1 (1.8)
Individual	2.5 (1.9)	2.5 (1.3)
Corporation	1.9 (1.3)	2.4 (1.4)

Figure 1 **Gratitude for Raise by Type of Benefactor**

To better understand why participants reported more gratitude toward the individual benefactor independent from the university than the university benefactor, bootstrapped mediational analyses were completed to assess if gratitude would be statistically associated with the individual benefactor via the indirect influence of obligation. PROCESS was used to conduct these analyses, which allows for testing of mediational models with bootstrapped confidence intervals (CI). A mediation consists of five pathways; Path A represents the relationship between the independent variable and the mediating variable, Path B represents the relationship between the mediator and the

dependent variable, Path C', direct effect, represents the relationship between the independent variable and the dependent variable, and Path ab, indirect effect, represents the indirect relationship among the independent variable and the dependent variable, via the mediator. Finally, Path C represents the total effect, that is the combination of the indirect effect and direct effect. To be considered statistically significant, the confidence interval (95%) of an indirect relationship must not contain 0. Figure 2 demonstrates the bootstrapped multiple mediational analysis used to test for association among gratitude and individual benefactor via the indirect influence of obligation. The analysis showed a significant indirect effect of gratitude,  $B = .32$ ,  $BootSE = .09$ , 95%  $BootCI = [.1686, .5204]$ , on the association of individual benefactor via the influence of obligation. No other mediation analysis with the appraisals was found to be significant.

Figure 2



Total effect (c) = .47 (.18); CI = [.1228, .8209]  
 Direct effect (c') = .15 (.18); CI [-.1957, .4983]  
 Indirect effect (ab) = .32 (.09); CI [.1686, .5204]

No significant effects were found for the cost manipulation on gratitude,  $F(1, 226) = 1.01, p = .316$ , see Figure 3. Moreover, self-reported cost appraisals were not correlated with gratitude for the raise ( $r = .07, p = .245$ ). Indeed, additional analyses suggested that individuals were not sensitive to the cost to the benefactor, as the cost manipulation had no significant impact on cost appraisals,  $F(1, 226) = 1.08, p = .316$ . Two appraisals most strongly predicted gratitude for the raise: personal value of the raise ( $r = .38, p < .0009$ ) and if the benefactor exceeded their obligations to the beneficiary ( $r = .33, p < .0009$ ). Taken together, this evidence suggests that people make a more global appraisal of the “goodness of the giver” (Watkins, 2014), rather than a more detailed analysis of the benefactor that would include cost. Although the pattern of indebtedness was similar to

that of gratitude, no significant main effects or interactions of our Benefactor Type on indebtedness were found,  $F(1, 225) = .51, p = .196$ . However, the cost appraisal was the only appraisal that significantly predicted indebtedness ( $r = .21, p = .001$ ) but did not predict gratitude ( $r = .08, p = .245$ ), see Table 3 for correlation matrix.

Figure 3 **Impact of Cost to Benefactor on Gratitude for Raise\***

*\*No significant effect,  $p = .68$*

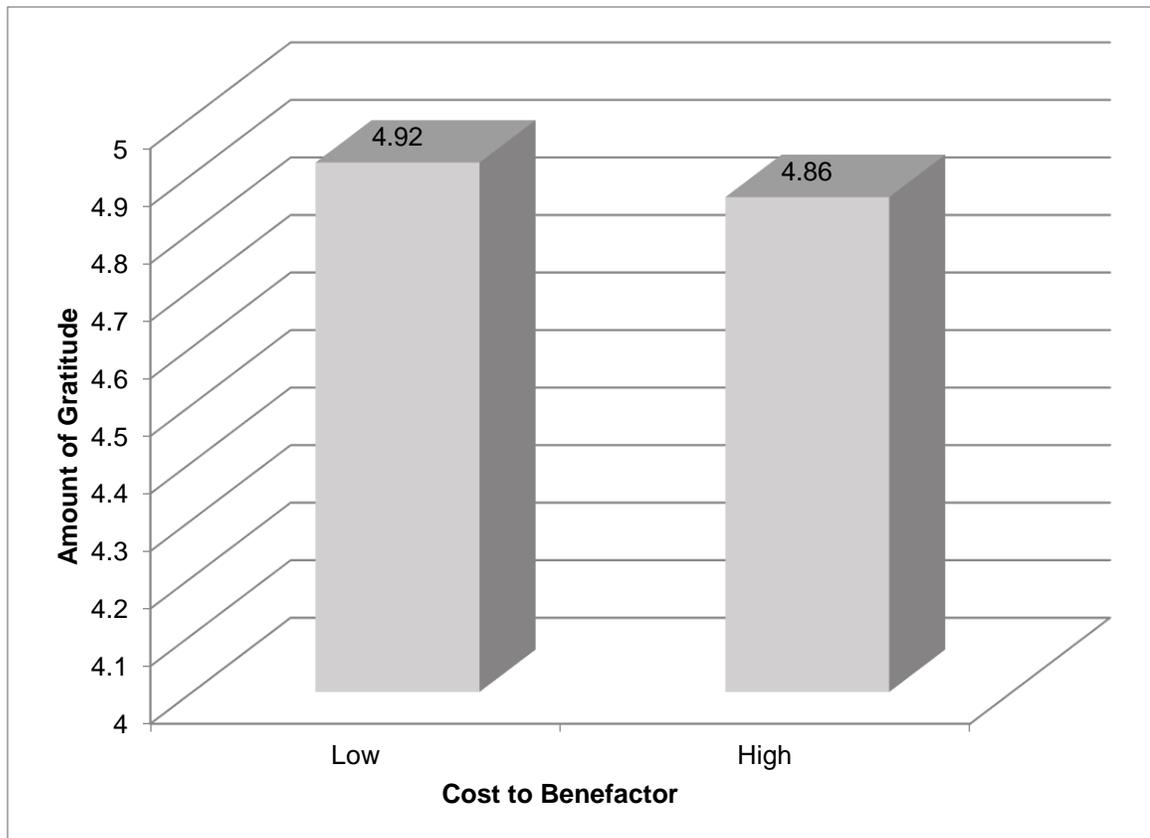


Table 3

*Correlation Matrix of Appraisals, Trait Gratitude, and Trait Indebtedness on Felt Gratitude and Indebtedness*

Measures	Gratitude	Indebtedness
Appraisals of Benefit		
Costly to Benefactor	.08	.21**
Altruism of Benefactor	.14*	-.10
Valuable to Beneficiary	.38**	-.04
Intended Benefit	.15*	.02
Expectation	.29**	.10
Obligation of Benefactor	.33**	.16*
GRAT-S	.20**	.07
GQ-6	.28**	-.03
IS-R	-.03	.04

\* $p < .05$ . \*\* $p < .01$ .

I also conducted a 3 (benefactor type) x 2 (cost) GLM on indebtedness. No significant main effect for Benefactor Type was found,  $F(2, 221) = 3.62$ . No significant interactions were found between benefactor type and cost for indebtedness,  $F(1, 221) = .543$ . All  $p$  values are above .2.

### Discussion

As predicted, participants reported feeling more gratitude toward the individual benefactor compared to the university benefactor. Mediation analyses suggested that people felt more grateful toward the individual than the university because they felt that the individual had exceeded their obligations to the professors more than the university. These results seem to follow the same pattern as what was seen in the study by Bar-Tal and colleagues (1977). When individuals perceive a benefactor to have a greater obligation to provide a benefit, they feel less gratitude toward that benefactor.

Contrary to what I initially predicted, cost to the benefactor did not seem to impact gratitude in any of the benefactor conditions. This is contradictory of some research that has shown cost to be an important appraisal of gratitude (e.g., Tesser, Gatewood, & Driver, 1968). On the other hand, considering the study by Watkins, Wood et al. (2016), these results could have been expected. They also found that cost appraisals did not make a significant contribution to professor's gratitude for their raise. In the present study and in Watkins, Wood et al., participants did not seem to make a careful cost appraisal. Both studies involved a university providing a raise, and cost did not impact gratitude felt toward the university. It is possible that the type of benefit being provided may determine if individuals consider the cost to the benefactor. For example, if an employee receives a raise, the employee may view the employer as being somewhat obligated to provide the raise, so the employee may not consider how much it may cost the employer to provide that raise. In a different situation, say when a stranger offers to pay for your groceries because you forgot your wallet at home, you may be more likely to consider how costly this benefit is to the stranger/benefactor who had no obligation to

pay for your groceries. If a university has a goal of increasing gratitude among professors, providing a raise may not be the best way to do that.

While indebtedness followed the pattern of gratitude, type of benefactor did not significantly impact level of indebtedness. These results are slightly surprising. When we look back again to the Bar-Tal et al. (1977) study, participants actually reported feeling more indebtedness toward a stranger or acquaintance who provided the benefit, compared to when the benefactor was a known individual. One would expect that university faculty would be more familiar with the university compared to outside sources like an individual or corporation, and therefore might feel less indebted to the university. This does not appear to be the pattern with feelings of indebtedness. On the other hand, I found that indebtedness was significantly predicted by the cost appraisal. As participants viewed the raise to be more costly to the benefactor their indebtedness increased. It seems the cost appraisal was much more of a predictor of indebtedness than gratitude, which is inconsistent with previous research that shows cost appraisals being an important predictor of gratitude (e.g., Tesser, Gatewood, & Driver, 1968). Tesser et al.'s measure of gratitude included indebtedness combined with gratitude. Perhaps when individuals receive a benefit that they believe was such a great cost to the benefactor, they feel more obligated to repay the favor, and focus less on the actual benefit to themselves.

While Tesser et al.'s (1968) study seemingly paved the way for research of the three appraisals of gratitude, it appears to have just touched the surface. Again, Tesser et al.'s study included gratitude and indebtedness in one composite dependent variable. As is apparent from my study and previous research (e.g., Watkins, 2006), gratitude and indebtedness are two distinct emotions. It is very possible that the cost appraisal was

found to be significant in Tesser et al.'s study in part due to reported feelings of indebtedness more so than feelings of gratitude. The Tesser et al. study was also conducted using all male participants. This could be another reason for varying results since male and females have been shown to have different gratitude responses (e.g., Kashdan, Mishra, Breen, & Froh, 2009).

As shown in past research, results from the current study showed that gratitude and indebtedness seem to be two very distinct emotions (e.g., Watkins et al., 2006). A large main effect for type of emotion was found; individuals reported experiencing far more gratitude than indebtedness in response to the scenario. Are individuals likely to experience lower feelings of indebtedness if a benefactor is believed to have an obligation to provide the benefit, such as what seems to be the case for feelings of gratitude? Because indebtedness was much lower than reported gratitude across benefactor conditions, this explanation seems unlikely. Why do people report far more gratitude than indebtedness in response to a benefit? In Western culture where individual success or growth is important, feeling the need to repay someone for a favor may not be as common, especially in the context of the benefit being a raise. With the feeling of gratitude, an individual can acknowledge they received a benefit from a benefactor without feeling the need to do anything to repay that benefactor. Feelings of indebtedness acknowledge the benefit but instill the feeling of being obligated to return the favor to the benefactor. In theory, this could lead the beneficiary to put effort toward repaying a debt instead of moving forward with their life.

Following a similar trend of previous research, participants experienced more gratitude when they believed the raise to have personal value to them (e.g., Tesser et al.,

1968; Algoe et al., 2008). It is possible that this appraisal of value may take away attention from the benefactor. The beneficiary evaluates how beneficial or valuable this benefit is to themselves. It could be that if the benefit has enough value to the individual, other factors such as cost, or altruistic motives of the benefactor are not as important to gratitude. Does attending to the value of a benefit distract beneficiaries from evaluating the “goodness of the giver”? Future research could investigate this question by manipulating details about the value of a benefit, to see if it decreases the relationship between appraisals of altruism and gratitude. The value appraisal appears to be one of the more consistent appraisals found to predict gratitude in participants.

### **Limitations**

One obvious limitation of this study is the scenario method that I used. Using a scenario methodology does not allow participants to fully experience the situation, they are just able to do their best to imagine it. While this particular manipulation would be hard to conduct in the lab, the study by Watkins et al. (2016) was able to survey real professors who had gone through a very similar scenario situation used in this study. When comparing the results, they are very similar and follow the same pattern; appraisals of cost to the benefactor did not significantly impact participants' gratitude. Nonetheless, the most significant limitation of this study is with the scenario methodology, which seriously limits this study's external validity.

Another limitation to this study is that participants were undergraduate students. The reason this is a problem is that it can be assumed these participants did not have jobs that pay similar wages to those described in the scenario, and thus they may have had difficulty imagining the impact of this raise. It is possible, for example, that because the

wages involved were far above their experience, they overestimated the emotional impact of the raise. Finally, as referred to above, because the students in this study were clearly from a Western culture, this limits the external validity of the study. Future studies should attempt to recruit participants from more diverse cultures. Considerably different findings might result from other cultures. For example, non-Western participants might experience far more indebtedness than my participants.

### **Future Research**

Future research would greatly benefit from focusing on different types of benefactors. This study has only just begun to shine some light on how benefactor type impacts gratitude and indebtedness. Focusing on different types of benefactors, such as a benefactor that is a known individual compared to an unknown individual, would greatly further our understanding of benefactor-beneficiary interactions. Furthermore, focusing on benefactors who may not have as much of an obligation to the beneficiary would advance our understanding of how benefactors impact gratitude.

This study again brings the cost appraisal into question. When the benefactor has an obligation to the beneficiary, does cost play a smaller role in predicting gratitude? One way to investigate this would be to have an employee receiving a raise from a manager that they have an actual relationship with. As indicated in Bar-Tal et al. (1977), the relationship with the benefactor has an impact on both gratitude and indebtedness. Or are there only certain situations that beneficiaries are likely to include the cost appraisal, specifically situations when the benefactor has no obligation to provide a benefit? It is clear the type of benefactor plays an important role on determining what gratitude

appraisals are used, and future research would greatly benefit from incorporating different benefactor types.

### **Conclusion**

In conclusion, I believe that these results offer several important implications for the science of gratitude. First, the type of benefactor matters to gratitude responses. It is somewhat surprising that past gratitude literature has seldom considered this issue (for an important exception, see Bar-Tal et al., 1977). Indeed, consideration of human versus supernatural benefactors would be an interesting avenue to pursue. Second, although the cost appraisal has been considered to be one of the three main appraisals important to gratitude responses, my results suggest that this appraisal did not influence gratitude in this situation. The findings here are consistent with other recent work (e.g., Scheibe et al., 2016; Watkins et al., 2013; Watkins, Wood et al., 2016), which seriously draws into question the importance of cost appraisals to gratitude. Third, consistent with past research (McCullough et al., 2001), the appraisals of the personal value of the benefit and whether the benefit exceeded expectations were important to gratitude. Taken together, my results suggest that the nature of the giver *matters* to gratitude.

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Appendix A

University High Cost Condition

Below you will see a story about a situation in which you will experience a change in your salary. Please try to imagine this situation vividly, and try your best to put yourself in the situation below and imagine how you would respond. **Please read the story very carefully and imagine how you would respond in this situation.** If you have read the instructions carefully, please circle the last word in this sentence.

Imagine yourself as a professor at EWU. You have been at the university for eight years. Because of various financial difficulties in the economy, your salary and that of your colleagues has fallen somewhat behind what those in other similar universities are making. The university would like to remedy this situation, so over the course of three years your salary goes up by \$16,800 per year. The university brings in a total of about \$60 million per year, and it will require the university to contribute about 5-6 million for this salary raise for faculty. Please imagine yourself in this situation and think carefully about how you would respond.

How **proud** would you feel?

0	1	2	3	4	5	6
No pride	Slight pride		Moderate pride		Strong pride	Very strong pride

How **grateful** would you feel?

0	1	2	3	4	5	6
No gratitude	Slight gratitude		Moderate gratitude		Strong gratitude	Very strong gratitude

How **joyful** would you feel?

0	1	2	3	4	5	6
No joy	Slight joy		Moderate joy		Strong joy	Very strong joy

How **indebted** (feeling obligated to repay) would you feel?

0	1	2	3	4	5	6
No indebtedness	Slight indebtedness		Moderate indebtedness		Strong indebtedness	Very strong indebtedness

How **contented** would you feel?

0	1	2	3	4	5	6
No contentment	Slight contentment		Moderate contentment		Strong contentment	Very strong contentment

How **guilty** would you feel?

0	1	2	3	4	5	6
No guilt	Slight guilt		Moderate guilt		Strong guilt	Very strong guilt

How **anxious** would you feel?

0	1	2	3	4	5	6
No anxiety	Slightly anxious		Moderate anxiety		Strong anxiety	Very strong anxiety

How **irritated or annoyed** would you feel?

0	1	2	3	4	5	6
No irritation	Slight irritation		Moderate irritation		Strong irritation	Very strong irritation

How **obligated** would you feel?

0	1	2	3	4	5	6
Not obligated	Slightly obligated		Moderately obligated		Strongly obligated	Very strongly obligated

How **uneasy** would you feel?

0	1	2	3	4	5	6
Not uneasy	Slightly uneasy		Moderately uneasy		Strongly uneasy	Very strongly uneasy

How **thankful** would you feel?

0	1	2	3	4	5	6
Not thankful	Slightly thankful		Moderately thankful		Strongly thankful	Very strongly thankful

How **ashamed** would you feel?

0	1	2	3	4	5	6
No shame	Slight shame		Moderate shame		Strong shame	Very strong shame

To what extent do you think the salary increase was costly to the university?  
 1 2 3 4 5 6 7  
 Not costly at all Moderately costly Very costly

To what extent do you think the salary increase was intended by the university to be altruistic—intended for your benefit versus given with ulterior motives?  
 1 2 3 4 5 6 7  
 It was primarily given with ulterior motives Somewhat for ulterior motives and somewhat for my benefit It was primarily given for my benefit

How valuable would this recent salary increase be for you?  
 1 2 3 4 5 6 7  
 Not valuable Moderately valuable Very valuable

To what extent do you think the salary increase was intended to benefit you versus benefit the university?  
 1 2 3 4 5 6 7  
 It was primarily to benefit the university It was intended to equally benefit the faculty and the university It was primarily to benefit faculty

Do you think this raise would meet your expectations of the salary you think you deserved?  
 1 2 3 4 5 6 7  
 It was very much below my expectations It was about what I think I deserved It very much exceeded my expectations

To what extent was the university meeting versus exceeding its obligations to the faculty in instituting this salary increase?  
 1 2 3 4 5 6 7  
 The university was not meeting its obligations to faculty The university was meeting its obligations to faculty The university was exceeding its obligations to faculty

How grateful would you be for your recent salary increase?  
 1 2 3 4 5 6 7  
 Not grateful Somewhat grateful Very grateful

How satisfied would you be with your recent salary increase?  
 1 2 3 4 5 6 7  
 Not satisfied Somewhat satisfied Very Satisfied

How long ago do you feel you should have received this recent salary increase?  
 1 2 3 4 5 6 7  
 A long time ago A few years ago I'm just glad I received it now

Appendix B

University Low Cost Condition

Below you will see a story about a situation in which you will experience a change in your salary. Please try to imagine this situation vividly, and try your best to put yourself in the situation below and imagine how you would respond. **Please read the story very carefully and imagine how you would respond in this situation.** If you have read the instructions carefully, please circle the last word in this sentence.

Imagine yourself as a professor at EWU. You have been at the university for eight years. Because of various financial difficulties in the economy, your salary and that of your colleagues has fallen somewhat behind what those in other similar universities are making. The university would like to remedy this situation, so over the course of three years your salary goes up by \$16,800 per year. The university brings in a total of about \$215 million per year, and it will require the university to contribute about 5-6 million for this salary raise for faculty. Please imagine yourself in this situation and think carefully about how you would respond.

How **proud** would you feel?

0	1	2	3	4	5	6
No pride	Slight pride		Moderate pride		Strong pride	Very strong pride

How **grateful** would you feel?

0	1	2	3	4	5	6
No gratitude	Slight gratitude		Moderate gratitude		Strong gratitude	Very strong gratitude

How **joyful** would you feel?

0	1	2	3	4	5	6
No joy	Slight joy		Moderate joy		Strong joy	Very strong joy

How **indebted** (feeling obligated to repay) would you feel?

0	1	2	3	4	5	6
No indebtedness	Slight indebtedness		Moderate indebtedness		Strong indebtedness	Very strong indebtedness

How **contented** would you feel?

0	1	2	3	4	5	6
No contentment	Slight contentment		Moderate contentment		Strong contentment	Very strong contentment

How **guilty** would you feel?

0	1	2	3	4	5	6
No guilt	Slight guilt		Moderate guilt		Strong guilt	Very strong guilt

How **anxious** would you feel?

0	1	2	3	4	5	6
No anxiety	Slightly anxious		Moderate anxiety		Strong anxiety	Very strong anxiety

How **irritated or annoyed** would you feel?

0	1	2	3	4	5	6
No irritation	Slight irritation		Moderate irritation		Strong irritation	Very strong irritation

How **obligated** would you feel?

0	1	2	3	4	5	6
Not obligated	Slightly obligated		Moderately obligated		Strongly obligated	Very strongly obligated

How **uneasy** would you feel?

0	1	2	3	4	5	6
Not uneasy	Slightly uneasy		Moderately uneasy		Strongly uneasy	Very strongly uneasy

How **thankful** would you feel?

0	1	2	3	4	5	6
Not thankful	Slightly thankful		Moderately thankful		Strongly thankful	Very strongly thankful

How **ashamed** would you feel?

0	1	2	3	4	5	6
No shame	Slight shame		Moderate shame		Strong shame	Very strong shame

To what extent do you think the salary increase costly to the university?

1	2	3	4	5	6	7
Not costly at all			Moderately costly			Very costly

To what extent do you think the salary increase was intended by the university to be altruistic—intended for your benefit versus given with ulterior motives?

1	2	3	4	5	6	7
It was primarily given with ulterior motives			Somewhat for ulterior motives and somewhat for my benefit			It was primarily given for my benefit

How valuable would this recent salary increase be for you?

1	2	3	4	5	6	7
Not valuable			Moderately valuable			Very valuable

To what extent do you think the salary increase was intended to benefit you versus benefit the university?

1	2	3	4	5	6	7
It was primarily to benefit the university			It was intended to equally benefit the faculty and the university			It was primarily to benefit faculty

Do you think this raise would meet your expectations of the salary you think you deserved?

1	2	3	4	5	6	7
It was very much below my expectations			It was about what I think I deserved			It very much exceeded my expectations

To what extent was the university meeting versus exceeding its obligations to the faculty in instituting this salary increase?

1	2	3	4	5	6	7
The university was not meeting its obligations to faculty			The university was meeting its obligations to faculty			The university was exceeding its obligations to faculty

How grateful would you be for your recent salary increase?

1	2	3	4	5	6	7
Not grateful			Somewhat grateful			Very grateful

How satisfied would you be with your recent salary increase?

1	2	3	4	5	6	7
Not satisfied			Somewhat satisfied			Very Satisfied

How long ago do you feel you should have received this recent salary increase?

1	2	3	4	5	6	7
A long time ago			A few years ago			I'm just glad I received it now

Appendix C

Individual High Cost Condition

Below you will see a story about a situation in which you will experience a change in your salary. Please try to imagine this situation vividly, and try your best to put yourself in the situation below and imagine how you would respond. **Please read the story very carefully and imagine how you would respond in this situation.** If you have read the instructions carefully, please circle the last word in this sentence.

Imagine yourself as a professor at EWU. You have been at the university for eight years. Because of various financial difficulties in the economy, your salary and that of your colleagues has fallen somewhat behind what those in other similar universities are making. An individual would like to remedy this situation, so over the course of three years your salary goes up by \$16,800 per year. This individual's business brings in a total of about \$60 million per year, and it will require the business to contribute about 5-6 million for this salary raise for faculty. Please imagine yourself in this situation and think carefully about how you would respond.

How **proud** would you feel?

0	1	2	3	4	5	6
No pride	Slight pride		Moderate pride		Strong pride	Very strong pride

How **grateful** would you feel?

0	1	2	3	4	5	6
No gratitude	Slight gratitude		Moderate gratitude		Strong gratitude	Very strong gratitude

How **joyful** would you feel?

0	1	2	3	4	5	6
No joy	Slight joy		Moderate joy		Strong joy	Very strong joy

How **indebted** (feeling obligated to repay) would you feel?

0	1	2	3	4	5	6
No indebtedness	Slight indebtedness		Moderate indebtedness		Strong indebtedness	Very strong indebtedness

How **contented** would you feel?

0	1	2	3	4	5	6
No contentment	Slight contentment		Moderate contentment		Strong contentment	Very strong contentment

How **guilty** would you feel?

0	1	2	3	4	5	6
No guilt	Slight guilt		Moderate guilt		Strong guilt	Very strong guilt

How **anxious** would you feel?

0	1	2	3	4	5	6
No anxiety	Slightly anxious		Moderate anxiety		Strong anxiety	Very strong anxiety

How **irritated or annoyed** would you feel?

0	1	2	3	4	5	6
No irritation	Slight irritation		Moderate irritation		Strong irritation	Very strong irritation

How **obligated** would you feel?

0	1	2	3	4	5	6
Not obligated	Slightly obligated		Moderately obligated		Strongly obligated	Very strongly obligated

How **uneasy** would you feel?

0	1	2	3	4	5	6
Not uneasy	Slightly uneasy		Moderately uneasy		Strongly uneasy	Very strongly uneasy

How **thankful** would you feel?

0	1	2	3	4	5	6
Not thankful	Slightly thankful		Moderately thankful		Strongly thankful	Very strongly thankful

How **ashamed** would you feel?

0	1	2	3	4	5	6
No shame	Slight shame		Moderate shame		Strong shame	Very strong shame

To what extent do you think the salary increase was costly to the individual who donated the funds?

1	2	3	4	5	6	7
Not costly at all			Moderately costly			Very costly

To what extent do you think the salary increase was intended by the individual to be altruistic—intended for your benefit versus given with ulterior motives?

1	2	3	4	5	6	7
It was primarily given with ulterior motives			Somewhat for ulterior motives and somewhat for my benefit			It was primarily given for my benefit

How valuable would this recent salary increase be for you?

1	2	3	4	5	6	7
Not valuable			Moderately valuable			Very valuable

To what extent do you think the salary increase was intended to benefit you versus benefit the individual?

1	2	3	4	5	6	7
It was primarily to benefit the individual			It was intended to equally benefit the faculty and the individual			It was primarily to benefit faculty

Do you think this raise would meet your expectations of the salary you think you deserved?

1	2	3	4	5	6	7
It was very much below my expectations			It was about what I think I deserved			It very much exceeded my expectations

To what extent was the individual meeting versus exceeding their obligations to the faculty in instituting this salary increase?

1	2	3	4	5	6	7
The individual was not meeting their obligations to faculty			The individual was meeting their obligations to faculty			The individual was exceeding their obligations to faculty

How grateful would you be for your recent salary increase?

1	2	3	4	5	6	7
Not grateful			Somewhat grateful			Very grateful

How satisfied would you be with your recent salary increase?

1	2	3	4	5	6	7
Not satisfied			Somewhat satisfied			Very Satisfied

How long ago do you feel you should have received this recent salary increase?

1	2	3	4	5	6	7
A long time ago			A few years ago			I'm just glad I received it now

Appendix D

Individual Low Cost Condition

Below you will see a story about a situation in which you will experience a change in your salary. Please try to imagine this situation vividly, and try your best to put yourself in the situation below and imagine how you would respond. **Please read the story very carefully and imagine how you would respond in this situation.** If you have read the instructions carefully, please circle the last word in this sentence.

Imagine yourself as a professor at EWU. You have been at the university for eight years. Because of various financial difficulties in the economy, your salary and that of your colleagues has fallen somewhat behind what those in other similar universities are making. An individual would like to remedy this situation, so over the course of three years your salary goes up by \$16,800 per year. This individuals' business brings in a total of about \$215 million per year, and it will require the business to contribute about 5-6 million for this salary raise for faculty. Please imagine yourself in this situation and think carefully about how you would respond.

How **proud** would you feel?

0	1	2	3	4	5	6
No pride	Slight pride		Moderate pride		Strong pride	Very strong pride

How **grateful** would you feel?

0	1	2	3	4	5	6
No gratitude	Slight gratitude		Moderate gratitude		Strong gratitude	Very strong gratitude

How **joyful** would you feel?

0	1	2	3	4	5	6
No joy	Slight joy		Moderate joy		Strong joy	Very strong joy

How **indebted** (feeling obligated to repay) would you feel?

0	1	2	3	4	5	6
No indebtedness	Slight indebtedness		Moderate indebtedness		Strong indebtedness	Very strong indebtedness

How **contented** would you feel?

0	1	2	3	4	5	6
No contentment	Slight contentment		Moderate contentment		Strong contentment	Very strong contentment

How **guilty** would you feel?

0	1	2	3	4	5	6
No guilt	Slight guilt		Moderate guilt		Strong guilt	Very strong guilt

How **anxious** would you feel?

0	1	2	3	4	5	6
No anxiety	Slightly anxious		Moderate anxiety		Strong anxiety	Very strong anxiety

How **irritated or annoyed** would you feel?

0	1	2	3	4	5	6
No irritation	Slight irritation		Moderate irritation		Strong irritation	Very strong irritation

How **obligated** would you feel?

0	1	2	3	4	5	6
Not obligated	Slightly obligated		Moderately obligated		Strongly obligated	Very strongly obligated

How **uneasy** would you feel?

0	1	2	3	4	5	6
Not uneasy	Slightly uneasy		Moderately uneasy		Strongly uneasy	Very strongly uneasy

How **thankful** would you feel?

0	1	2	3	4	5	6
Not thankful	Slightly thankful		Moderately thankful		Strongly thankful	Very strongly thankful

How **ashamed** would you feel?

0	1	2	3	4	5	6
No shame	Slight shame		Moderate shame		Strong shame	Very strong shame

To what extent do you think the salary increase was costly to the individual who donated the funds?

1	2	3	4	5	6	7
Not costly at all			Moderately costly			Very costly

To what extent do you think the salary increase was intended by the individual to be altruistic—intended for your benefit versus given with ulterior motives?

1	2	3	4	5	6	7
It was primarily given with ulterior motives			Somewhat for ulterior motives and somewhat for my benefit			It was primarily given for my benefit

How valuable would this recent salary increase be for you?

1	2	3	4	5	6	7
Not valuable			Moderately valuable			Very valuable

To what extent do you think the salary increase was intended to benefit you versus benefit the individual?

1	2	3	4	5	6	7
It was primarily to benefit the individual			It was intended to equally benefit the faculty and the individual			It was primarily to benefit faculty

Do you think this raise would meet your expectations of the salary you think you deserved?

1	2	3	4	5	6	7
It was very much below my expectations			It was about what I think I deserved			It very much exceeded my expectations

To what extent was the individual meeting versus exceeding their obligations to the faculty in instituting this salary increase?

1	2	3	4	5	6	7
The individual was not meeting their obligations to faculty			The individual was meeting their obligations to faculty			The individual was exceeding their obligations to faculty

How grateful would you be for your recent salary increase?

1	2	3	4	5	6	7
Not grateful			Somewhat grateful			Very grateful

How satisfied would you be with your recent salary increase?

1	2	3	4	5	6	7
Not satisfied			Somewhat satisfied			Very Satisfied

How long ago do you feel you should have received this recent salary increase?

1	2	3	4	5	6	7
A long time ago			A few years ago			I'm just glad I received it now

Appendix E

Corporation High Cost Condition

Below you will see a story about a situation in which you will experience a change in your salary. Please try to imagine this situation vividly, and try your best to put yourself in the situation below and imagine how you would respond. **Please read the story very carefully and imagine how you would respond in this situation.** If you have read the instructions carefully, please circle the last word in this sentence.

Imagine yourself as a professor at EWU. You have been at the university for eight years. Because of various financial difficulties in the economy, your salary and that of your colleagues has fallen somewhat behind what those in other similar universities are making. A corporation would like to remedy this situation, so over the course of three years your salary goes up by \$16,800 per year. This corporation brings in a total of about \$60 million per year, and it will require the corporation to contribute about 5-6 million for this salary raise for faculty. Please imagine yourself in this situation and think carefully about how you would respond.

How **proud** would you feel?

0	1	2	3	4	5	6
No pride	Slight pride		Moderate pride		Strong pride	Very strong pride

How **grateful** would you feel?

0	1	2	3	4	5	6
No gratitude	Slight gratitude		Moderate gratitude		Strong gratitude	Very strong gratitude

How **joyful** would you feel?

0	1	2	3	4	5	6
No joy	Slight joy		Moderate joy		Strong joy	Very strong joy

How **indebted** (feeling obligated to repay) would you feel?

0	1	2	3	4	5	6
No indebtedness	Slight indebtedness		Moderate indebtedness		Strong indebtedness	Very strong indebtedness

How **contented** would you feel?

0	1	2	3	4	5	6
No contentment	Slight contentment		Moderate contentment		Strong contentment	Very strong contentment

How **guilty** would you feel?

0	1	2	3	4	5	6
No guilt	Slight guilt		Moderate guilt		Strong guilt	Very strong guilt

How **anxious** would you feel?

0	1	2	3	4	5	6
No anxiety	Slightly anxious		Moderate anxiety		Strong anxiety	Very strong anxiety

How **irritated or annoyed** would you feel?

0	1	2	3	4	5	6
No irritation	Slight irritation		Moderate irritation		Strong irritation	Very strong irritation

How **obligated** would you feel?

0	1	2	3	4	5	6
Not obligated	Slightly obligated		Moderately obligated		Strongly obligated	Very strongly obligated

How **uneasy** would you feel?

0	1	2	3	4	5	6
Not uneasy	Slightly uneasy		Moderately uneasy		Strongly uneasy	Very strongly uneasy

How **thankful** would you feel?

0	1	2	3	4	5	6
Not thankful	Slightly thankful		Moderately thankful		Strongly thankful	Very strongly thankful

How **ashamed** would you feel?

0	1	2	3	4	5	6
No shame	Slight shame		Moderate shame		Strong shame	Very strong shame

---

To what extent do you think the salary increase was costly to the corporation?

1	2	3	4	5	6	7
Not costly at all			Moderately costly			Very costly

To what extent do you think the salary increase was intended by the corporation to be altruistic—intended for your benefit versus given with ulterior motives?

1	2	3	4	5	6	7
It was primarily given with ulterior motives			Somewhat for ulterior motives and somewhat for my benefit			It was primarily given for my benefit

How valuable would this recent salary increase be for you?

1	2	3	4	5	6	7
Not valuable			Moderately valuable			Very valuable

To what extent do you think the salary increase was intended to benefit you versus benefit the corporation?

1	2	3	4	5	6	7
It was primarily to benefit the corporation			It was intended to equally benefit the faculty and the corporation			It was primarily to benefit faculty

Do you think this raise would meet your expectations of the salary you think you deserved?

1	2	3	4	5	6	7
It was very much below my expectations			It was about what I think I deserved			It very much exceeded my expectations

To what extent was the corporation meeting versus exceeding its obligations to the faculty in instituting this salary increase?

1	2	3	4	5	6	7
The corporation was not meeting its obligations to faculty			The corporation was meeting its obligations to faculty			The corporation was exceeding its obligations to faculty

How grateful would you be for your recent salary increase?

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Not grateful			Somewhat grateful			Very grateful

How satisfied would you be with your recent salary increase?

1	2	3	4	5	6	7
Not satisfied			Somewhat satisfied			Very Satisfied

How long ago do you feel you should have received this recent salary increase?

1	2	3	4	5	6	7
A long time ago			A few years ago			I'm just glad I received it now

Appendix F

Corporation Low Cost Condition

Below you will see a story about a situation in which you will experience a change in your salary. Please try to imagine this situation vividly, and try your best to put yourself in the situation below and imagine how you would respond. **Please read the story very carefully and imagine how you would respond in this situation.** If you have read the instructions carefully, please circle the last word in this sentence.

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How **proud** would you feel?

0	1	2	3	4	5	6
No pride	Slight pride		Moderate pride		Strong pride	Very strong pride

How **grateful** would you feel?

0	1	2	3	4	5	6
No gratitude	Slight gratitude		Moderate gratitude		Strong gratitude	Very strong gratitude

How **joyful** would you feel?

0	1	2	3	4	5	6
No joy	Slight joy		Moderate joy		Strong joy	Very strong joy

How **indebted** (feeling obligated to repay) would you feel?

0	1	2	3	4	5	6
No indebtedness	Slight indebtedness		Moderate indebtedness		Strong indebtedness	Very strong indebtedness

How **contented** would you feel?

0	1	2	3	4	5	6
No contentment	Slight contentment		Moderate contentment		Strong contentment	Very strong contentment

How **guilty** would you feel?

0	1	2	3	4	5	6
No guilt	Slight guilt		Moderate guilt		Strong guilt	Very strong guilt

How **anxious** would you feel?

0	1	2	3	4	5	6
No anxiety	Slightly anxious		Moderate anxiety		Strong anxiety	Very strong anxiety

How **irritated or annoyed** would you feel?

0	1	2	3	4	5	6
No irritation	Slight irritation		Moderate irritation		Strong irritation	Very strong irritation

How **obligated** would you feel?

0	1	2	3	4	5	6
Not obligated	Slightly obligated		Moderately obligated		Strongly obligated	Very strongly obligated

How **uneasy** would you feel?

0	1	2	3	4	5	6
Not uneasy	Slightly uneasy		Moderately uneasy		Strongly uneasy	Very strongly uneasy

How **thankful** would you feel?

0	1	2	3	4	5	6
Not thankful	Slightly thankful		Moderately thankful		Strongly thankful	Very strongly thankful

How **ashamed** would you feel?

0	1	2	3	4	5	6
No shame	Slight shame		Moderate shame		Strong shame	Very strong shame

---

To what extent do you think the salary increase was costly to the corporation?

1 2 3 4 5 6 7  
 Not costly at all Moderately costly Very costly

To what extent do you think the salary increase was intended by the corporation to be altruistic—intended for your benefit versus given with ulterior motives?

1 2 3 4 5 6 7  
 It was primarily given with ulterior motives Somewhat for ulterior motives and somewhat for my benefit It was primarily given for my benefit

How valuable would this recent salary increase be for you?

1 2 3 4 5 6 7  
 Not valuable Moderately valuable Very valuable

To what extent do you think the salary increase was intended to benefit you versus benefit the corporation?

1 2 3 4 5 6 7  
 It was primarily to benefit the corporation It was intended to equally benefit the faculty and the corporation It was primarily to benefit faculty

Do you think this raise would meet your expectations of the salary you think you deserved?

1 2 3 4 5 6 7  
 It was very much below my expectations It was about what I think I deserved It very much exceeded my expectations

To what extent was the corporation meeting versus exceeding its obligations to the faculty in instituting this salary increase?

1 2 3 4 5 6 7  
 The corporation was not meeting its obligations to faculty The corporation was meeting its obligations to faculty The corporation was exceeding its obligations to faculty

How grateful would you be for your recent salary increase?

1 2 3 4 5 6 7  
 Not grateful Somewhat grateful Very grateful

How satisfied would you be with your recent salary increase?

1 2 3 4 5 6 7  
 Not satisfied Somewhat satisfied Very Satisfied

How long ago do you feel you should have received this recent salary increase?

1 2 3 4 5 6 7  
 A long time ago A few years ago I'm just glad I received it now

## Appendix G

## Thought/Action Tendencies

Take a moment to again imagine yourself as the professor in the scenario. How would you feel in this situation? Concentrate on all the emotion you would feel and live it as vividly and as deeply as possible. *Given this feeling, please list all the things you would like to do right now.*

I would like to \_\_\_\_\_

## Appendix H

## PANAS-X

This scale consists of a number of words that describe different feelings and emotions. Read each item and then mark the appropriate number in the space next to that word. Indicate to what extent *you feel that way right now, that is, at the present moment*, not necessarily how you feel generally or how you feel on average. Use the following scale to record your answers.

1	2	3	4	5
Very slightly or not at all	a little	moderately	quite a bit	extremely
___ cheerful	___ afraid	___ nervous	___ distressed	
___ disgusted	___ tired	___ lonely	___ blameworthy	
___ attentive	___ feeling indebted	___ sleepy	___ feeling obligated	
___ bashful	___ amazed	___ excited	to to repay others	
___ sluggish	___ shaky	___ hostile	___ determined	
___ daring	___ happy	___ proud	___ frightened	
___ surprised	___ timid	___ appreciative	___ astonished	
___ strong	___ alone	___ jittery	___ interested	
___ scornful	___ alert	___ lively	___ loathing	
___ relaxed	___ upset	___ ashamed	___ confident	
___ irritable	___ angry	___ at ease	___ feeling like I owe	
___ delighted	___ bold	___ scared	others a favor	
___ inspired	___ blue	___ drowsy	___ energetic	
___ fearless	___ shy	___ angry at self	___ concentrating	
___ disgusted with	___ thankful	___ enthusiastic	___ dissatisfied with	
self	___ active	___ downhearted	self	
___ sad	___ guilty	___ grateful		
___ calm	___ joyful	___ sheepish		

## Appendix I

## GRAT-S

**OPINION QUESTIONNAIRE**

se provide your honest feelings and beliefs about the following statements which relate to you. There are no right or wrong /ers to these statements. We would like to know how much you feel these statements are true or not true of you. Please try to :ate your true feelings and beliefs, as opposed to what you would like to believe. Respond to the following statements by fillir e number in the blank provided that best represents your real feelings. Please use the scale provided below, and please choose number for each statement (i.e. don't write in two numbers), and record your choice in the blank preceding each statement.

- | 1                      | 2 | 3                      | 4 | 5   | 6 | 7  | 8 | 9                                    |
|------------------------|---|------------------------|---|---|---|--|---|--------------------------------------|
| I strongly<br>disagree |   | I disagree<br>somewhat |   | I feel<br>neutral<br>about the<br>statement |   | I mostly<br>agree with<br>the<br>statement |   | I strong<br>agree w<br>the<br>statem |
- 
- \_\_\_\_\_ 1. I couldn't have gotten where I am today without the help of many people.
- \_\_\_\_\_ 2. Life has been good to me.
- \_\_\_\_\_ 3. There never seems to be enough to go around and I never seem to get my share.
- \_\_\_\_\_ 4. Oftentimes I have been overwhelmed at the beauty of nature.
- \_\_\_\_\_ 5. Although I think it's important to feel good about your accomplishments, I think that it's also important to remember how others have contributed to my accomplishments.
- \_\_\_\_\_ 6. I really don't think that I've gotten all the good things that I deserve in life.
- \_\_\_\_\_ 7. Every Fall I really enjoy watching the leaves change colors.
- \_\_\_\_\_ 8. Although I'm basically in control of my life, I can't help but think about all those who have supported me and helped me along the way.
- \_\_\_\_\_ 9. I think that it's important to "Stop and smell the roses."
- \_\_\_\_\_ 10. More bad things have happened to me in my life than I deserve.
- \_\_\_\_\_ 11. Because of what I've gone through in my life, I really feel like the world owes me something.
- \_\_\_\_\_ 12. I think that it's important to pause often to "count my blessings."
- \_\_\_\_\_ 13. I think it's important to enjoy the simple things in life.
- \_\_\_\_\_ 14. I feel deeply appreciative for the things others have done for me in my life.
- \_\_\_\_\_ 15. For some reason I don't seem to get the advantages that others get.
- \_\_\_\_\_ 16. I think it's important to appreciate each day that you are alive.

## Appendix J

GQ-6

Using the scale below as a guide, write a number beside each statement to indicate how much you agree with it.

**1 = strongly disagree**

**2 = disagree**

**3 = slightly disagree**

**4 = neutral**

**5 = slightly agree**

**6 = agree**

**7 = strongly agree**

\_\_\_\_ 1. I have so much in life to be thankful for.

\_\_\_\_ 2. If I had to list everything that I felt grateful for, it would be a very long list.

\_\_\_\_ 3. When I look at the world, I don't see much to be grateful for.

\_\_\_\_ 4. I am grateful to a wide variety of people.

\_\_\_\_ 5. As I get older I find myself more able to appreciate the people, events, and situations that have been part of my life history.

\_\_\_\_ 6. Long amounts of time can go by before I feel grateful to something or someone.

## Appendix K

## IS-R

## IS

Please indicate your response to the following items by circling the number that best represents your agreement or disagreement. There are no right or wrong answers to these items, so please provide as honest assessment of your agreement as you can. If you have read the instructions carefully, please circle the bold in the top of this page.

	Strongly Disagree					Strongly Agree
1. One should return favors from a friend as quickly as possible in order to preserve the friendship.	-3	-2	-1	1	2	3
2. Owing someone a favor makes me uncomfortable.	-3	-2	-1	1	2	3
3. One should not borrow money from a friend unless it is absolutely necessary.	-3	-2	-1	1	2	3
4. Asking for another's help gives them power over your life.	-3	-2	-1	1	2	3
5. Never a borrower or a lender be.	-3	-2	-1	1	2	3
5. I'd be embarrassed if someone had to remind me of a debt I owed them.	-3	-2	-1	1	2	3
7. As a rule, I don't accept a favor if I can't return the favor.	-3	-2	-1	1	2	3
8. If someone pays for my dinner or invites me to eat at their place, I feel obligated to buy them dinner the next time or to invite them to eat at my place.	-3	-2	-1	1	2	3
9. I get very upset when I discover I have forgotten to return something I borrowed.	-3	-2	-1	1	2	3
10. If someone goes out of their way to help me, I feel as though I should do more for them than merely return the favor.	-3	-2	-1	1	2	3
11. When someone does me a favor it often bothers me because I immediately wonder how I will repay them.	-3	-2	-1	1	2	3
12. I like to make sure I don't owe anybody anything.	-3	-2	-1	1	2	3
13. Sometimes I find myself worrying about whether I have repaid all the favors I have received.	-3	-2	-1	1	2	3
14. When someone gives me something or provides a favor to me, I usually feel somewhat uncomfortable at first.	-3	-2	-1	1	2	3
15. I'd rather do things myself than have someone help me because I don't like feeling obligated to return their favor.	-3	-2	-1	1	2	3
16. I don't receive gifts very well.	-3	-2	-1	1	2	3
17. If someone buys me an expensive gift, I worry a lot about whether I will be able to repay them.	-3	-2	-1	1	2	3
18. In good friendships you should make sure that you pay back all the favors you have received from your friend.	-3	-2	-1	1	2	3
19. If someone does me a favor, I usually try to pay them back as soon as possible.	-3	-2	-1	1	2	3
20. I get very uncomfortable when someone surprises me with a large or expensive gift.	-3	-2	-1	1	2	3
21. When I am able to repay a favor or gift, it brings me great relief.	-3	-2	-1	1	2	3
22. Often I have trouble enjoying gifts from others because I'm concerned about what I will give them in return.	-3	-2	-1	1	2	3

## Appendix L

PES

**PES**

Please respond to the following items using the number that best reflects your own beliefs. Please use the following 7-point scale:

- 1 = strong disagreement
- 2 = moderate disagreement
- 3 = slight disagreement
- 4 = neither agreement nor disagreement
- 5 = slight agreement
- 6 = moderate agreement
- 7 = strong agreement

- \_\_\_1. I honestly feel I'm just more deserving than others.
- \_\_\_2. Great things should come to me.
- \_\_\_3. If I were on the Titanic, I would deserve to be on the *first* lifeboat!
- \_\_\_4. I demand the best because I'm worth it.
- \_\_\_5. I do not necessarily deserve special treatment.
- \_\_\_6. I deserve more things in my life.
- \_\_\_7. Mark 7 for this question.
- \_\_\_8. People like me deserve an extra break now and then.
- \_\_\_9. Things should go my way.
- \_\_\_10. I feel entitled to more of everything.

Appendix M

SJS

**Your Experiences Last Week**

For the following items we would like you to indicate your opinions and experience **for the last week**, as honestly as you can. For each item, please circle the number that is associated with your response. Please note that the scale changes at item 3.

1. In the past week, how often have you felt joyful?

1	2	3	4	5	6	7
Not at all	Hardly at all	A few times	Several times	A number of times	Fairly Often	Frequently

2. In the past week, how often have you felt enthusiastic?

1	2	3	4	5	6	7
Not at all	Hardly at all	A few times	Several times	A number of times	Fairly Often	Frequently

3. Because of the joy I experienced this week, time just seemed to fly.

1	2	3	4	5	6	7
Completely Disagree			Neither agree or disagree			Strongly Agree

4. This week I found myself enjoying something so much that I lost track of time.

1	2	3	4	5	6	7
Completely Disagree			Neither agree or disagree			Strongly Agree

5. This week I felt free.

1	2	3	4	5	6	7
Completely Disagree			Neither agree or disagree			Strongly Agree

6. This week, I felt ready to enjoy whatever opportunity presented itself.

1	2	3	4	5	6	7
Completely Disagree			Neither agree or disagree			Strongly Agree

7. Something happened this week that made me feel like celebrating.

1	2	3	4	5	6	7
Completely Disagree			Neither agree or disagree			Strongly Agree

8. This week, the reality of my life was the way I feel it should be.

1	2	3	4	5	6	7
Completely Disagree			Neither agree or disagree			Strongly Agree

9. This week, I felt free to play.

1	2	3	4	5	6	7
Completely Disagree			Neither agree or disagree			Strongly Agree

10. This week, my life went well.

1	2	3	4	5	6	7
Completely Disagree			Neither agree or disagree			Strongly Agree

11. This week, life just made sense to me.

1	2	3	4	5	6	7
Completely Disagree			Neither agree or disagree			Strongly Agree

## Appendix N

DJS

**DJS Short Final**

Please respond to the following items in terms of how much you agree or disagree with each statement. With each item, please use the following scale:

1	2	3	4	5	6	7
<i>Strongly Disagree</i>						<i>Strongly Agree</i>

1. \_\_\_ I often feel bursts of joy.
2. \_\_\_ I consistently feel like my life is going well.
3. \_\_\_ I can find joy in almost any occasion.
4. \_\_\_ I would say that most of the occasions in my life bring me joy.
5. \_\_\_ My life is always improving.
6. \_\_\_ Many things bring me delight.
7. \_\_\_ I would say that I am an enthusiastic person.
8. \_\_\_ Good things happen to me all the time.
9. \_\_\_ I often feel blessed.
10. \_\_\_ Please mark 1 for this statement.
11. \_\_\_ Even when things aren't going well, I can still feel joy.
12. \_\_\_ I often find myself amazed at all the good things I have received.
13. \_\_\_ I am an intensely cheerful person.
14. \_\_\_ Even in the midst of bad situations, I can usually find something to rejoice about.
15. \_\_\_ In a typical day, things often happen that tell me my life is working out the way it should.
16. \_\_\_ I consistently feel a subtle but enduring feeling of joy.
17. \_\_\_ I often feel overjoyed when something good happens.

## Appendix O

## Demographics

**How well could you imagine yourself as the professor in the scenario?**

Not at all

Somewhat

Completely

**Demographics**

**Gender (Circle one):** Male Female Other

**Age** \_\_\_\_\_

**Ethnicity (circle all that apply):**

Hispanic or Latino American Indian or Alaska Native Asian White

Black or African American Native Hawaiian or Pacific Islander Other

Prefer to not say

**Grade Level (Circle one):**

Freshman Sophomore Junior Senior Graduate Other

**Family Household Income (Circle one):**

Less than \$30,000 \$30,000-\$49,999 \$50,000-\$74,999 \$75,000-100,000

\$101,000-150,000 \$151,000-200,000 >\$200,000

## Appendix P

**Study Description/Announcement**

This is a study that intends to investigate how well you can imagine yourself as actually being involved in a scenario. This study will help us obtain information about how psychological processes such as imagination might improve your well-being. To participate in this study, you must be at least 18 years of age or older. This study is also meeting the requirements of the principal investigator's thesis.

**Procedures**

In this study you will be asked to read a short scenario and imagine yourself as the professor in that scenario. The scenario involves the professor receiving a raise. First you will be asked to respond to questions about how you would feel in that situation (e.g., "how proud would you feel?"). These questions will be followed by a number of other questionnaires about how you are feeling, and how much you agree or disagree with statements (e.g., "my life is always improving", "I often feel bursts of joy"). Finally you will be asked to fill out a short demographic questionnaire (e.g., gender and age). In total, this study should take anywhere from 25 to 45 minutes.

**Risks, Stress, or Discomfort**

This study involves less than minimal risk to your well-being. Your participation in this experiment is anonymous. There is no way your responses can be connected to your identity. You may find that some questions relate to sensitive issues (e.g., "How guilty would you feel?"), however, remember that all of your responses are anonymous and if any question is objectionable you may choose not to answer. Access to information is restricted to the principal investigator and her research assistants. You may choose to withdraw from this study at any time without penalty. The data obtained in this experiment will be used to promote our understanding of psychological states. Five years after publication of this study your data will be destroyed via shredding.

**Other Information**

Your participation in this experiment is anonymous. Your consent to participate in this study is implied by the fact that you complete the questionnaire packet. If you do not wish to participate in this study, you may discuss alternate extra credit opportunities with your instructor. You may choose to withdraw from participation in this study at any time. You will be given a slip indicating your participation when you return your packet to the survey administrator. Alternatively, you may receive extra credit through the SONA system.

If you have any concerns about your rights as a participant in this research or any complaints you wish to make, you may contact Ruth Galm, Human Protection Administrator, at (509) 359-6567 or [rgalm@ewu.edu](mailto:rgalm@ewu.edu). If you have any questions about the research you may contact Trese McLaughlin, Principal Investigator, at (253) 740-9012 or [tmclaughlin1@eagles.ewu.edu](mailto:tmclaughlin1@eagles.ewu.edu); or Dr. Philip Watkins, Responsible Project Investigator, at (509) 359-6174 or [pwatkins@ewu.edu](mailto:pwatkins@ewu.edu).

## Curriculum Vita

### Education

#### MS Clinical Psychology

Eastern Washington University | *June 2018*

#### BA Psychology, Minor in Family Studies

Central Washington University | *June 2013*

#### Associate of Arts

Highline Community College | *June 2011*

### Certifications

**Motivational Interviewing Basics** – 14 CEUs | *February 12<sup>th</sup> & 13<sup>th</sup>, 2018*

#### Columbia Suicide Risk Assessment

Meets the Washington State RCW 43.70.442 | *December 8, 2017*

#### Counselor Agency Affiliated Registration

Washington State Department of Health | *April 2015 – August 2016*

**Washington: HIV/AIDS** – 4 Contact Hours | *February 16, 2015*

### Research Experience

**Research Assistant – Gratitude Research** | *October 2016 – June 2018*

Eastern Washington University

Working under the supervision of Dr. Philip Watkins to conduct research on gratitude and various aspects of positive psychology.

**Research Assistant – Undergraduate Honor Thesis** | *April 2013 – June 2013*

Central Washington University

Assisted peer with research on effects of message framing on health behavior.

Oversaw research participants and assisted in compiling findings.

Completing a poster which we presented at SOURCE.

### Publication

Watkins, P. C., McLaughlin, T., & Parker, J. (in press). Gratitude and subjective well-being: Cultivating gratitude for a harvest of happiness. In N. Silton (Ed.) *Scientific concepts behind happiness, kindness, and empathy in contemporary society*. Hershey, PA: IGI Global.

### Peer Reviewed Paper Presentations and Symposia

Symposium presented at the Annual Convention of the Western Psychological Association, Sacramento, CA. (2017, April). Fifteen-minute presentation given on the topic of grateful reappraisal.

### Peer Reviewed Poster Presentations

McLaughlin, T., Johnson, K., Strother, T., Huerta, A., & Watkins, P.C. (2018, April).

*Effects of benefactor type on gratitude and indebtedness*. Poster presented at the Annual Convention of the Western Psychological Association, Portland, OR.

Watkins, P. C., Bell, J. D., Scheibe, D., & McLaughlin, T. (2017, May). *Gender, gratitude, and indebtedness: the debt of gratitude is heavier for men than women.* Poster presented at the Annual Convention of the Association for Psychological Science, Boston, MA.

McLaughlin, T., Budde, A., Watkins, P.C. (2017, April). *In pursuit of virtue: the strengths people desire.* Poster presented at the Annual Convention of the Western Psychological Association, Sacramento, CA.

## **Professional Experience**

### **Clinician Intern – Practicum/Internship**

Frontier Behavioral Health, Spokane, WA | *March 2017 – May 2018*

Working as a clinician intern to satisfy Clinical Psychology Master of Science program requirements.

### **Behavioral Specialist & Coordinator Assistant – Intern**

HealthPoint, Auburn, WA | *July 2012 – September 2012*

Organized patient files and called patients for meetings, job shadowed behavioral specialist, to finish filing patient charts and shadowed the behavioral specialist for a follow up consultation with a patient

## **Additional Experience**

**Psychologist Job Shadow - 42 Hours | November 2013 – December 2014**

Rainier School, Buckley, WA

**Posttraumatic Stress, Trauma, & Anxiety Disorders - 6 Hours | October 8, 2014**

Institute of Natural Resources, Olympia, WA

**DDA Continuing Education - 6 Hours | January 28, 2014**

Developmental Disabilities Administration, Seattle, WA

**Insanity Defense - 1 Hour | October 25, 2013**

Western State Hospital, Tacoma, WA

## **Honor Societies & Memberships**

**Psi Chi Member | June 2013 – Present**

**Dean's List – 5 Quarters | March 2011 - December 2013**

**Family Studies Club Member | April 2012 – June 2013**

**Treasurer of Psychology Club | June 2012 – June 2013**