The Effects of Favor and Apology on Compliance

Ryan Goei
University of Minnesota Duluth

Anthony Roberto
The Ohio State University

Gary Meyer
Marquette University

Kellie Carlyle
Arizona State University

This study was designed to test the effects of favor and apology on compliance and to explain any potential effect via indebtedness, gratitude, and liking. Two experiments were devised to accomplish these ends. In the first experiment favor and apology were varied in the absence of a transgression to see if apologizing for not providing a favor can be used proactively to increase compliance. In the second experiment favor and apology were varied in a more common scenario, following a transgression. Results show that favor has a positive effect on compliance mediated by gratitude when using a general prosocial request and by liking when using a more altruistic request. Results also suggest that apology has a positive effect on liking and that apology has an indirect effect on compliance under certain conditions.

Keywords: favor; apology; compliance; reciprocity; persuasion

Optimizing the effectiveness of our compliance-seeking messages is of great interest to both researchers and laypersons. One way to increase compliance is to provide a favor to a target before making a direct request for compliance. Nevertheless, interactions do not always proceed optimally and predicaments often arise that limit the effectiveness of our compliance-seeking messages. When predicaments occur, a common response is to apologize. An apology can repair negative outcomes following social predicaments. As such, apologizing to a target before making a direct request for compliance might affect the target’s compliance decision. This work presents two experiments that extend compliance research by testing, under varying conditions, the independent and conjoint effects of favor and apology on compliance.
Favor

The claim that favor increases compliance is well supported (Boster, Fediuk, & Kotowski, 2001; Boster, Rodriguez, Cruz, & Marshall, 1995; Goei & Boster, 2005; Greenberg, Block, & Silverman, 1971; Regan, 1971; Wilke & Lanzetta, 1970). A favor has its strongest effect on compliance when it occurs between strangers (Boster et al., 1995); the benefactor incurs high cost to provide it (Goei & Boster, 2005); the beneficiary perceives high reward from receiving it (Greenberg et al., 1971); the beneficiary attributes the favor to benevolent intentions, not to some ulterior motive (Reeder, Vonk, Ronk, Ham, & Lawrence, 2004); and the benefactor follows the favor with a prosocial (not an antisocial) request for compliance (Boster et al., 2001).

Whereas there is little disagreement that favor increases compliance, especially under the aforementioned conditions, there is some disagreement as to the psychological mechanisms that explain the favor–compliance relationship. At least three independent possibilities have been proposed to explain the relationship: the indebtedness explanation, the gratitude explanation, and the liking explanation.

The most commonly accepted explanation for the favor–compliance relationship is that the norm of reciprocity mandates the reciprocation of favors (Gouldner, 1960). Upon the receipt of a favor, internalization of the norm of reciprocity induces a psychological state of indebtedness or obligation (Greenberg et al., 1971; Greenberg & Frisch, 1972). Indebtedness, because it restrains behavioral autonomy, is a negative, aversive state that most desire to eliminate (Greenberg & Shapiro, 1971). Beneficiaries can reduce indebtedness by complying with subsequent requests from their benefactors. Thus the indebtedness explanation posits an aversive arousal reduction model in which beneficiaries reciprocate to reduce the aversive state of indebtedness introduced by the receipt of the favor.

Despite its widespread acceptance, empirical evidence does not consistently support the proposition that indebtedness increases compliance (e.g., Abrahams & Bell, 1994; Goei & Boster, 2005; Goei, Lindsey, Boster, Skalski, & Bowman, 2003). In addition, a competing theoretical argument can be made. According to Brehm (1966), the restraint of behavioral autonomy (e.g., feeling indebted) causes a beneficiary to experience reactance, and reactance causes people to try to reinstate their behavioral freedom. One way to reinstate behavioral freedom is to resist a compliance-seeking message from a benefactor to show that one is not bound by normative exchange demands. Given the inconsistent findings and the competing theoretical propositions, we pose the following research questions regarding the role of indebtedness:

Research Question 1: What effect, if any, does favor have on beneficiary feelings of indebtedness?

Research Question 2: What effect, if any, do feelings of indebtedness have on beneficiary compliance with subsequent benefactor requests?
Gouldner (1960), to whom the indebtedness explanation is often attributed, also implicates a second and largely unheeded potential explanation—the gratitude explanation. This implication is clear when Gouldner writes,

The motivation for reciprocity stems not only from the sheer gratification which Alter receives from Ego but also from Alter’s internalization of a specific norm of reciprocity which morally obliges him to give benefits to those from whom he has received them. (p. 174)

Adam Smith (1790/1976) advanced a gratitude explanation for our tendency to reciprocate favors when he wrote, “The sentiment which most immediately and directly prompts us to reward, is gratitude” (p. 68).

The gratitude explanation put forth by Gouldner (1960) and Smith (1790/1976) suggests that favor enhances beneficiary feelings of gratitude and that the positive affective state of gratitude serves as a moral motivator, increasing benevolent behavior toward a benefactor. McCullough, Kilpatrick, Emmons, and Larson (2001) contend that gratitude is a moral affect on par with sympathy and empathy insofar as it is a positive state that is motivated by and results in moral behavior. Moral behavior, in this case, is defined as behaviors enacted solely to improve the benefactor’s well-being, not a self-interested purpose. Indebtedness and gratitude do not differ in that both the indebted and the grateful beneficiary make a cognitive assessment of the rewards received and costs incurred by the benefactor to provide the favor. Indebtedness and gratitude differ in that the indebted beneficiary feels negative and reciprocates to alleviate the aversive state of indebtedness by complying with the social norm, whereas the grateful beneficiary feels positive and complies out of a desire to benefit the benefactor.

Though few studies have tested the gratitude explanation, results consistently support the propositions that favor induces gratitude and that gratitude increases compliance (Goei & Boster, 2005; Okamoto & Robinson, 1997). One of these studies tested both gratitude and indebtedness simultaneously (Goei & Boster, 2005). Results from that study showed that favor cost (the level of effort the benefactor incurred to provide the favor) had a positive effect on compliance mediated by gratitude but not by indebtedness suggesting that gratitude-motivated patterns of reciprocation are widely mistaken for indebtedness-motivated patterns. Therefore, we hypothesize the following:

**Hypothesis 1:** Participants who receive a favor will report greater feelings of gratitude than participants who do not receive a favor.

**Hypothesis 2:** As participants report greater levels of gratitude they will be more likely to comply with a benefactor request.
Another positive affective explanatory mechanism is liking. Supporters of the liking explanation argue that a favor causes a beneficiary to perceive a benefactor as kind and good, and this increased liking positively affects compliance. The first part of this explanation contends that beneficiaries are more attracted to benefactors because the favor shows that the benefactor is concerned with the beneficiary’s welfare and is more likely to provide resources to the beneficiary in the future—an attractive characteristic. The empirical evidence for this claim has been generally supportive; receipt of a favor increases beneficiary attraction to their benefactor (Greenberg & Frisch, 1972; Kiesler, 1966; Regan, 1971; Whatley, Webster, Smith, & Rhodes, 1999).

The second part of this explanation, that liking increases compliance, is less well supported. It has been argued that liking should increase compliance because humans desire positive relations with liked others and compliance maintains these positive relations (Williamson, Clark, Pegalis, & Behan, 1996). Nevertheless, the empirical data relevant to this claim are not consistent. Some researchers find that liking has little or no effect on compliance (Boster et al., 1995), notably when indebtedness is salient (Regan, 1971), and others find that liking has a substantial positive effect on compliance (Burger, Soroka, Gonzago, Murphy, & Somervell, 2001), even when indebtedness is salient (Goei et al., 2003). Thus, we pose the following hypothesis and research question.

**Hypothesis 3:** Participants who receive a favor will report higher levels of liking for their benefactor than participants who do not receive a favor.

**Research Question 3:** What effect, if any, will participant liking for the benefactor have on the likelihood that the participant will comply with benefactor requests?

This is the first study to test the indebtedness, gratitude, and liking explanations simultaneously to control for the effects of the others. The proposed model following the logic just outlined posits each of the three psychological mechanisms as independent mediators of the favor–compliance relationship.

**Apology**

When predicaments arise and project unwanted, negative aspersions on our character, an apology is one method of remediation. Goffman (1971) argues that an apology is an attempt to split the self in two, to communicate that the bad-self that has been presented is not the true good-self. As Schlenker (1980) puts it,

> Apologies allow an actor to admit blameworthiness for an undesirable event but also attempt to obtain a pardon from the audience by convincing the latter that the event should not be considered a fair representation of what the actor is really like as a person. (p. 154)
Generally, an apology acknowledges responsibility and regret for a violation. Schlenker and Darby (1981) argue that apologies vary in complexity. Perfunctory apologies (“Pardon me”) can be augmented with at least five components that increase their complexity. An apologetic statement (“I’m sorry”) alone is a rather simple addition. But an expression of remorse (“I feel badly about this”), an offer to help the other (“Let me make it up to you”), a self-castigating statement (“I am so stupid”), or a direct request for forgiveness (“Please forgive me”) are additions that increase the complexity of the apology. Schlenker and Darby found that as transgression severity increased, so did apology complexity suggesting that apologies often fit the crime: the bigger the transgression, the bigger the attempt to remediate.

Apologies have generally positive effects following a transgression. Several studies show that apologies alleviate negative sanctions like aggression or anger and boost positive perceptions like trust and liking (Kim, Ferrin, Cooper, & Dirks, 2004; Ohbuchi, Kameda, & Agarie, 1989). Moreover, evidence suggests that more complex apologies should achieve these positive ends more efficiently than less complex, more perfunctory apologies (Ohbuchi et al., 1989).

Apology and Transgression

As previously noted, most existing apology research examines the role of apology following a transgression. In at least one case, researchers have examined the effect of apology provided simultaneously with the transgression (Skarlicki, Folger, & Gee, 2004), but in most cases a transgression is perceived, even if wrongly. Given the positive effects of apology on liking following social predicaments and the possibility that liking increases compliance, we decided to extend apology research to the realm of favors and compliance-seeking by examining if apology might be used proactively as a tool to seek compliance even when no transgression has taken place. Specifically, in the first experiment we test the notion that apologizing for not providing an unsolicited favor to a stranger can increase compliance. In the second experiment, with some alterations to the method, we test the effects of apology and favor on compliance following a transgression.

Experiment 1

A prediction regarding the effect of apologizing for not providing an unsolicited favor to a stranger is not straightforward. One line of reasoning says that, if apologizing after a transgression positively affects liking because it discounts the bad self and puts forward the good self, apologizing for not providing an unsolicited favor to a stranger refers to a bad self that most others would not construe as bad. In this context, assuming few people expect a stranger to provide them with an unsolicited favor, it is likely that the bad self is not discounted by others, and thus the good self will not be put forward.
favor, apologizing sets an extremely high moral standard for the true, good self (i.e., a person who feels the need to apologize for not giving a favor to a stranger must be an extremely kind and generous person compared to most). Therefore, one might apologize for not providing a favor to elicit liking with the expectation that liking will increase compliance.

In addition, apologizing for not providing a favor might work to increase liking and compliance because it communicates one’s intentions to provide a favor. It cannot be argued that the benefactor has incurred costs or that the beneficiary has received rewards. But apology implicitly communicates the transgressor’s intention to not do the negative act in the future (Bennett & Dewberry, 1994). Thus, by apologizing for not providing a favor, the would-be benefactor implicitly communicates his or her willingness and intention to do such a favor for the would-be beneficiary. Several studies support the notion that a benefactor’s intentions, not just the actual value or cost of the favor, are important to beneficiaries and increase their own intentions to reciprocate and communicate with the benefactor in the future (Ames, Flynn, & Weber, 2004; Greenberg et al., 1971; McCabe, Rigdon, & Smith, 2003; Nelson, 2002). In this way, the first experiment is a test of whether the thought counts. If the thought counts despite no benefit conferred, then we should observe a positive effect for apology on compliance mediated by liking.

An opposing line of reasoning suggests that apology without a transgression will have a negative effect on compliance. Kim et al. (2004) conducted a study in which participants viewed video vignettes of job applicants who were accused of a negative act or not, apologized for the negative act or denied having done the negative act, and were subsequently found either guilty or innocent. Results showed that, when innocent, apologizing was actually less effective than denying the accusation in restoring positive perceptions (e.g., trust, perceived competence, perceived integrity, and desire to hire). Moreover, even though positive perceptions were restored partially when people were guilty (i.e., a transgression had truly occurred), apologizing did not restore positive perceptions to pretransgression levels. These findings suggest that apology might serve only as an abatement, not a facilitating, device.

According to this logic, apologizing without transgressing could reflect negatively on the apologizer by construing the apologizer’s behavior as a transgression when it would otherwise not be construed as such. Thus, choosing not to apologize could be better than choosing to apologize when a transgression is not likely to be perceived without the apology. Given one can argue for both a positive and a negative effect for apology on compliance, we pose the following two research questions:

**Research Question 4:** What effect, if any, does apologizing to a target for not doing a favor have on compliance?

**Research Question 5:** What effect, if any, does apologizing to a target for not doing a favor have on liking?
The answers to these questions concerning the role of apology hold some potentially interesting implications. If results demonstrate a positive effect for apology similar to that of a favor, this would suggest that one can use apology proactively to facilitate positive interactions and increased compliance even following positive or neutral interactions. If true, one could increase compliance without incurring the objective costs associated with actually providing a favor simply by communicating that they were sorry for not doing a favor. Alternatively, if apology has a negative effect, this would suggest that one refrain from apologizing for transgressions that would otherwise remain undiscovered as is often recommended to defendants accused of some wrongdoing because it implicitly acknowledges guilt and associates them with a transgression.

Based on this discussion, we designed the first experiment to test the effects of favor and apology on compliance with no transgression. The study was devised to optimize the chances that favor and apology would increase compliance. Thus, we employed a favor that incurred cost to the benefactor, rewarded the beneficiary, was provided to a stranger, and was followed by a prosocial request. We employed an apology of moderate complexity that described the transgression, admitted blame-worthiness, and included both an apologetic and a self-castigating statement. We refrained from adding more apology components (e.g., direct request for forgiveness and expressions of intense emotion) for fear of creating an apology that was too complex for the situation and might induce heightened levels of suspicion. We aggregated all of the hypotheses and research questions into a full model, which can be seen in Figure 1.

**Method**

This study implemented a 2 (no favor/favor) × 2 (no apology/apology) between-subjects design. Participants were the unit of analysis and were randomly assigned to one of the four conditions.
Participants
Sixty-four females from communication undergraduate courses in a large Midwestern university participated in the study. Students participated for course credit. The participants’ average age was 19.69 years (SD = 1.60). Eighty-three percent of the sample classified themselves as White or European American, 8% Black or African American, 3% Asian or Pacific Islander, 1% Hispanic, and 5% Other.

Confederates
Three female confederates were used in this study so that all interactions occurred between same-sex strangers. The effectiveness and consistency of the inductions relied heavily on these confederates. Thus, confederates were trained extensively to follow a script, control their nonverbal behavior, and track for problems of implementation. No problems were reported. No significant differences due to confederate were obtained in measures of indebtedness, gratitude, liking, or compliance.

Procedure
Experimenters welcomed one participant and one confederate into a laboratory in which the two were seated facing opposite directions in a small room. As a cover story, experimenters introduced the experiment as a creativity study designed to assess how similar and dissimilar persons produce ideas. Participants were told that during the study they would be brainstorming solutions to campus problems and completing some surveys to measure their perceptions.

After being introduced to the study, participants completed a survey of general attitudes (ostensibly to assess their similarity levels) and demographic variables—the former not being relevant. Next, participants were provided instructions for the brainstorming tasks. They were allotted 3 minutes to brainstorm solutions for each task. Participants and confederates always brainstormed individually. Upon completion of the first task, experimenters collected both lists of ideas and said, “I’m going to review these responses shortly. I will be right back to begin the next task. Remember not to talk to one another while I’m gone.” Exactly 2 minutes later, experimenters returned to begin the second brainstorming task.

After completion of the second task, experimenters repeated the previous instructions about reviewing their responses and not talking. As experimenters exited the room, confederates asked, “While you’re doing that can I get a quick drink?” Experimenters replied, “Sure, but don’t be long.” Confederates quickly left the lab. Upon return they carried out the favor and apology inductions.

In the no favor/no apology condition, confederates returned to their seat without saying anything. In the no favor/apology condition, confederates returned to the lab with one bottled water, stopped as they entered the lab and, acting surprised and disappointed, said, “Oh. I should have bought one for you too. That was stupid.” They then paused and finished sincerely, “I’m sorry.” In the favor/no apology condition confederates returned to the lab with two bottled waters, placed one of the waters on
the participant’s desk, and said, “Here you go, I bought one for you too.” After being thanked, confederates replied, “You’re welcome,” and returned to their seat. In the favor/apology condition, confederates returned a minute later with one bottled water, stopped in the doorway of the lab, and said, “Oh. I should have bought one for you too. That was stupid.” They then paused and finished sincerely, “I’m sorry. Just a second . . .” As they finished speaking they exited the lab for a second time, returned 1 minute later with a second water bottle, and said, “Here you go, I bought one for you too.” After being thanked, confederates replied, “You’re welcome,” and returned to their seat. Confederates were always gone 2 minutes before the favor was given.

Following the favor and apology inductions, experimenters returned to begin the third brainstorming tasks. After participants completed the third task, experimenters said, “We’re also interested in knowing how your feelings toward your brainstorming partner affect your ability to produce ideas.” They then gave participants a survey comprised of filler questions and items to measure their liking for the confederate. Pending completion of the survey, experimenters began the fourth brainstorming task.

After the fourth task, experimenters reiterated that they would be reviewing their responses and asked them not to talk during that time. Before experimenters could leave the lab, confederates asked, “If we can’t talk at all, is it okay if I give her a note that doesn’t have anything to do with the experiment?” Experimenters replied, “That’s okay. But please, do not talk at all.”

The confederates then tore a sheet of paper from their notebook and wrote the compliance-seeking message. The message, adapted from Regan (1971), read,

Hey, I’m selling raffle tickets for my old high school. The tickets cost $1.00 each and the prize is a new iPod. If you are willing to buy any, would you just write how many on this note and give it back to me right away so I can make out the tickets after the experiment? If you don’t have the money now you can pay me later. Thanks.

A written compliance-seeking message of this type is common practice (Goei et al., 2003; Regan, 1971) and was preferred to control verbal and nonverbal aspects of the request that might otherwise vary. After participants responded to the note, experimenters reentered the room, probed participants for suspicion, and provided a partial debriefing. During the partial debrief, experimenters told participants that their partner was part of the study and that they had been instructed to make the raffle ticket request. At this point, experimenters did not inform participants that the favor and apology inductions were part of the experiment. Participants were then asked to complete a survey regarding why they decided to comply or not. Participants were instructed to respond “as it pertains to how you felt during the study, not how you feel now.” Experimenters reminded them that confederates would never see their responses and administered the survey containing the indebtedness and gratitude items. Following completion of this survey, participants were completely debriefed, sworn to secrecy, and excused.
Instrumentation

**Indebtedness.** Indebtedness was measured with four items. Participants responded to items on a semantic differential-type scale with two descriptors (*not at all* and *to a large extent*) on either end of a set of seven dashes. Responses varied from 1 to 7 and were coded such that higher scores represented higher levels of indebtedness (all subsequent items in both experiments, save the compliance items, employ the same scale and are coded similarly). Indebtedness items included statements like, “I felt that I had to buy raffle tickets to pay back my partner” and “I felt pressured to do something for my partner.” Most of these items have been used in previous studies and have been found valid and reliable (Goei & Boster, 2005). The mean indebtedness score was low ($M = 2.70$, $SD = 1.90$) and standardized item alpha for the scale was .95.

**Gratitude.** Gratitude was measured with four items. Items included statements like, “I felt thankful toward my partner” and “I felt grateful toward my partner.” These four items have been found valid and reliable (Goei & Boster, 2005). The mean gratitude score was moderate ($M = 3.57$, $SD = 2.03$) and standardized item alpha for the scale was .97.

**Liking.** Liking was measured with six items. Items included statements like, “I think she could be a friend of mine” and “I like her.” The average liking response was moderately high ($M = 4.77$, $SD = .80$) and standardized item alpha for the scale was .73.

**Compliance.** The number of raffle tickets participants agreed to buy on the note constituted the measure of compliance. The mean compliance rate was 1.39 ($SD = 1.27$). These scores were highly positively skewed (skewness = 1.39, $SE = .30$). Therefore, a binary measure of compliance was computed (0 = no tickets, 1 = one or more tickets). The mean compliance rate of the binary measure was .77 ($SD = .43$). All subsequent analyses of compliance employ the binary measure. Table 1 contains descriptive statistics for these variables across all conditions.

Results

The data were submitted to confirmatory factor analyses (Hunter & Gerbing, 1982) to test the four-factor hypothesis (indebtedness, gratitude, liking, compliance). In tests of internal consistency fewer than 14% of all errors between the predicted and obtained correlations fell outside what one would expect from sampling error. The four errors that exceeded sampling error were small (average error = .06) and not systematic to one factor or item. In tests of parallelism, errors were few (less than 1% exceeded sampling error) and not systematic to one factor or item. Therefore, we concluded that the data were consistent with the four-factor model.
Test of the Proposed Model

We examined the roles of indebtedness, gratitude, and liking by testing the full path model in Figure 1. To test this model, the ordinary least squares criterion was used to estimate the parameters. Parameter size and significance were examined and the fit of the overall model assessed (Hunter & Gerbing, 1982). All path coefficients and their confidence intervals were corrected for attenuation due to error of measurement. The dependent variable (compliance), although dichotomous, was treated as a linear variable in the model to derive correlations for testing the path model. Results from the loglinear tests are not different from and do not change any of the conclusions reached using the linear tests for either experiment. Each confidence interval represents the equivalent of a two-tailed significance test, even when directional predictions were made.

The predicted model proposes that favor increases indebtedness, gratitude, and liking. It proposes that apology increases liking and subsequently that indebtedness, gratitude, and liking all increase compliance. Results show that favor increased indebtedness, \( r = .46, P(0.26 \leq r \leq 0.66) = .95 \), and gratitude, \( r = .50, P(0.30 \leq r \leq 0.70) = .95 \), but had no statistically significant effect on liking, \( \beta = .20, P(-0.07 \leq \beta \leq 0.47) = .95 \). Apology increased liking, \( \beta = .27, P(0.00 \leq \beta \leq 0.54) = .95 \). Nevertheless, neither liking, \( \beta = -.11, P(-0.44 \leq \beta \leq 0.33) = .95 \), nor indebtedness, \( \beta = -.13, P(-0.54 \leq \beta \leq 0.28) = .95 \), had a significant subsequent effect on compliance. Gratitude had a substantial positive effect on compliance, but it did not achieve statistical significance, \( \beta = .38, P(-0.05 \leq \beta \leq 0.81) = .95 \).
The data were clearly not consistent with the model. Thus, all nonsubstantial paths were removed and an amended model was derived. We retained the gratitude–compliance path because it was substantial in size, was significant using a one-tailed test (an acceptable option considering the a priori directional prediction), and was both substantial and statistically significant (two-tailed) once the other factors were removed. Tests of the amended model suggest that the data were consistent with a simple causal string in which favor induced gratitude and gratitude increased subsequent compliance. The favor–gratitude path was positive and significant, \( r = .50, P(.30 \leq \rho \leq .70) = .95 \). The gratitude–compliance path was also significant, \( r = .24, P(.01 \leq \rho \leq .48) = .95 \). The overall test of the model revealed that the error between the predicted and the observed correlation was small (\( e = .08 \)) and not statistically significant, \( \chi^2(1, N = 64) = .20, p = .65 \). The revised model and results can be seen in Figure 2.

Experiment 2

Results from the first experiment suggest favor has a positive effect on compliance mediated by gratitude. Also, results indicate that apology enhances liking but that liking has no effect on compliance. To further our understanding of apology and how it compares to favor in its effect on compliance, a second experiment was designed to test the effect of favor and apology on compliance. The second experiment replicated the general design and method of the first experiment, but with four changes.

In the first experiment, the compliance-seeking request did not directly benefit the requestor. Instead, it could easily be interpreted as a general prosocial request (e.g., raising money for high school academics, not for the requestor). In the second experiment, we amended the compliance-seeking request to highlight how compliance directly benefits the requestor. In this way, any compliance by the target can be less ambiguously interpreted as doing something to benefit the requestor and thereby represents a better example of moral behavior directed at the requestor. Also, to increase the ecological validity of the compliance-seeking message, we altered its channel from written to face-to-face.

Apologizing without having transgressed is a unique use of apology. More commonly apology follows a transgression. To further our understanding of the role that apology might play in affecting compliance, we designed the second experiment so
that confederates would have something more obvious for which to apologize. As a final change, we included males and females in the sample to increase the generalizability of our understanding concerning the effects of favor and apology on compliance.

**Method**

The second experiment replicated the 2 (no favor/favor) × 2 (no apology/apology) between-subjects design from the first. Again, participants were the unit of analysis and were randomly assigned to one of the four conditions.

**Participants**

We recruited 186 students from communication undergraduate courses in a small Midwestern university to participate in the study (110 females). Students participated for course credit. Participant’s average age was 19.87 years (SD = 5.50). Eighty-seven percent of the sample classified themselves as White or European American, 3% Black or African American, 4% Asian or Pacific Islander, 1% Hispanic, and 4% Other.

**Confederates**

Seven confederates (four females, three males) were used in this study. Confederates always interacted with a same-sex participant. Again, confederates were trained extensively to follow a script and control their nonverbal behavior. Confederates reported no problems implementing the favor and apology inductions. No differences in indebtedness, gratitude, liking, or compliance emerged due to confederate.

**Procedure**

The second experiment began as did the first. Participants were seated in a small, quiet room at separate desks, facing opposite directions, within 10 feet of one another and instructed to produce as many ideas as possible in four, timed brainstorming tasks.

During the first 3-minute brainstorming task, the confederate engaged in the transgression. Two minutes after beginning the first timed task, the confederate’s cell phone rang. Instead of turning it off or ignoring it, confederates answered the phone during the timed session and said loudly, “Hello? Oh, hi. What’s up? No . . . really? Ok, well listen, I really can’t talk right now can I call you back? Cool. See ya later.” Because confederates and participants were less than 10 feet apart in a silent room, the participants always heard the phone ringing and the confederate’s part of the phone conversation.

Upon completion of the first task, experimenters collected the brainstorming lists and said, “I’m going to review these responses shortly. I will be right back to begin the next task. Approximately 30 seconds after experimenters left, confederates in the apology conditions turned around to apologize saying, “I’m so sorry about my cell
phone. I really should have turned it off before we started. I hope I didn’t interrupt you too much.” Exactly 2 minutes later, experimenters returned to begin the second brainstorming task.

After completion of the second task confederates asked, “While you’re doing that can I get a quick drink?” Experimenters replied, “Sure, but don’t be long.” Confederates quickly left the lab. Two minutes later they returned to carry out the favor induction.

In the no favor conditions, confederates returned to their seat without saying anything. In the favor conditions, confederates returned to the lab with two bottled waters and said, “Here you go, I bought one for you too.” After being thanked, confederates replied, “You’re welcome,” and returned to their seat.

Following the favor and apology inductions, participants completed the third task, the liking survey, and the fourth task. Experimenters then dismissed participants so that they would not assume the forthcoming compliance-seeking message was part of the experiment. As participants prepared to leave, confederates made the compliance-seeking request by approaching participants, handing the participant a pledge sheet, and saying,

Hey, I’m selling raffle tickets, and if I sell enough tickets I win $50 and I could use it. I’m just taking pledges, so you don’t need any money right now. They’re $1.00 each and the winner gets $300. Think you could help me out?

Pledge sheets contained the name of a fictitious school and the reward information for both the seller (i.e., the $50 prize) and the potential buyer (i.e., the $300 prize). Each participant received a clean pledge sheet with no other names or purchases yet recorded to prevent influence from others’ buying decisions. After participants had a chance to respond to the compliance-seeking request, experimenters intervened to give the partial debrief. Following the partial debrief, participants completed the indebtedness and gratitude survey, were fully debriefed, and were excused.

Instrumentation

The instruments employed in the second experiment were the same as those employed in the first experiment with one exception. One item was added to the liking scale (“I think it would be difficult to talk with him/her”).

---

**Figure 3**
Revised Model Depicting the Favor Compliance Relationship Mediated by Liking for Experiment 2

![Diagram](https://example.com/diagram.png)
To summarize, the mean indebtedness score was low ($M = 3.01$, $SD = 1.80$), and standardized item alpha for the scale was .96. The mean gratitude score was moderate ($M = 4.13$, $SD = 1.91$), and standardized item alpha for the scale was .97. The average liking response was moderately high ($M = 4.80$, $SD = .76$), and standardized item alpha for the scale was .73. The mean compliance rate was 1.50 ($SD = 1.69$). As in the first experiment, these scores were highly positively skewed (skewness $= 2.17$, $SE = .18$). Therefore, a binary measure of compliance was computed (0 = no tickets, 1 = one or more tickets). The mean compliance rate of the binary measure was .78 ($SD = .42$). A complete report of all means by condition can be seen in Table 1.

**Results**

These data were submitted to confirmatory factor analysis to test the four-factor hypothesis (indebtedness, gratitude, liking, compliance). Replicating the first experiment, results supported the four-factor model.

**Test of the Proposed Model**

In the second experiment we tested the same theoretical model proposed in the first experiment (see Figure 1). Results showed that favor had a substantial positive effect on indebtedness, $r = .35$, $P(.21 \leq r \leq .49) = .95$, gratitude, $r = .69$, $P(.61 \leq r \leq .77) = .95$, and liking, $\bar{\beta} = .36$, $P(.20 < \bar{\beta} \leq .52) = .95$. Data revealed no significant effect for apology on liking, $\bar{\beta} = .12$, $P(-.06 \leq \bar{\beta} \leq .30) = .95$. Nevertheless, the effect size obtained in this experiment was positive and fell within sampling error of the positive and statistically significant effect from the first experiment ($Z_{diff} = .32$, $p = .75$). Unlike the first experiment, gratitude did not have a significant effect on compliance, $\bar{\beta} = .10$, $P(-.09 \leq \bar{\beta} \leq .29) = .95$, while liking did have a substantial and significant positive effect on compliance, $\bar{\beta} = .27$, $P(.09 \leq \bar{\beta} \leq .45) = .95$. Consistent with the first experiment, indebtedness had no significant effect on compliance, $\bar{\beta} = .09$, $P(-.09 \leq \bar{\beta} \leq .27) = .95$.
All nonsubstantial paths were removed from the model and a revised model was derived (see Figure 3). Data were consistent with the simple causal string in which favor induces liking and liking increases compliance. Favor increased liking significantly, \( r = .36, P(.20 \leq \rho \leq .52) = .95 \), and liking increased compliance significantly, \( r = .32, P(.16 \leq \rho \leq .48) = .95 \). The error between the predicted and the observed unconstrained relationship was small (\( e = .06 \)) and not statistically significant, \( \chi^2(1, N = 186) = .29, p = .59 \). In addition, despite the fact that women (83%) were more likely to comply than men overall (70%), \( \chi^2 = 4.37, p = .04 \), none of the relationships reported above differ significantly by sex.

**Discussion**

These two experiments were designed to see if and why favor and apology affect compliance. In the first experiment we compared the effect of favor and a unique use of apology by examining the effect of apologizing for not providing an unsolicited favor. In the second experiment we compared the roles of favor and apology in a more ordinary context, following a transgression. Given apology and favor did not combine multiplicatively to affect the mediating or dependent variables, we discuss the main effects of apology and favor separately in the following sections.

**The Effect of Apology**

Results from these two experiments suggest that apology has a positive effect on liking. This finding suggests that apology might be used to achieve the social rewards that emerge when liking for the requestor is high even when no transgression has occurred. This finding stands in contrast to the argument that apologizing when no transgression is perceived might decrease liking for the apologizer by unnecessarily connecting him or her with a negative behavior.

In the first study, however, liking did not increase compliance. Nevertheless, when the compliance-seeking message was altered in the second experiment to more explicitly reward the requestor, liking did increase compliance. Taken together, these findings suggest that apology might be used proactively in situations without a clear transgression to increase liking and compliance only when one employs an altruistic compliance-seeking message to make liking salient. This potentiality is powerful. It suggests that apology might be used to augment compliance rates without suffering the tangible cost of providing a favor—one need only to apologize for not having done a favor. But these two claims were not supported simultaneously within one experiment. In addition, we used the same favor and similar apologies in both experiments. As such, these results might be limited to the experimental inductions used. Future work is necessary to test multiple, varied instantiations of the favor and apology inductions to help concretize our understanding of the effect and be sure the findings from this study are not limited to the chosen inductions.
The Effect of Favor

As expected, the effect of favor on compliance was positive in both experiments. More interestingly, however, is that results from these experiments corroborate claims that positive affective responses, like gratitude and liking, explain this effect whereas indebtedness does not.

Both experiments provide evidence that positive affective mechanisms explain the favor–compliance relationship. A discrepancy arose concerning the primary positive affective mediator of the favor–compliance relationship. The first experiment suggests that gratitude mediates the favor–compliance relationship and that liking does not. The second experiment suggests that liking mediates the relationship and that gratitude does not. This was likely due to the difference in compliance-seeking requests. Recall, in the first experiment we employed a general prosocial request (i.e., buy raffle tickets to benefit unknown high school); in the second experiment we used a more altruistic request that communicated more clearly the benefit of compliance to the requestor (i.e., buy raffle tickets to help the requestor win money that he or she needs). We predicted the request in the second experiment to make liking more salient than in the first experiment, but not to trump the effect of gratitude. Nevertheless, it seems reasonable that liking for the requestor play a stronger role than gratitude in predicting compliance when the requestor makes a more altruistic request and that gratitude play the stronger role than liking when the requestor makes a more general prosocial request.

To elaborate, an altruistic request makes a “do it for me” type of appeal (Marwell & Schmidt, 1967) that ought to be more effective with one who likes the requestor than with one who does not like the requestor because compliance in this circumstance directly benefits someone who the target desires to see fare well. When compliance, however, does not benefit the requestor directly but benefits some group of unknown others for a prosocial cause, the target’s sense of gratitude for their own state of being ought be more predictive of their willingness to comply. Indeed, it has been proposed that gratitude is not target specific, as is liking, and that it has the power to inspire moral behavior for unknown others (McCullough et al., 2001). Liking cannot hold this power for unknown others.

In fact, a reexamination of the literature shows that when compliance clearly benefits the requestor, liking tends to be a stronger predictor of compliance (Burger et al., 2001; Carnevale, Pruitt, & Carrington, 1982; Frenzen & Davis, 1990; Goei et al., 2003). Although only one study examined the effect of gratitude on compliance, that study used a general prosocial request and found support for a gratitude–compliance link (Goei & Boster, 2005). These findings raise a largely unheeded issue in this area of study: the effect of request type. The nature of the compliance-seeking request could determine which mechanism (e.g., indebtedness, gratitude, or liking) explains compliance and help clarify some of the previous inconsistencies. Research that examines explanatory mechanisms as a function of different types of compliance-seeking requests might be useful.
Despite this inconsistency, the results overwhelmingly suggest that reciprocal patterns are motivated by positive affective mechanisms and not indebtedness. These findings challenge the commonly held notion that people reciprocate favors because the norm of reciprocity generates a state of indebtedness that motivates reciprocation. In fact, of the six experiments that include a direct measure of indebtedness, this is the fifth to find that indebtedness has no effect on compliance (Abrahams & Bell, 1994; Goei & Boster, 2005; Goei et al., 2003). These results make it increasingly clear that in initial interactions, indebtedness does not play an active mediating role in the unsolicited favor–compliance relationship, despite the pervasive belief that it does.

Many researchers argue that the tendency to feel indebted following receipt of a favor is a critical aspect of our human character, a product of socialization or natural selection processes that helps perpetuate the reciprocal cycles that stabilize human societies (Cialdini, 2001; Gouldner, 1960). Nevertheless, most researchers would also agree that the intentions of the benefactor are integral in prompting reciprocal behavior insofar as favors enacted for purely moral or altruistic reasons optimize subsequent reciprocation compared to those enacted for self-interested or other external reasons (Greenberg & Frisch, 1972; Schopler & Thompson, 1968).

As such, an important problem with the indebtedness logic emerges that might help one understand these findings. If A is motivated to reciprocate only (or most strongly) when B provides a favor for purely altruistic reasons (with only the interests of the beneficiary in mind) and is less inclined to reciprocate when B provides a favor for the more self-interested reason of alleviating B’s own aversive state of indebtedness, then the indebtedness explanation does not explain long-term reciprocal prosocial relationships as effectively as a positive affective explanation. So if B is motivated by gratitude or liking to improve the well-being of A independent of self-interested concerns, the cycle is likely to perpetuate most efficiently because A will perceive B’s selfless intentions and be more likely to reciprocate the favor. As such one might argue that the regulatory mechanism that humans try to instill in their young, or for which we have naturally selected, is positive and affective. Attention to this possibility might increase our understanding of human reciprocal behavior. Despite this potentiality, complete rejection of the indebtedness explanation is not yet warranted.

Indebtedness could explain human reciprocal behavior under different, as of yet unexplored, circumstances. Indebtedness might induce compliance among some people, but not among others. For example, individual differences in indebtedness-and gratitude-motivated behavior remain untested. Also, indebtedness might induce compliance only when the favor is either extremely costly to the benefactor or extremely rewarding to the beneficiary. Another possibility is that indebtedness augments compliance with solicited favors but not unsolicited favors. Solicited favors might differ from unsolicited favors in that when a beneficiary receives a solicited favor from a benefactor, the beneficiary is in part responsible for the costs
incurred by the benefactor. This feeling of responsibility could induce an aversive sense of indebtedness that does not induce reactance and thereby increases reciprocation. In the area of compliance-seeking research we tend to focus on unsolicited favors employed proactively to gain compliance, but in the area of everyday helping behavior often the beneficiary is responsible for, or has directly requested help from, a benefactor. This might be a fruitful area for further research to help uncover the role, if any, indebtedness might yet play in explaining human reciprocal behavior.

Notes

1. Correspondence concerning this article should be addressed to Ryan Goei, 455 A.B. Anderson Hall, University of Minnesota Duluth, Department of Communication, Duluth, MN 55812; e-mail: rgoei@d.umn.edu.

2. Ideally one would measure indebtedness, gratitude, and liking after the favor but before the decision to comply has been made (i.e., temporally where it belongs in our causal reasoning). Indeed, liking is measured at this time. We decided, however, not to measure gratitude and indebtedness at this point. We made this decision because participants responding to gratitude and indebtedness items after a favor (but before the compliance seeking request) might experience heightened suspicion. It would be difficult to get beneficiaries to respond to questions like “I feel pressured to pay back my brainstorming partner for what he or she did for me” without arousing suspicion. Of course, in so doing, participants’ gratitude and indebtedness responses are open to potential influence from demand effects and their compliance decisions. We opted to run this risk and limit suspicion and potential demand effects to get a more valid measure of participants’ compliance.

References


**Ryan Goei** (PhD, Michigan State University, 2003) is an assistant professor in the department of communication at the University of Minnesota Duluth. His research interests include social influence, interpersonal, and health communication.

**Anthony Roberto** (PhD, Michigan State University, 1995) is an assistant professor in the school of communication at The Ohio State University. His primary research interests are in the areas of persuasion and health communication campaigns.

**Gary Meyer** (PhD, Michigan State University, 1995) is an associate dean in the J. William and Mary Diederich College of Communication and associate professor in the department of communication studies at Marquette University (Milwaukee, WI). His primary research is focused in persuasion theory often applied with the areas of health promotion and disease prevention.

**Kellie Carlyle** (PhD, MPH, The Ohio State University, 2007) is an assistant professor in the Hugh Downs School of Human Communication at Arizona State University. Her primary research interests are in public health and health communication.