ANGER, GOALS, AND COMPLIANCE-GAINING: AN EXPLORATION OF THE REBUFF PHENOMENON

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ABSTRACT

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The rebuff phenomenon refers to the finding that although people generally enter interpersonal influence situations intending to use prosocial compliance-gaining strategies, they turn to less prosocial ones if their initial strategy is rebuffed. Both angerand goals-based explanations have been generated for this phenomenon; the purpose of this paper was to merge both into a testable model. To test the model, an experimental study was conducted in which subjects interacted with a confederate who either did or did not cooperate with instructions. Anger, goals, and message valence were measured throughout the interaction. Results suggest that anger provides a good explanation of the rebuff phenomenon, but goals do not.

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INTRODUCTION

The *rebuff phenomenon* (Hample & Dallinger, 1997) is one of the most consistent findings in the compliance-gaining literature. Researchers repeatedly find that although people generally enter interpersonal influence situations intending to use prosocial compliance-gaining strategies, they turn to less prosocial ones if their initial strategy is rebuffed. To clarify, a rebuff is a specific type of obstacle faced in a compliance-gaining context; it is an unexplained refusal to do what is asked (Hample & Dallinger, 1997). The consistency in the interaction pattern following a rebuff and its localization to this particular type of obstacle is what led Hample and Dallinger (1997) to distinguish the phenomenon with its own label. Hample and Dallinger's (1997) study, in addition to the other studies cited above, find that a rebuff is followed by an increase in the use of negative messages.

The rebuff phenomenon has been observed in several contexts, including studies of sexual resistance (Afifi & Lee, 2000), child misbehavior (Wilson, Whipple, & Grau 1996), managerial behavior (Yukl, Falbe, & Youn, 1993), requests and re-requests in various cultures (Hollos & Beeman, 1978; Kim, Shin, & Cai, 1998), and recruitment of campaign volunteers (King, 2001), among others. The phenomenon has also been found for several types of influence goals (Roloff & Janiszewski, 1989; Roloff, Janiszewski, McGrath, Burns, & Manrai, 1988; Wilson, Aleman, & Leatham, 1998), indicating that its occurrence is not constrained to any particular interpersonal influence situation. Although the plethora of evidence in support of the rebuff phenomenon is encouraging, adequate testable formulations of the underlying mechanism are lacking. As Hample and Dallinger (1997) put it, explanations are "interestingly thin," (p. 309). Even when explanations are advanced, they are typically assumptive and presented either post hoc or as an introductory side note (although see Mikolic, Parker, & Pruitt, 1997; Pruitt, Parker, & Mikolic, 1997). As a result, the explanations that have been advanced remain substantially untested, and little empirical evidence exists for or against any of them. An overview of these explanations is provided in the following section.

LITERATURE REVIEW

Anger

One major category of explanations of the rebuff phenomenon holds that the effect is observed because goal interruption generates anger, which in turn causes people to select more negative compliance-gaining strategies on follow-up attempts. Subscribers to this perspective include deTurck (1985; 1987), Mikolic et al. (1997), Pruitt et al. (1997), Roloff et al. (1988), and Roloff and Janiszewski (1989). These authors see negativity in strategy choice as a direct result of anger at the compliance-gaining target, suggesting the causal model in Figure 1, below.



Figure 1. Anger only model of the rebuff phenomenon.

In previous studies, anger has generally been assumed to occur rather than measured, although Mikolic et al.'s (1997) experiment is one exception. In this study, the authors found that a confederate's refusal to obey subjects produced a steady escalation to more negative compliance-gaining tactics over the course of the subjectconfederate interactions. Furthermore, the degree of escalation was related to anger levels. Pruitt et al. (1997) also conducted two follow-up studies with the same basic method. These authors replicated the pattern of escalating tactics as a result of goal interruption, and also found that self-reported anger and frustration increased over time. As with the Mikolic et al. (1997) study, the Pruitt et al. (1997) studies found that the degree of escalation was related to anger. In both papers, the authors argue that as people get angrier following repeated goal interference, they simply become more willing to escalate to harsher tactics.

Goal Importance

Another mediator often argued to be relevant for the rebuff phenomenon is goal importance. The goals perspective holds that the effect is observed because goal interruption results in a shift in goal importance, which makes the use of more negative compliance-gaining strategies permissible on follow-up attempts. Subscribers to this perspective include Afifi and Lee (2000), Hullman, Seibert-Kiser, Arias, and Miller (2008), Kim et al. (1998), and King (2001).

More specifically, the idea is that people enter into compliance-gaining situations with a primary goal of gaining compliance. Alongside this goal, people may also have several other secondary goals concerning the trajectory of the interaction, the ultimate relationship with the compliance-gaining target, physical wellbeing, and so on (see Dillard, 1990a; Dillard, 1990b; Dillard et al., 1989). Initially, primary and secondary goals are moderately highly valued, and both are taken into consideration when choosing a particular strategy. When someone encounters unexplained resistance (i.e., a rebuff) while trying to gain compliance, however, secondary goals become less important relative to the primary influence goal, and this permits the use of strategies that are more negative than the one originally employed. No experimental evidence of these processes has yet been gathered, but goals-based explanations remain popular nonetheless. This argument suggests the causal model in Figure 2, below.



Figure 2. Goal importance only model of the rebuff phenomenon.

Some authors also generate explanations that are conceptually similar to those explicitly mentioning goals, but utilize different terminology. For example, Hample and Dallinger (1998) describe the rebuff phenomenon as a result of relaxation of editorial standards after a rebuff. These authors argue that people begin a compliance-gaining attempt with high editorial standards that restrict their strategies to person-centered messages, but lower these standards after a rebuff. The lower standards then permit more negative strategies. The restriction that editorial standards place on messages is conceptually similar to the restrictions that secondary goals are purported to place on the pursuit of primary goals (cf. Dillard 1990a; Dillard, 1990b; Dillard et al., 1989). In addition, Roloff and Jordan (1991) see the rebuff phenomenon in terms of plan revision. They argue that people are more willing to use coercion and other negative tactics in alternative plans than in the first plan generated. A plan is typically described as a series of steps generated to reach a goal (e.g., Dillard, 1990a; Srull & Wyer, 1986), so adjusting a plan is analogous to adjusting the tactics one uses to pursue a goal. As a final example, Yukl et al. (1993) allude to goal-related concerns, but make no assertions about specific mechanisms at work. The authors simply state that "in the face of continued resistance by the target, the agent will either escalate to 'harder' tactics or abandon the effort if the request does not justify the risks of escalation," (p. 11). Their argument that escalation is a risk that must be justified implies there are other concerns at odds with gaining compliance, which parallels Dillard et al.'s (1989) description of the primary compliance-gaining goal as frequently inconsistent with secondary goals.

A NEW MODEL OF THE REBUFF PHENOMENON

Although both affective and goals-based explanations of the rebuff phenomenon have important points to offer the literature, neither is entirely satisfactory in isolation. Both perspectives also need greater explication and formalization in order to direct future research adequately. In an attempt to remedy these issues, the study proposed herein is designed to examine the mechanism of the rebuff phenomenon.

The model tested in this study proposes that the relationship between goal interruption and compliance-gaining strategy choice is mediated by (1) blame; (2) anger; and (3) an adjustment in the importance of one's primary influence goal and of secondary relational and interaction goals. The link between goal importance and strategy choice is also predicted to be moderated by threshold, the degree of willingness to use compliance-gaining strategies with negative interpersonal consequences (cf. Hunter & Boster, 1987). In other words, when people are rebuffed during compliance-gaining attempts, they blame the target for interrupting their goals, they become angry, and then the primary influence goal becomes relatively more important than secondary relational and interaction goals. The change in the comparative importance of different goals permits the use of more negative strategies on follow-up attempts, although how negative the strategies become also depends on one's threshold.

This model assumes that the issue is important to the influencer and that compliance gaining continues to be the primary goal for the duration of the interaction.

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Situations in which someone gives up after failing to gain compliance or in which a different goal takes precedent¹ are thus outside the realm of the model. Refusal to comply can no longer be considered a rebuff if the goal is no longer to gain compliance.

Explication of Key Constructs

To streamline the presentation of arguments for the model proposed herein, it will be helpful to explicate how goals, anger, and blame are conceptualized in the present paper.

Goals. The definition of goals used here is akin to the one advocated by authors such as Klinger (1975) and Dillard (1990b), in which goals are desirable end states. In addition, this model rests on the assumption that human behavior is primarily goal-directed (e.g., Dillard, 1990a; Klinger, 1975), meaning that these end states have a real and substantial influence on behavior. That goals are assumed to direct behavior *does not*, however, mean that all or even most behavior is assumed to be consciously directed. Many goals may not be particularly salient or conscious (cf. Bargh, 1990; Berger, 1995; Dillard, 2004), and people may not have any idea of the behaviors that would actually result in attainment of the goals that are salient, but goals are still assumed to direct behavior in a general way.

Consistent with many goals theorists (e.g., Simon, 1967; Wilson et al., 1998), the present paper also holds that people almost always pursue multiple goals simultaneously. Although they may have current concerns (Klinger, 1975), primary goals (Dillard, 1990a; Dillard, 1990b; Dillard et al., 1989) or most valued goals (Stein & Levine, 1990) that actively and consciously influence behavior, the argument is that people also have other goals that affect how they behave "in more subtle ways," (Klinger, 1975, p. 3). Dillard (1990a; 1990b; Dillard et al., 1989) proposed that these other goals could be thought of as secondary goals, which he labeled identity goals, interaction goals, relational resource goals, personal resource goals, and arousal management goals. Identity goals are behavioral standards that one has for oneself, based on morals, principles, and personal preferences. Interaction goals have to do with being judged as socially appropriate. These goals are more other-directed than identity goals, encompassing such concerns as impression management, maintaining the flow of the conversation, avoidance of face threats, and production of socially appropriate messages. Relational resource goals are those that are associated with relational assets, which are benefits that derive from an interpersonal relationship. *Personal resource goals* are associated with material assets (i.e., physical objects of value) and physical assets (i.e., aspects of one's health). And arousal management goals are desires to keep one's arousal level within acceptable limits. This goal categorization is based on a confirmatory factor analysis (cf. Hunter & Gerbing, 1982) conducted by Dillard et al. (1989), who found that the six-factor structure they proposed a priori provided the best fit to the data. Although the findings of this preliminary construct validation do not rule out the possibility that there are more than six goal types, they provide evidence that the six Dillard describes are distinct. For this reason, and because delineating possible additional goals is beyond the scope of this paper, Dillard's categorization scheme will be used here.

However, it is unlikely that all of the secondary goals listed above are relevant to the rebuff phenomenon. Many goals theorists argue that the choice of a particular compliance-gaining strategy depends on its perceived efficiency and appropriateness (Dillard et al., 1989; Marwell & Schmitt, 1969; Wilson et al., 1998). Strategies that will quickly and easily result in compliance are desirable, because they more efficiently accomplish the primary goal. But people also want to avoid strategies that the target might view as offensive, because they run counter to interaction goals and relational resource goals. For example, Bisanz and Rule (1990) found that people judged negative compliance-gaining strategies to be effective, but socially inappropriate. Similarly, Peirce et al. (1993) found that people selected positive negotiation tactics when they were worried about social and relational concerns, but selected negative tactics when they were more concerned with reaching their own goals. On the other hand, personal resource goals and arousal goals are rarely discussed in the compliance-gaining literature. Therefore, the secondary goals of focus in this paper will be interaction and relational resource goals, ignoring personal resource and arousal goals for the time being.

Anger. In this paper, anger is defined as an intense negative emotion distinguishable from other negative emotions, such as fear and sadness, by means of physiological responses (Ax, 1953), patterns of activation in the brain (Panksepp, 1982), and self-perception (Averill, 1983; Shaver, Schwartz, Kirson, & O'Connor, 1987; Smith & Ellsworth, 1985). Anger is prototypically associated with feelings of unfairness, violated expectations, and imagined or actual attacks on the offender; sadness and fear have much different prototypical features (see Shaver et al., 1987). Furthermore, there is substantial evidence that anger is related to an approach motivation, driving people to take action toward the source of the anger, whereas other negative emotions are related to an avoidance motivation (Carver & Harmon-Jones, 2009). The anger may be directed either at oneself or at an external target.

There are two separate issues to consider regarding the experience of anger: whether or not the emotion is experienced at all, and the intensity with which it is experienced. To the first point, several authors argue that appraising the implications of events for one's goals is an important first step in determining whether or not anger will be aroused (Abelson, 1983; Carver & Schier, 1990; Shaver et al.; Smith & Ellsworth, 1985; Smith & Ellsworth, 1987; Stein & Levine, 1990). Abelson (1983), for example, argues that people become angry if events lead to goal failure, but they can imagine alternative realities in which goals could easily have been met.

To the second point, there are several factors that have been proposed to affect the strength of the emotion produced by an appraisal. Carver and Schier (1990), for example, argue that the intensity of an emotion depends on the discrepancy between actual and desired rates of progress toward a goal. Anger is likely to be more intense if progress is sluggish or nonexistent than if the delay is slight. Alternatively, Srull and Wyer (1986) argue that the intensity of negative affect depends on the importance of the interrupted goal, how close the goal is to being attained at the point of the interruption, and the amount of time and effort wasted in pursuit of the goal. Zeigarnik (1938) found some evidence consistent with this argument. In a series of studies, she demonstrated that interrupting people when they were attempting to complete tasks created tension that made those tasks more memorable than uninterrupted ones. Furthermore, the effect was greater when the subject was interrupted just before goal completion than when the interruption occurred early on.

In sum, the key appraisal being made is whether or not current circumstances have negative implications for one's goals. Once the situation is determined to have negative repercussions, other aspects of the situation affect the intensity of emotion that will result.

Blame. Blame is defined as the act of attributing a negative consequence to a particular person or thing (see Averill, 1983). When people decide that they themselves, some other target, or both are responsible for an undesirable outcome, they are by

definition assigning blame to those perceived to be at fault. As with anger, blame may be directed either at oneself or an external target.

Several authors also argue that blame plays a central role in the arousal of anger (e.g., Abelson, 1983; Roloff et al., 1988; Wilson et al., 1998). In the appraisal-attribution perspective on emotion, for example, anger is hypothesized to occur only when (1) a negative consequence is attributed to (i.e., blamed on) someone or something and (2) the negative consequence would not have happened absent the influence of that person or thing (Berkowitz & Heimer, 1989). Likewise, Srull and Wyer (1986) argue that anger is always targeted at whomever or whatever the causal agent is perceived to be.

The degree of blame placed on the causal agent depends on how the incriminating actions are perceived. For example, a common argument is that actions perceived to be controllable tend to result in more blame than those that are not (Smith & Ellsworth, 1985; Weiner, 1985; Weiner, Graham, & Chandler, 1982). Other authors also argue that the perceived novelty (Stein & Levine, 1990), unexpectedness (Roloff et al., 1988; Shaver et al., 1987; Simon, 1967), unfairness (Shaver et al., 1987; Smith & Ellsworth, 1987), and intentionality (Berkowitz & Heimer, 1989; Stein and Levine, 1990) of the obstacle are important in determining how much blame is assigned.

Now that the key concepts—goals, anger, and blame—have been defined, the next step is to integrate them into a coherent model of the rebuff phenomenon.

Empirical evidence and theoretical work pertinent to each link in the proposed model are presented below.

Goal Failure \rightarrow Blame \rightarrow Anger

The first links in the causal chain lead from goal interruption to blame to anger. In a compliance-gaining situation, the primary goal is to influence the other person's behavior (Dillard et al., 1989), so a rebuff by definition constitutes goal failure, at least temporarily (Hample & Dallinger, 1997). The rebuff is therefore expected to engender a negative appraisal of the situation that is then blamed on the compliance-gaining target (i.e., the perpetrator of the rebuff). In accordance with the attribution-appraisal perspective (e.g., Srull & Wyer, 1987), blaming the target for the goal interruption is predicted to lead to anger. As noted above, this prediction assumes that gaining compliance is important to the requestor. Another assumption is that the request is actually made with the goal of gaining compliance in mind (i.e., the request is not simply a token gesture or a half-hearted attempt directed at someone who is unable to comply or whose refusal is anticipated).

Evidence for these causal relationships comes from a reanalysis of the Pruitt et al. (1997) and Mikolic et al. (1997) data. Although these authors did not measure goals, they did examine anger, blame for other, and escalation of tactics (from simple requests to threats) during an influence attempt with an uncooperative confederate. In these studies, there was a moderate correlation between blame and anger and between anger and escalation, but only a small correlation between blame and escalation (see Table 1, below). If the causal model indeed runs from blame to anger to escalation level, the estimated correlation between blame and escalation would be the product of the blame-anger correlation and the anger-escalation correlation (cf. Hunter & Gerbing, 1982).

Table 1.Selected Correlations and Calculations

Study	Ν	r_{ba}	r _{ae}	r_{be}	\hat{r}_{be}
Pruitt et al. (1997), Study 1	67	.50	.39	.20	.20
Pruitt et al. (1997), Study 2	59	.58	.33	.23	.19
Mikolic et al. (1997)	69	.31	.33	.10	.10

Note. In the subscripts of the correlation coefficients, *b* represents blame, *a* represents anger, and *e* represents escalation level.

Calculating the products for each of these three studies (by multiplying the numbers r_{ba} and r_{ae} for each row of Table 1) results in predicted correlations of r = .20, r = .19, and r = .10, respectively. These values are well within sampling error of the obtained correlations of r = .20, r = .23, and r = .10, respectively. Thus a simple causal chain leading from blame to anger to escalation seems to provide a reasonable fit for their data. The ratings of blame and anger also tended to increase as the interactions between the subject and confederate continued. This pattern provides indirect evidence that as the number of interruptions increases, blame and anger do as well.

Also consistent with these findings, previous studies have revealed that people often attribute anger to having their plans interrupted and to others' failures to do what was desired or socially normative (Averill, 1983; Shaver et al., 1987). Moreover, subjects frequently report feeling that the anger is caused specifically by that other person (Smith & Ellsworth, 1985; Smith & Ellsworth, 1987; Weiner et al., 1982). People also cite similar reasons when interpreting the anger of others, often reporting that they feel blame to be "inherent in the other person's anger," (Averill, 1983, p. 1150). In sum, several authors have found evidence that blame precedes anger and is necessary for anger to occur. The blame appears to be particularly strong when another person is the responsible party, as would be the case with the rebuff phenomenon.

Anger \rightarrow Goal Importance

The next links in the model lead from anger to primary, interaction, and relational resource goal importance. Although the causal model extracted from the Mikolic et al. (1997) and Pruitt et al. (1997) papers offers a reasonable explanation for the rebuff phenomenon, the present model incorporates goal importance for the following reasons. First, including goals in the model enriches the conceptual understanding of this process. Second, taking goals into account may explain additional variance in compliance-gaining strategy choice beyond that accounted for by anger. And third, because many of the papers on the rebuff phenomenon (Afifi & Lee, 2000; Hullman et al., 2008; Kim et al., 1998; King, 2001) cite goals-based explanations, including goals in the present model offers an opportunity to bolster or disconfirm these existing untested hypotheses.

The inclusion of goals in the model is also necessary if human behavior is indeed goal-directed (e.g., Dillard, 1990a; Klinger, 1975). If goals drive behavior, then it follows that a change in compliance-gaining behavior must be preceded by a change in goals. Therefore, anger can only affect strategy choice indirectly, by operating directly on goal importance in such a way that harsher strategies become permissible or desirable.

Anger, therefore, is expected to influence the importance of the primary goal, the secondary goals, or both. The change in goal importance occurs "as communicators realize that the attainment of both social goals (saving face) and compliance is unlikely," (King, 2001, p. 389). Goals theorists generally agree that this shift in importance is rapid (Austin & Vancouver, 1996; Berger, 1995; Berger, 1997) and may be unconscious (Bargh, 1990; Berger, 1995; Dillard, 2004), but the nature of the change remains otherwise unclear. Existing theories do not specify whether the absolute importance of the primary or secondary goals should change in a particular way or if the relative importance of the two goal types is what matters. Therefore, there are three possible models for what might happen.

Differential increase. In what is labeled here as the *differential increase model*, anger resulting from goal interruption causes the absolute importance of the primary goal to increase as the importance of secondary relational and interaction goals increase gradually or remain constant. In other words, the importance of the primary goal increases at a faster rate than that of the secondary goals. This results in an increase in

the importance of the primary goal relative to the secondary goals even though both may be increasing in an absolute sense. This model would be somewhat consistent with findings from Hample and Dallinger (1998), who observed that subjects were more likely to endorse the use of highly impolite messages with one or two rebuffs, but that the endorsement of highly polite messages remained consistent. In fact, the pattern of means for the endorsement of the most polite messages increased with one or two rebuffs, although the increases were not statistically significant.

Differential decrease. In what is labeled here as the *differential decrease model*, anger resulting from goal interruption causes the absolute importance of the primary goal to decrease gradually or remain constant as the importance of secondary relational and interaction goals decreases. In other words, the importance of secondary goals decreases at a faster rate than that of the primary goal. These changes result in an increase in the importance of the primary goal relative to secondary goals, although both may be decreasing in an absolute sense. This model is consistent with findings from Hullman et al. (2008), who observed that when a first request failed, subjects' second request messages were less likely to reference both task and relational goals.

Deviation amplification. In what will be labeled here as the *deviation amplification model*, anger resulting from goal interruption causes the absolute importance of the primary goal to increase and the absolute importance of secondary relational and interaction goals to decrease. In other words, the importance of the

primary goal is increasing relative to the importance of secondary goals as well as in an absolute sense. Essentially, the result is a sort of *cognitive myopia*, whereby a single goal eclipses all thoughts of other goals. This model would be consistent with the pattern suggested by Klinger (1975), who argues that people enter a stage of *invigoration* after they first encounter an obstacle. In these circumstances, an incentive seems more attractive than it was previously (see also Mischel & Masters, 1966), while other incentives simultaneously become less attractive. In a compliance-gaining attempt, this would be analogous to the increased importance of influencing the other person's behavior at the expense of relational and interaction concerns.

Goal Importance → Compliance-Gaining Strategy Valence

The final links in the model lead from primary, interaction, and relational resource goal importance to strategy valence. A compliance-gaining situation begins with importance placed on both the primary influence goal and on secondary relational resource and interaction goals. Dillard et al. (1989) found that the influence goal is often rated most important during a compliance-gaining attempt, but secondary goals are also rated fairly highly. Therefore, before a rebuff has occurred, the default is to avoid negative tactics and be as polite as possible (Wilson et al., 1998). As goals undergo a differential decrease, differential increase, or deviation amplification, however, compliance-gaining strategies are expected to become more negative.

The use of more negative tactics is observed because relatively less emphasis is placed on secondary goals as they have become progressively less important compared to the primary influence goal. Dillard (1990b) found that interaction goals and relational resource goals were both associated with the use of more positive messages during compliance-gaining attempts. If the importance of these goals declines, the use of positive messages can be expected to decline as well. Further, the lower relative importance of the secondary goals may permit or even mandate (King, 2001) the use of negative compliance-gaining strategies. If collateral damage to relational and interaction goals is no longer of paramount concern, the use of negative messages will be correspondingly higher. Wilson et al. (1998) argue more specifically that "individuals" may have a limited desire to protect [the target's] face because the target is violating responsibilities and may be taking advantage of them," (p. 76), and that "sources are less concerned about imposing if the target already should have complied," (p. 76).

A steady and ordered escalation of tactics (Mikolic et al., 1997; Pruitt et al., 1997) occurs with additional rebuffs as secondary goals continue to become progressively less important relative to primary goals. Simon (1967, p. 37) argues that when an obstacle to one's goals is met, "the painful consequences may lead to more precipitous, less adaptive responses when the situation recurs." As an interaction goes on and the compliance-gaining target continues to rebuff requests for participation, tactics should thus become more and more negative.

Moderation by Threshold

Aside from goal importance, there is also an additional factor to consider in determining how much compliance-gaining strategies will escalate in response to goal failure: threshold. The threshold concept comes from Hunter and Boster's (1987) model of compliance-gaining message selection. In the model, strategies fall along a unidimensional scale such that message selection depends on the compliance-gaining target's anticipated affective reaction. Different strategies (e.g., from Marwell & Schmitt, 1967) are anticipated to result in different degrees of positive or negative affect, and one's willingness to employ a particular strategy depends on one's willingness to deal with the potential emotional fallout of that strategy. Individuals with very high thresholds are unwilling to use all but the most polite compliance-gaining strategies, whereas individuals with very low thresholds are willing to use even the most negative compliance-gaining strategies. Therefore, the degree to which goal hierarchy adjustment leads to the selection of more negative compliance-gaining strategies likely depends on one's threshold. An individual with a low threshold should have a wider permissible range of negative strategies than an individual with a high threshold, presumably making escalation after goal failure more likely and more extreme. People with low thresholds might also conceivably escalate more quickly than people with high thresholds.

Although an individual's threshold is conceptually similar to secondary goal importance, the two concepts, as described in the literature, are distinct. Secondary goal importance is fluid and situation-based; it can change over the course of an interaction. Threshold, on the other hand, is trait-like; it should not change over the course of a single given compliance-gaining scenario, regardless of how secondary goal importance changes. Even if the importance of one's secondary interaction and relational resource goals drops to zero, the negativity of the compliance-gaining strategies employed would be expected to be limited by one's threshold.

Another factor that might also influence compliance-gaining strategies is verbal aggressiveness (Infante & Wigley, 1986). Although verbal aggressiveness is not explicitly included in the model, it is conceptually similar to threshold and might also help to explain compliance-gaining strategy selection. Like threshold, it may moderate the relationships between goal importance and message selection. More verbally aggressive individuals can be expected to be more willing to use negative compliance-gaining strategies, regardless of the status of their primary or secondary goals.

The differential increase, differential decrease, and deviation amplification models are depicted in Figure 3, below. The purpose of the following study is to examine whether or not any of the three model variants fits the data well. If the models fail, the results will hopefully provide preliminary evidence as to whether anger, goal importance, or neither provides a feasible mechanism of the rebuff phenomenon.

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Figure 3. **New proposed models of the rebuff phenomenon**. PG = primary goal importance, RG = relational resource goal importance, IG = interaction goal importance. Strategy = negativity of compliance-gaining strategy choice. The '+' and '-' signs over the links from anger to goal importance indicate the predicted valence of those paths. A '++' indicates a larger positive path than a '+', and a '--' indicates a larger negative path than a '-'.

PILOT STUDY

Before beginning the main experiment, a pilot study was conducted to (1) examine the factor structure and reliability of the anger, blame, and goals measures; and (2) explore how the goal failure manipulation might affect anger and blame.

Participants

The pilot study was conducted with undergraduates at Michigan State University (N = 229). Participants were recruited from the participant pool available to the Communication Department and received class credit in exchange for their participation.

Measures

All variables were measured on five-point Likert-type scales (1 = strongly disagree, 5 = strongly agree). Five items were developed to measure anger for the purpose of the study. For the pilot, the items were worded specifically for anger at partner. Likewise, ten items were developed to measure blame for the purpose of the study. Five of the items pertained to self-blame; the other five pertained to partner-blame. Other than the referent, the blame items were worded the same for both self-and partner-blame. Goal importance was assessed using items from Dillard et al. (1989). The primary and interaction goal importance scales were each composed of three items; the relational resource goal importance scale was composed of three items.

Procedure

Data were collected using an online survey. The first part of the survey, which was the same for all participants, presented a hypothetical scenario about a group project (see Appendix A, Table A1). This scenario was used because it was a simple compliance-gaining situation with which students were likely to be familiar. Participants were told to imagine that a group member had failed to complete part of the project correctly, leaving the participant to try to convince him or her to redo it. Subjects then filled out the anger, blame, and goal importance items.

Next subjects were randomly placed in one of two conditions. In the *failure* condition, subjects (N = 114) were asked to imagine they had received a terrible grade on the project. A second set of self-blame, partner-blame, and anger items followed this information (see Appendix A, Table A2). In the *success* condition, subjects (N = 115) were asked to imagine they had received an excellent grade on the project. As with the failure condition, a second set of self-blame, partner-blame, and anger items followed this information, a second set of self-blame, partner-blame, and anger items followed this information, although the blame items were rewritten to have a more positive connotation (e.g., I would attribute the good grade to my partner.) (see Appendix A, Table A3).

Results

Factor analyses. Following data collection, confirmatory factor analyses (CFAs) were conducted to examine the content validity of the items. The analyses were

performed utilizing the lessR package (Gerbing, 2014) of the R 3.1.0 statistical software (R Core Development Team, 2014), which employs the centroid solution to estimate parameters (Hunter & Gerbing, 1982). Fit indices for the analyses were also obtained using the IBM® SPSS® Amos 20 statistical package. The first CFA was conducted on the data from the first part of the pilot study. A six-factor structure was predicted to fit this portion of the data, reflecting the fact that each scale (partner-blame, self-blame, anger, primary goal importance, interaction goal importance, and relational resource goal importance) was intended to tap a unique factor. All 229 participants responded to the same items during this part of the survey, but ten participants had to be deleted due to missing data, leaving a total N of 219.²

The items were first examined for internal consistency and then for parallelism (Hunter & Gerbing, 1982). The initial output indicated that the partner-blame and selfblame factors both held up well, but there were problems with the other the factors. Parallelism was problematic for the anger factor, and all three goals factors were replete with large residuals in both the internal consistency and parallelism blocks. The first important observation was that the interaction goal items tapped two factors (selfpresentation goals and appropriateness goals) rather than one, rendering the predicted six-factor structure inadequate.

The data were reanalyzed with a seven-factor structure in place, and then items with overlarge residuals were removed in an iterative fashion. Items were dropped until the number of larger than expected residuals was at or lower than that expected to occur by chance with an alpha level of .05. Good fit was eventually attained by removing one of the anger items, three of the primary goal importance items, and one of the relational resource goal importance items, CFI = .94, RMSEA = .05 (see Appendix C, Table C1).

The second CFA was conducted on the data for the second part of the pilot study, for which subjects were split into the success and failure conditions. A three-factor structure was predicted to fit this portion of the data, reflecting the fact that each scale (partner-blame, self-blame, and anger³) was intended to tap a unique factor. Data for subjects in both conditions were analyzed together, but five subjects had to be deleted due to missing data, leaving a total *N* of 224. As before, the items were examined for internal consistency and parallelism. All three of the scales exhibited good fit with the data, *CFI* = .96, *RMSEA* = .09 (see Appendix C, Table C2).

Based on the results of the two CFAs, the partner-blame and self-blame factors were retained unaltered for the main experiment. The first four items of the anger factor were retained, discarding the item that failed to load in the first CFA. For the four goal importance scales, additional items were drafted for the main experiment in order to improve reliability. For each factor, three additional items were generated (see Appendix B, Table B5), rounding each one out to five items.

Exploratory analyses. Following the CFAs, mixed-design ANOVAs were conducted with condition as the between groups factor and partner-blame, self-blame, and anger as within groups factors. For partner-blame, there was a strong main effect of time, F (1, 224) = 126.58, p < .001, partial η^2 = .36. Overall, subjects reported that they would blame their partner less following the success or failure manipulation (M = 15.98, SD = 5.52) than initially (M = 19.22, SD = 3.06). There was also a strong main effect of condition, *F* (1, 224) = 135.54, p < .001, partial η^2 = .38. Subjects in the failure condition (*M* = 19.66, SD = 3.25) tended to blame their partner more than subjects in the success condition (M = 15.54, SD = 1.93). Finally, there was a very strong time by condition interaction effect, F (1, 224) = 186.94, p < .001, partial η^2 = .46. Subjects in the success condition blamed their partner substantially less after the manipulation (M = 11.94, SD =3.85) than before (M = 19.10, SD = 2.93), suggesting that they held their partner responsible for early problems, and gave them little credit for the good grade that was eventually received. Subjects in the failure condition instead reported higher levels of partner-blame following the manipulation (M = 20.00, SD = 3.68) as compared to before (M = 19.33, SD = 3.20), indicating that they blamed their partner both for the initial problems and for the eventual poor grade.

The results for self-blame were similar to those for partner-blame. There was a strong main effect of time, *F* (1, 222) = 161.86, *p* < .001, partial η^2 = .42. Overall, participants tended to blame themselves more following the success or failure

manipulation (M = 15.01, SD = 5.30) than initially (M = 10.98, SD = 3.77). There was also a strong main effect of condition, F (1, 222) = 93.23, p < .001, partial η^2 = .30. Participants in the success condition (M = 14.87, SD = 1.90) tended to blame themselves more than participants in the failure condition (M = 11.18, SD = 3.88). Finally, there was again a strong time by condition interaction, F (1, 222) = 124.76, p < .001, partial $\eta^2 = .36$. Participants in the success condition reported substantially higher levels of self-blame after the manipulation (M = 18.61, SD = 3.47) than before (M = 11.09, SD = 3.64). In essence, they accepted little responsibility for the initial problems with the group, but took credit for the eventual good grade earned. Participants in the failure condition also reported somewhat higher levels of self-blame after the manipulation (M = 11.35, SD =4.23) than before (M = 10.86, SD = 3.92). These subjects, like the subjects in the success condition, accepted little responsibility for the initial problems with the group, and they also admitted only slightly more responsibility for the eventual poor grade earned.

The results for anger reflected the findings for partner-blame. There was a strong main effect of time, F(1, 221) = 101.10, p < .001, partial $\eta^2 = .31$. Overall, subjects tended to be less angry following the manipulation (M = 13.94, SD = 4.22) than initially (M = 15.88, SD = 2.54). There was also a moderate main effect of condition, F(1, 221) = 47.90, p < .001, partial $\eta^2 = .18$. Unsurprisingly, subjects in the success condition (M = 13.62, SD = 2.58) exhibited generally lower levels of anger than subjects in the failure condition (M = 16.15, SD = 2.75). Finally, there was a very strong time by condition interaction effect, F
(1, 221) = 165.00, p < .001, partial $\eta^2 = .43$. Participants in the success condition tended to start with high levels of anger (M = 15.88, SD = 2.42), but become substantially less angry following the manipulation (M = 11.48, SD = 3.64). Participants in the failure condition, on the other hand, tended to start with high levels of anger (M = 15.89, SD = 2.67), and then become even angrier following the manipulation (M = 16.44, SD = 3.17)

To summarize, participants in the success condition reported less anger at a problematic group member when the group ultimately did well, and largely took credit for the good grade. Participants in the failure condition reported even more anger at a problematic group member when the group ultimately did poorly, and largely blamed the group member for the poor grade. These results provided encouraging evidence that the manipulation of goal failure in the main study could be expected to influence blame and anger.

MAIN EXPERIMENT

Method

Participants. The main study, like the pilot study, was conducted with undergraduates at Michigan State University. Participants (N = 385) were first recruited to take an online survey. After they had completed the survey portion, they were asked to sign up for the follow-up lab study for additional class credit. There was substantial attrition between the two phases, such that only 18.4% of the survey subjects (N = 71, 59.2% female) ultimately participated in the lab study.

Measures. The online survey contained items designed to measure compliancegaining threshold and verbal aggressiveness (see Appendix B, Tables B1-B2). Threshold was measured by asking subjects how willing they would be to use each of the 16 compliance-gaining tactics listed by Marwell and Schmitt (1967) to deal with an uncooperative group member. Responses were measured on five-point scales (1 = definitely would not use, 5 = definitely would use). Verbal aggressiveness was measured using the scale developed by Infante and Wigley (1986). Responses to these items were also measured on five-point scales (1 = almost never true, 5 = almost always true). The purpose of administering these items prior to the lab session was to reduce suspicion about the true nature of the experiment. Because one of the aims of the study was to measure goals, it was desirous that subjects be unaware that compliance-gaining messages were of interest. The online survey also asked participants to create a personal identification code by which they could be matched with their lab data should they choose to participate in the next phase.

Two lab survey instruments were used during the experiment. The first was a pretest (see Appendix B: Tables B3-B5), which contained the anger and goal importance items developed in the pilot study, interspersed with a filler personality inventory and other mood items to conceal the focus on anger. The second instrument was a post-test (see Appendix B: Tables B6-B10), which contained the anger, blame, and goal importance items, as well as a filler performance assessment question and other fillers related to enjoyment of the task, perceptions of leadership quality, and others related to the task. The performance question utilized a dichotomous response scale (0 = poorly, 1 = well), and the other filler items employed the same five-point Likert-type scale as the anger, blame, and goals items.

Procedure. When subjects came to the lab, they were greeted by the experimenter and told that the session would begin as soon as the second participant arrived. Soon after, one of three confederates (one male, two females) entered the lab posing as another subject. The confederate also attempted to convey a poor attitude and lack of enthusiasm about the task, which was meant to enhance the experimental induction. The subject and confederate were told to introduce themselves, and the experimenter then explained the task at hand. Participants were led to believe that they and the confederate would be cooperating on a drawing task intended to measure

teamwork and communicative competence. Following the explanation, the subject and confederate were assigned to the roles of "leader" and "artist". Assignment was designed to appear random, but was rigged such that the subject was always assigned the leader role.

After roles were assigned, the subject and confederate were escorted to two different rooms (see Figure 4). The subject was seated in a narrow room at a table facing a one-way mirror. The confederate was seated in the room on the other side of the glass, which was equipped with a whiteboard and drawing supplies. The subject and the confederate both had access to a computer, open to an instant messaging program through which they could communicate. The lighting during the task was set up such that the subject could see through to the other room and could see what the confederate was doing, but the confederate could not see the subject.

Before the task began, subjects filled out the pretest survey and were asked to recreate their personal identification codes so that their data could be matched to their online survey responses. When the subject had completed the materials, the experimenter handed the participant the first drawing, explaining that this drawing was the simplest and that most groups had no trouble recreating it successfully. For all but the first nine groups, the experimenter also explained that some artists were better than others, but some leaders had found success by making their messages more positive or more negative when their partner was struggling (this was added to increase variance in message valence following an observation that early subjects said little beyond simple direct requests). The experimenter then started the timer, dimmed the lights in the subject's room, and moved to the confederate's room to observe.



Figure 4. Schematic of the lab space.

Subjects were given ten minutes on each drawing, during which they could send as many messages as they wanted to the confederate. The drawings were simple geometric shapes (see Appendix D), and recreating them required the subject to describe different lines and colors to the confederate. The confederate would receive the subject's instructions on the computer, and then use markers to draw or color the shape on the whiteboard. Any time the confederate made a mistake, the experimenter would erase the shape, and the confederate would have to begin again. Groups were permitted to continue until the ten minutes expired or until they made three mistakes on the drawing. If the group was successful in recreating the drawing, the subject was awarded a raffle ticket to enter in a drawing for a \$50 gift card.

When the group either recreated the drawing successfully or failed to do so (either because the ten minutes expired or because the confederate made three mistakes), the experimenter interrupted the task and administered the post-test survey. Following this survey, the experimenter handed the subject the second drawing, which proceeded in the same way as the first. When the second round concluded, the post-test survey was administered again. So that the goals items could still be collected, subjects were not told how many rounds of the task there would be. Participants answered as though they would be completing a third task, even though no such task actually existed. When this survey was complete, subjects signed up for the raffle, indicated any suspicion about the task (if yes, they were asked to explain what they were suspicious of and what about the task had made them suspicious), and were debriefed about the nature of the experiment and the confederate. The confederate, sex of the participant, and condition were recorded for each subject. A note was also made of whether or not the subject was known to the experimenter or confederate and whether or not the subject had expressed suspicion.

Experimental manipulation. When subjects came to the lab, they were randomly assigned to either the experimental or control condition. The only difference between the two conditions was the confederate's behavior during the two rounds of drawing. In the control condition, the confederate consistently followed directions. To the extent possible, confederates used their knowledge of the drawings to recreate them successfully. In some cases directions were so poor that *not* making a mistake would have generated suspicion, but in most cases the confederates were ultimately successful. In the experimental condition, on the other hand, the confederates purposefully made three mistakes or dragged out the drawing process long enough that the group ran out of time. As a result, subjects in the experimental condition universally failed to recreate either drawing. The condition variable was thus used to represent goal interruption (0 = control = no interruption; 1 = experimental = goal interruption).

Coding. To quantify compliance-gaining message choice, the transcript of each subject's instant messaging conversation was saved and coded by two coders who were blind to conditions and hypotheses. The coders first unitized the messages. In general, a unit was defined as a sent message—each time the subject hit the *Enter* key to send a string of text to the confederate, it was defined as a new unit. However, the coders also combined sent messages into one unit when the messages were uninterpretable separately (e.g., when a subject accidentally sent something before finishing a thought) and split sent messages into two or more units when the text fit into multiple categories

(e.g., a sent message contained a reprimand followed by a simple direct request). Following unitization, the coders categorized each unit by message type. A message could be classified as a simple direct request, a request with emphasis, reinforcement, encouragement, an apology, a reprimand, an interjection, a cohesive statement about a positive outcome, a cohesive statement about a negative outcome, or other. These categories were pre-defined based on an examination of transcripts by the experimenter. The coding protocol and two sample transcripts can be found in Appendix E.

Initially, two of the transcripts were coded together as a training exercise, and then the coders worked to code and resolve disagreements on sets of five transcripts at a time until agreement was satisfactory. The coders then coded the remaining transcripts and resolved any differences to produce the final set of message codes. When this process was complete, the coders also rated the valence of each message category from -3 (very negative) to +3 (very positive) based on a sample of the messages that they had classified under each one. The valence of each message categorized as *other* was also coded individually. Final agreement was $\alpha = .89$ for the unitization, $\kappa = .83$ for the message categorization, $\alpha = .95$ for the category valence coding, and $\alpha = .78$ for the *other* valence coding. The final valence codes and information on frequency of each category's use can be found in Table 2. For each subject, the average valence of all messages sent during a task was then computed and used to represent compliance-

gaining message valence.

Message Type	Valence	Total Messages	% of Ss Using
Simple direct request	0	1467 (70.2%)	100%
Request with emphasis	0	120 (5.7%)	35.2%
Reinforcement	3	252 (12.1%)	87.3%
Encouragement	2	26 (1.2%)	28.2%
Apology	1	55 (2.6%)	53.5%
Reprimand	-3	6 (0.3%)	5.6%
Interjection	-2	40 (1.9%)	35.2%
Cohesive – positive	3	15 (0.7%)	15.5%
Cohesive – negative	1	5 (0.2%)	7.0%
Other	M = 0.67, SD = 1.07	105 (5.0%)	60.6%

Table 2.Descriptives for Use of Message Types

Results

Before conducting main analyses, data were assessed to determine whether or not the confederate, suspicion, or being known to the confederate or experimenter affected the messages sent by the subject. Fourteen subjects (19.7%) expressed suspicion, typically about the nature of the confederate; no subject reported suspecting that compliance gaining or their messages were the focus of the task. Analyses also indicated that the suspicious subjects' compliance-gaining behavior did not differ from the non-suspicious subjects, so the full sample was retained for analysis. Furthermore, none of the three confederates elicited different compliance-gaining behavior from subjects. There was insufficient evidence to conclude that the confederates were sent different most positive or most negative messages during either task, or that average valence of the messages differed. Finally, 12 subjects (16.9%) were known to the confederate or experimenter. These subjects' messages were somewhat more positive than those of other subjects during the first task, but not during the second task⁴. However, all conclusions remained the same regardless of whether or not they were included. To preserve statistical power, these subjects were thus retained for analyses.

Factor analyses. Confirmatory factor analyses were conducted on all measures used in the main study. The purpose of these analyses was to reassess the validity of the blame and anger scales, to assess the validity of the new goal importance scales, and to assess the validity of the verbal aggressiveness scale.

Pretest measures. The first phase of analysis focused on the items administered on the pretest—anger and primary, self-presentation, appropriateness, and relational resource goal importance. Items were examined for internal consistency and parallelism (Hunter & Gerbing, 1982), and items with larger than expected residuals were dropped until there were fewer large errors than would be expected to occur by chance alone. Fit was lower than desired, but acceptable fit was obtained by dropping one primary goal item, one self-presentation goal item, one appropriateness goal item, and two relational resource goal items (*CFI* = .72, *RMSEA* = .11). Factor loadings, reliabilities, and descriptive statistics are provided in Appendix C, Table C3. *Post-test measures*. The second phase of the analysis focused on the items administered after each round of the drawing task—anger at self and partner, blame/attribution to self and partner, and the four goals scales. The solution uncovered for the goals scales when analyzing the pretest measures was implemented for these data before they were examined. The analysis indicated that both anger scales and both blame scales exhibited excellent fit, and the pretest solution for the four goal importance scales provided a good fit to the data on both post-test surveys. The fit of the overall model improved for the post-Task 1 items (*CFI* = .86, *RMSEA* = .09) and post-Task 2 items (*CFI* = .86, *RMSEA* = .10). Factor loadings, reliabilities, and descriptive statistics for post-Task 1 and post-Task 2 data are provided in Appendix C, Tables C4 and C5, respectively.

Verbal aggressiveness. The third phase of the analysis focused on the verbal aggressiveness scale (Infante & Wigley, 1986). Levine, Beatty, Limon, Hamilton, Buck, and Chory-Assad (2004) argue that the verbal aggressiveness scale is multidimensional, with the ten aggressively-worded items measuring verbal aggressiveness and the ten reflected, benevolently-worded items measuring supportiveness or prosocial cooperation. The CFA was thus conducted with this two-factor factor structure in mind. Two items in each factor exhibited problematic residuals and were dropped from the analysis, but the resultant model provided an acceptable fit to the data, *CFI* = .88, *RMSEA* = .08. Accordingly, the eight aggressively worded items were summed to form

a single index, with higher values indicating greater verbal aggressiveness. Fit indices and reliabilities can be found in Appendix C, Table C6.

Guttman scaling: Threshold. Because Hunter and Boster (1980) demonstrated that threshold, as measured by likelihood of using the various Marwell and Schmitt (1967) compliance-gaining strategies, forms a Guttman simplex, the measures were not subjected to usual CFA procedures. Instead, the items were assessed for fit to a simplex in the manner suggested by Guttman (1944). First, the mean usage ratings for the items were calculated and used to place the items in rank order. Second, the absolute values of the differences in the means of adjacent items were calculated. Third, the correlations between all of the items were calculated. And finally, the discrepancies were correlated with the interitem correlations. If the items do indeed form a simplex, then items that are closer together in ranking (i.e., with small discrepancies between their means) will be more highly correlated than those that are further apart in ranking.

The initial fit of the simplex was reasonable, although a few of the items were associated with large residuals. Good fit was obtained by removing four of the problematic items, r = -.77, df = 64, p < .001. The remaining 12 items were summed to form an index of threshold for each subject, with higher values indicating a greater willingness to use negative strategies.

Pretest data. Before testing the model, pretest scores for subjects in the two conditions were compared to examine whether or not there were initial differences.

Before the task began, reported levels of anger for subjects in the two conditions did not differ more than would be expected by chance alone, t (67) = 0.60, p = ns, r = .07. Furthermore, there was very little evidence for a main effect of condition on the importance subjects assigned to any of the four goal types, F (3, 207) = 0.02, p = ns, partial $\eta^2 < .001$; or of a goal type by condition interaction, F (3, 207) = 1.29, p = ns, partial $\eta^2 = .02$. However, there was a main effect of goal type, F (3, 207) = 9.76, p < .001, partial $\eta^2 = .12$. The main effect can be attributed the self-presentation goal (M = 3.36, SD = 0.75), which was rated lower in importance than all three other goal types. Primary (M = 3.84, SD = 0.50), appropriateness (M = 3.69, SD = 0.66), and relational resource (M = 3.72, SD = 0.65) goals were all appraised at a similar level of importance.

Subjects in the two conditions were similar on relevant personality characteristics. There was little evidence of differences between the conditions in either verbal aggressiveness, t (67) = -0.14, p = ns, r = .02; or threshold, t (67) = 0.29, p = ns, r = .04.

Tests of model. The initial goal of the study was to test the three models depicted in Figure 1 to determine whether or not any of them provided adequate fit to the data. Unfortunately, the full model could not be tested in this way because of an unexpected pattern of responses to the performance question on the feedback surveys. Because subjects in the experimental condition universally failed to complete the task properly, they were expected to indicate on the feedback survey that their team had

performed poorly on both rounds of the task, leading them to answer the negatively worded blame items both times. On the other hand, subjects in the control condition were expected to indicate on the feedback survey that their team had performed well on both rounds of the task, leading them to answer the positively worded attribution items both times. Instead, the majority of subjects in both conditions indicated that their team performed well on at least one of the tasks (see Table 3, below).

Table 3.Breakdown of Performance Assessments

	T1: Co	ontrol	T1: Experimental		
T2	Poorly	Well	Poorly	Well	
Well Poorly	1 0	31 1	16 3	16 3	

As a result of these unrealistic performance evaluations, only 24 subjects ever answered the blame items, and only three answered the blame items after both tasks. Given that longitudinal trends in blame could only be examined for these three people, it was not possible to test the model with blame included adequately. So that a reasonable test could still be conducted, blame was dropped from the model, and the remaining relationships were analyzed as depicted in Figure 1 (i.e., condition was used as a direct, rather than indirect, predictor of anger). Furthermore, initial regression analyses demonstrated no evidence for moderation of the effect of any of the four goal types on compliance gaining strategy choice. As a result, threshold was also dropped from the tests of the model.⁵

With these changes made, two sets of models were ultimately analyzed, one including anger at self and one including anger at partner. The two anger variables were tested separately to examine any differences in paths to or from them, as well as to determine which resulted in superior model fit. These two sets were also further divided into three separate models: one using most positive message as the ultimate dependent variable, one using most negative message, and one using average message valence, for a total of six models tested overall. Analyses were conducted using the PATH program (Hunter, 1985; Hunter & Hamilton, 1987) of the PACKAGE statistical software developed by Hunter and Gerbing (1982). The models were analyzed longitudinally, as displayed in Figures 5-10, below.

Model 1: Self-anger, most positive message. The first model tested exhibited several problems. First, self-anger did not have a substantial impact on any of the goals types, nor did the goals have a substantial impact on the most positive message use. There were also several places where local fit of the model was poor, with observed correlations differing substantially from those that would be expected to occur were the model correct. Therefore, despite an acceptable global fit of the model, χ^2 (47) = 57.08, *p* = .15, Model 1 failed to provide an adequate explanation of the data.



Figure 5. **Model 1**. SA = self-anger, PG = primary goal importance, SPG = self-presentation goal importance, AG = appropriateness goal importance, RG = relational resource goal importance, MPCG = most positive compliance gaining strategy. The numbers (1 and 2) represent the time point: 1 = post-Task 1, 2 = post-Task 2. * p < .05

Model 2: Self-anger, most negative message. For the second model tested, the paths from anger at self to goal importance remained the same as the first model, meaning they were also insubstantial in this model. Also similar to the first model, the paths running from primary, appropriateness, and relational resource goal importance to message valence were not substantial, although the effect of self-presentation goal importance was marginally so. Similar to the first model, there were also several issues

with local fit, although the global fit of the model was better, χ^2 (47) = 41.17, *p* = .71. Again, this model did not provide an altogether satisfactory explanation of the data.



Figure 6. **Model 2**. SA = self-anger, PG = primary goal importance, SPG = self-presentation goal importance, AG = appropriateness goal importance, RG = relational resource goal importance, MNCG = most negative compliance-gaining message. The numbers (1 and 2) represent the time point: 1 = post-Task 1, 2 = post-Task 2. * p < .05

Model 3: Self-anger, average message valence. The test of this model looked little different than the tests of the previous two models. The paths from anger at self to goal importance again remained the same, and the paths from goals to average message

valence were similarly insubstantial. The same issues with local fit were also exhibited in this model, and the global fit was similar to Model 2, χ^2 (47) = 40.75, *p* = .73. Overall, none of the three models including self-anger were satisfactory.



Figure 7. **Model 3**. SA = self-anger, PG = primary goal importance, SPG = self-presentation goal importance, AG = appropriateness goal importance, RG = relational resource goal importance, AVGCG = average compliance-gaining strategy valence. The numbers (1 and 2) represent the time point: 1 = post-Task 1, 2 = post-Task 2. * p < .05

Model 4: Partner-anger, most positive message. For the first of the models including anger at partner, there were similar issues to those facing Models 1-3. The

paths from anger at partner to goals were weak, and the paths from goal importance to most positive message remained the same as Model 1, meaning they were again insubstantial in this model. Local fit was also more problematic in this model than the previous three, with many large errors in the observed correlations. Furthermore, this model had poor global fit, χ^2 (47) = 109.10, *p* < .001. Even more so than the previous three models, this model did not explain the data well.



Figure 8. **Model 4**. PA = partner-anger, PG = primary goal importance, SPG = selfpresentation goal importance, AG = appropriateness goal importance, RG = relational resource goal importance, MPCG = most positive compliance-gaining message. The numbers (1 and 2) represent the time point: 1 = post-Task 1, 2 = post-Task 2. * p < .05



Figure 9. **Model 5**. PA = partner-anger, PG = primary goal importance, SPG = selfpresentation goal importance, AG = appropriateness goal importance, RG = relational resource goal importance, MNCG = most negative compliance-gaining message. The numbers (1 and 2) represent the time point: 1 = post-Task 1, 2 = post-Task 2. * p < .05

Model 5: Partner-anger, most negative message. For this model, the paths from anger to goals remained the same as for Model 4, and the paths from goals to most negative message remained the same as for Model 2, meaning the same issues with insubstantial paths were present in this model. Local fit was also still problematic, and the global fit of this model was as bad as for Model 5, χ^2 (47) = 100.36, *p* < .001, indicating that it presented a similarly poor explanation of the data.



Figure 10. **Model 6.** PA = partner-anger, PG = primary goal importance, SPG = selfpresentation goal importance, AG = appropriateness goal importance, RG = relational resource goal importance, AVGCG = average compliance-gaining strategy valence. The numbers (1 and 2) represent the time point: 1 = post-Task 1, 2 = post-Task 2. * p < .05

Model 6: Partner-anger, average message valence. For the final model, the paths from anger to goals remained the same as for Model 4, and the paths from goals to average message valence remained the same as for Model 3, again meaning the same issues with insubstantial paths were present here. Local fit was also again problematic, and the global fit was a bit poorer than Model 5, χ^2 (47) = 100.66, *p* < .001, indicating this model provided a poor explanation of the data.

Table 4.*Correlations: Anger and Goals Items*

	SA1	PA1	PG1	SPG1	AG1	RG1	SA2	PA2	PG2	SPG2	AG2	RG2
1												
2	.48**											
3	25*	38**										
4	04	23	.50**									
5	11	.01	.19	.26*								
6	.02	23	.28*	.52**	.55**							
7	.37**	.62**	09	05	.05	08						
8	.39**	.73**	44**	28*	14	18	.63**					
9	31*	36**	.85**	.48**	.39**	.32**	14	39**				
10	04	19	.50**	.91**	.32**	.44**	03	21	.53**			
11	14	13	.26*	.33**	.81**	.59**	07	24*	.38**	.34**		
12	.05	08	.21	.42**	.64**	.73**	.06	10	.31*	.43**	.61**	

Note. Column labels are abbreviations for anger and goals variables. SA = self-anger, PA = partner-anger, PG = primary goal, SPG = self-presentation goal, AG = appropriateness goal, RG = relational resource goal. The numbers (1 and 2) indicate time point (post-Task 1 and post-Task 2). For ease of interpretation, correlations between anger and goals are in blue; correlations between different goals items are in red. * p < .05 ** p < .01 *** p < .001

Overall, the three models including partner-anger fared worse than the three models including self-anger, and none of the six models was entirely satisfactory. Beyond the inadequate indicators of model fit for each of the models, the paths between anger and goals also failed to map onto the pattern that would be expected were the differential increase, differential decrease, or deviation amplification models correct. The importance ratings for all four goal types were positively correlated at the pretest and after both tasks. Overall, anger at self and anger at partner also tended to be negatively correlated with all four (see Table 4, above). From the table it is also clear that both types of anger also had the strongest negative effects on primary goal importance, the opposite of what would be expected were one of the proposed models correct.

Table 5.		
Descriptive Sta	tistics for Key	Variables

	T1				T2			
	Control		Experimental		Control		Experimental	
	М	SD	М	SD	М	SD	М	SD
Anger								
Self	1.62	0.69	2.22	0.70	1.32	0.51	2.05	0.79
Partner	1.33	0.48	1.81	0.52	1.33	0.49	1.89	0.62
Goal importance								
Primary	3.97	0.47	3.79	0.52	4.02	0.56	3.82	0.58
Self-presentation	3.69	0.70	3.51	0.66	3.67	0.79	3.56	0.68
Appropriateness	3.71	0.71	3.80	0.57	3.85	0.72	3.93	0.59
Relational resource	3.75	0.57	3.71	0.58	3.65	0.76	3.80	0.67
Compliance-gaining								
messages								
Most positive	2.61	0.93	2.34	1.17	2.82	0.73	2.50	0.92
Most negative	-0.70	1.10	-0.55	0.95	-0.52	0.87	-0.50	0.95
Average valence	0.49	0.39	0.31	0.32	0.41	0.31	0.38	0.27

Note. Anger and goal importance were measured on a 5-point scale, 1 being low and 5 being high. Compliance-gaining message valence was measured on a 7-point scale, -3 being most negative and +3 being most positive.

In-depth analyses. Given that the models failed to adequately account for the data, in-depth analyses of anger, goals, and compliance-gaining behavior were conducted to develop a better understanding of the data. Descriptive statistics for these

variables can be found in Table 5, above. Although blame could not be included in the model, it was also examined further to see whether or not any interesting trends emerged.

Anger. A 2 (conditions) x 2 (types of anger) x 2 (time points) analysis of variance was conducted to examine variance in anger more closely. There was a strong main effect of condition on anger, F (1, 67) = 28.61, p < .001, partial $\eta^2 = 0.30$; such that subjects in the experimental condition (M = 2.00, SD = 0.45) exhibited substantially higher levels of anger than subjects in the control condition (M = 1.40, SD = 0.46). There was also a substantial main effect of anger type (self or partner) on anger level, F(1, 67) = 15.40, p < 15.40.001, partial η^2 = .19; such that participants generally tended to be angrier at themselves (M = 1.83, SD = 0.62) than at their partner (M = 1.61, SD = 0.55). On the other hand, there was little evidence for a main effect of time on anger, F (1, 67) = 2.55, p = ns, partial $\eta^2 =$.04; with overall anger levels after the first task (M = 1.77, SD = 0.56) differing little from those after the second task (M = 1.66, SD = 0.63). There was also insufficient evidence to conclude that the time by condition interaction, F(1, 67) = 0.74, p = ns, partial $\eta^2 = .01$; anger type by condition interaction, F(1, 67) = 1.98, p = ns, partial $\eta^2 = .03$; or three-way interaction, *F* (1, 67) < 0.01, *p* = *ns*, partial η^2 < .001 impacted anger levels. The time by anger type interaction, however, did have a moderate effect, F(1, 67) = 6.89, p = .01, partial η^2 = .09. Whereas anger at self declined from Task 1 (*M* = 1.94, *SD* = 0.75) to Task

2 (*M* = 1.70, *SD* = 0.76), anger at partner remained much the same at both time points (T1: *M* = 1.59, *SD* = 0.55; T2: *M* = 1.62, *SD* = 0.62).

Goals. A 2 (conditions) x 4 (goal types) x 2 (time points) analysis of variance was conducted to examine goals data more closely. There was little evidence for a main effect of goal type, *F* (1, 68) = 1.34, *p* = *ns*, partial η^2 = .02; suggesting that participants appraised the importance of all four goal types similarly. There was also even weaker evidence for a main effect of condition, F (1, 68) = 0.14, p = ns, partial $\eta^2 < .01$; indicating that experimental participants differed little from control participants in the importance they assigned to goals. Although the effect did not reach statistical significance, there was some evidence for a main effect of time, F (1, 68) = 3.04, p = .09, partial $\eta^2 = .04$. Overall, goal importance tended to increase slightly from Time 1 (M = 3.74, SD = 0.44) to Time 2 (M = 3.78, SD = 0.51). There was also a marginally significant effect of the goal by condition interaction, F (1, 68) = 2.99, p = .09, partial $\eta^2 = .04$. Whereas control subjects placed more emphasis on primary goals (M = 4.00, SD = 0.49) and self-presentation goals (M = 3.68, SD = 0.73) than did experimental subjects (M = 3.80, SD = 0.54 and M =3.53, SD = 0.65, respectively), experimental subject rated appropriateness goals (M =3.86, SD = 0.55) and relational resource goals (M = 3.75, SD = 0.58) as more important than control subjects did (M = 3.78, SD = 0.69 and M = 3.70, SD = 0.62 respectively). Beyond this effect, there was little evidence for other interaction effects. Neither the time by condition interaction, F (1, 68) = 0.97, p = ns, partial $\eta^2 = .01$; the time by goal

type interaction, *F* (1, 68) < 0.01, *p* = *ns*, partial η^2 < .001; or the three-way interaction, *F* (1, 68) = 2.06, *p* = *ns*, partial η^2 = .03 had a substantial impact on goal importance.

Compliance-gaining messages. For the final analysis of the key variables in the model, compliance-gaining message behavior was examined with three 2 (conditions) x 2 (time points) analyses of variance, one for each variable-most positive message used, most negative message used, and average message valence. For most positive message used, the data trended toward a main effect of time, F (1, 69) = 1.93, p = .17, partial $\eta^2 =$.03, suggesting the most positive messages used during Task 1 and Task 2 were similar in valence, but that messages tended to get somewhat more positive over time (T1: M =2.47, SE = 0.13; T2: M = 2.66, SE = 0.10). The data also trended toward a main effect of condition, F (1, 69) = 2.47, p = .12, partial $\eta^2 = .04$, suggesting that subjects in the experimental and control conditions used most positive message of similar valence, but experimental subjects (M = 2.42, SE = 0.13) tended to be somewhat less positive than control subjects (M = 2.71, SE = 0.14). The time by condition interaction had a miniscule effect on the most positive message used, F (1, 69) = 0.04, p = ns, partial $\eta^2 < .01$.

For most negative message, there were no notable effects. There was insufficient evidence that time, F(1, 69) = 0.71, p = ns, partial $\eta^2 = .01$; or condition, F(1, 69) = 0.19, p = ns, $\eta^2 < .01$, had a meaningful impact on the most negative message used. The time by condition interaction had no demonstrable effect, F(1, 69) = 0.19, p = ns, partial $\eta^2 < .01$.

Finally, for average message valence, the data trended toward a main effect of condition, *F* (1, 69) = 2.72, *p* = .10, partial η^2 = .04, suggesting that both control and experimental subjects had conversations of similar overall valence, but experimental subjects tended to be slightly less positive (*M* = 0.35, *SE* = 0.04) than control subjects (*M* = 0.45, *SE* = 0.05). On the other hand, there was no evidence of a main effect of time, *F* (1, 69) < 0.01, *p* = *ns*, partial η^2 < .01; although the data did trend toward a time by condition interaction effect, *F* (1, 69) = 2.54, *p* = .12, partial η^2 = .04. Whereas control subjects tended to get somewhat less positive over time, experimental subjects tended to get somewhat less positive over time, experimental subjects tended to get somewhat

Blame. Rather than break the analysis down by condition, because of the problems with performance assessment described above, blame was examined according to the subjects' performance evaluations after each task.

For those who assessed their team to have performed well both times (N = 47), there was a main effect of time, F(1, 45) = 9.43, p < .01, partial $\eta^2 = .17$, such that levels of blame (attribution) were higher after Task 2 (M = 3.80, SE = 0.09) than after Task 1 (M = 3.55, SE = 0.09). There was also a main effect of target, F(1, 45) = 12.57, p < .01, partial $\eta^2 = .22$, such that subjects attributed the success substantially more to their partner (M = 3.87, SE = 0.10) than to themselves (M = 3.49, SE = 0.09). Finally, there was a main effect of condition, F(1, 45) = 6.41, p < .05, partial $\eta^2 = .13$, such that control subjects assigned higher levels of attribution (M = 3.88, SE = 0.09) than did experimental subjects (M = 3.88, SE = 0.09).

3.48, *SE* = 0.13). There was also a substantial time by target interaction, *F* (1, 45) = 8.80, *p* < .01, partial η^2 = .16, such that the discrepancy between attribution to self and partner was larger after Task 1 than after Task 2; and there was also a marginally significant three-way interaction effect, *F* (1, 45) = 3.79, *p* = .06, partial η^2 = .08. There was little evidence for a time by condition interaction, *F* (1, 45) = 0.10, *p* = *ns*, partial η^2 < .01; or a target by condition interaction, *F* (1, 45) = 0.01, *p* = *ns*, partial η^2 < .01.

For those who assessed their team to have performed poorly after the first task, but well after the second task (N = 17), there was a main effect of time, F(1, 15) = 16.16, p < .01, partial $\eta^2 = .52$, suggesting that subjects were less willing to assign blame for the initial failure (M = 2.64, SE = 0.22) than they were to assign attribution for the subsequent success (M = 3.16, SE = .07). There was insufficient evidence to conclude that any other main or interaction effects had a substantial impact on blame.

There were very few subjects who assessed their team performance as good after the first task, but poor after the second task (N = 4). Because of this miniscule cell size, the comparison of neither attribution nor blame was statistically significant. Descriptively, subjects tended to attribute the group's initial success more to themselves (M = 3.60, SD = 0.63) than to their partner (M = 3.55, SD = 0.53), t (3) = -0.40, ns, r = .22. On the other hand, subjects also blamed themselves (M = 2.75, SD = 1.50) more than their partner (M = 2.00, SD = 1.41) for the group's subsequent failure, t = -0.68, ns, r = .36. There were even fewer subjects who assessed their team to have performed poorly both times (one of whom was missing data and could not be included in the assessment of blame, leaving N = 2). Again, the lack of subjects in this cell meant that neither of the comparisons of blame was significant. Descriptively, subjects tended to blame themselves (M = 3.40, SD = 0.85) much more than their partner (M = 2.80, SD = 0.57) for the initial failure. Interestingly, this effect reversed for the second task, for which subjects tended to blame their partner (M = 3.50, SD = 0.14) much more than themselves (M = 2.70, SD = 0.99).

An Exploratory Model

Because the links with goals were the most problematic parts of the original model, an exploratory test was conducted on the anger-only model depicted in Figure 1. Many authors advocate an anger-based explanation of the rebuff phenomenon, so this model is not inconsistent with previous literature. Similar to the original model, six tests of this model were run—three using self-anger and three using partner-anger.

For the models including self-anger, fit was generally good. Except for the path from anger at self to most negative compliance-gaining strategy, all paths in the models were substantial. When most positive compliance-gaining message choice was the dependent variable (see Figure 11A), the tests of local fit were non-significant, meaning that there were no errors larger than would be expected by chance. However, one of these tests was marginally significant, indicating that local fit was in one case worse than ideal. Still, global fit was acceptable, χ^2 (4) = 2.33, p = .68. When most negative compliance-gaining message choice was used as the dependent variable (see Figure 11B), fit improved. The errors in the tests of local fit were smaller, and global fit was excellent, χ^2 (4) = 1.31, p = .86. When average message valence was used as the dependent variable (see Figure 11C), fit was even better. The errors in the tests of local fit were again small, and global fit improved, χ^2 (4) = 0.89, p = .93. Interestingly, whereas condition had the anticipated positive effect on anger in these models, anger also had an unanticipated positive effect on the valence of the most positive compliance-gaining message and the average conversation valence, suggesting that people who were angrier at themselves were actually more positive toward the confederate.

For the models including partner-anger, fit was also generally good, although the paths from partner-anger to compliance gaining were less substantial, particularly for most positive and negative message used. When most positive compliance-gaining message was the dependent variable (see Figure 12A), tests of local fit indicated no errors larger than those expected to occur by chance. Global fit of the model was also good, χ^2 (4) = 1.09, *p* = .90. The fit of the model when most negative compliance-gaining message was the dependent variable (see Figure 12B) had even better fit. There were yet smaller errors in the tests of local fit, and global fit was excellent, χ^2 (4) = 0.11, *p* > .99. When average message valence was the dependent variable (see Figure 12C), fit was also great. There were no errors larger than expected to occur by chance, and the global

fit was similarly good, χ^2 (4) = 1.62, p = .81. For these models, condition had the expected positive effect on anger at partner, but partner-anger had only a weak effect on compliance-gaining messages. The model for which evidence was the strongest was for the effect of partner-anger on average message valence, but the effect was positive rather than in the anticipated negative direction.



Figure 11. **Exploratory models including self-anger**. SA = self-anger, MPCG = most positive compliance-gaining message, MNCG = most negative compliance-gaining message, AVGCG = average valence of compliance-gaining messages. Numbers (1 & 2) represent time points.

* p < .05



Figure 12. **Exploratory models including partner-anger**. PA = partner-anger, MPCG = most positive compliance-gaining message, MNCG = most negative compliance-gaining message, AVGCG = average valence of compliance-gaining messages. Numbers (1 & 2) represent time points.

* $p \le .05$

DISCUSSION

The purpose of this study was to develop a possible explanation for the rebuff phenomenon—the tendency for individuals thwarted in their compliance-gaining attempts to use more negative strategies on follow-up requests. Overall, the results suggest that a model incorporating both affective (anger) and cognitive (goals) mediators is unlikely to be correct, at least in the order specified. Models using both anger at self and anger at partner fared poorly, regardless of whether compliancegaining behavior was measured as the most positive message used, the most negative message used, or the average message valence. The predictions about threshold also failed to hold up.

When examining the variables in the model more closely, it became clear that although anger was affected by condition in the predicted way, goal importance was not. As expected, when compared to control subjects, the experimental subjects were more upset both at themselves and at their partner over the course of both tasks. On the other hand, goal importance did not differ between the two conditions. And even if a larger sample size produced statistically significant differences, the results were inconsistent with the predicted tradeoff between primary goals and secondary goals. There was no evidence to suggest that primary goal importance increased at a faster rate than secondary goal importance (as per the differential increase model), decreased at a slower rate than secondary goal importance (as per the differential decrease model), or increased while the importance of secondary goals declined (as per the deviation amplification model). The high positive correlations among all four goal types instead suggest that subjects who tended to care more about getting their partner to cooperate also cared more about making better impressions, avoiding offensive tactics, and maintaining a good rapport with their partner. The negative correlations of all four goal types with anger also suggest that anger led subjects to care less about all measured aspects of the interaction, rather than invigorating their compliance gaining efforts.

When goals were removed from the model, leaving only anger, fit was much improved. Over the course of testing this exploratory model, it became clear that anger at partner had weak and inconsistent effects on measures of message valence, although the models still exhibited superior fit. On the other hand, anger at self had moderately strong effects on both the most positive compliance-gaining message and on average message valence. More surprisingly, these effects were both *positive*, indicating that subjects who were angrier at themselves were more positive toward the confederate. In line with this finding, the subjects also readily assigned blame for failure to themselves and attributed successes to the confederate.

Overall, the results suggest that the experimental condition was successful in inducing anger both at oneself and at the confederate. But contrary to expectation, subjects felt that the failure to perform well on the task was not the confederate's fault, but their own. As subjects grew angry at themselves for failing the team during each round of the task, they became increasingly positive as a means of making up for their shortcomings to the confederate. In Table 6, below, the compensatory nature of the messages is illustrated clearly by the much higher use of apologies among experimental subjects.

Table 6.Message Use by Condition

Message Type	Number of messages: Control condition	Number of messages: Experimental condition
Simple direct request	716	751
Request with emphasis	61	59
Reinforcement	130	122
Encouragement	11	15
Apology	19	36
Reprimand	2	4
Interjection	19	21
Cohesive – positive	14	1
Cohesive – negative	0	5
Other	37	68

Notably, these findings are inconsistent with several popular theoretical paradigms. First, the finding that goal importance had little to no bearing on subjects' compliance-gaining message use casts doubt on arguments that behaviors are primarily goal-directed. Not only were the paths from goals to compliance-gaining message choice insubstantial, there were several cases where observed correlations differed greatly from what would be expected were a goals-based model correct. In fact, the data come closer to suggesting that behaviors drive responses to goals items than the other

way around. For example, the best-fitting of the original six models was the one including self anger and average message valence. If this model is re-specified such that condition predicts self-anger, self-anger predicts message valence, and message valence predicts goal importance, the fit is much improved, χ^2 (50) = 25.49, p > .99. In other words, there was as much or more evidence that people came up with their goals to justify what they had already done during the task than that goal importance actually drove behaviors.

Second, these findings are inconsistent with claims about the fundamental attribution error (Ross, 1977). The fundamental attribution error is the supposed tendency for people to overestimate internal causes and underestimate situational causes when explaining others' behavior. In the context of this experiment, subjects were asked to make attributions about the causes of their team's (in)ability to complete a task. If the fundamental attribution error was influencing subjects' perceptions, they would be expected to attribute the confederate's failure to complete the drawing to internal factors, such as his or her ineptness at following directions, rather than external factors, such as the directions he or she had to work with or the difficulty of the task. Instead, subjects indicated that they felt the team's failure was their own fault, and often apologized to the confederate when mistakes were made. In other words, the confederate's mistake-ridden drawings were attributed to the subject's own poor instructing, not to anything related to confederate characteristics.
Finally, these findings were inconsistent with claims about self-serving bias. Selfserving bias is the tendency for people to attribute their failures to situational factors, but to attribute their successes to internal factors (Campbell & Sedikides, 1999). In their meta-analysis, Campell and Sedikides (1999) found moderate support for the existence of self-serving bias, although the size of the effect depended on several situational and personality variables. In this experiment, however, the opposite effects were observed. The subjects who perceived their team to have succeeded in the task attributed the success primarily to their partner-the attribution was other-serving rather than selfserving. On the other hand, the subjects who perceived their team to have failed in the task attributed the failure primarily to themselves, another other-serving attribution. Moreover, subjects in the experimental condition often apologized for mistakes, indicating an acceptance of responsibility and *not* an attempt to explain away the mistake as a result of the confederate's behavior or of situational factors.

Limitations

Although several findings in the present study were encouraging, and there were some intriguing findings about the attributions subjects made during the task, there were also several limitations. First, the rebuff phenomenon was not observed in this experiment. Although the model uncovered over the course of the study provides a compelling explanation of compliance-gaining behavior, it cannot be said to be a model of the rebuff phenomenon. Rather than escalate to more negative messages over the course of the experimental tasks, subjects in the experimental condition became more positive over time. Follow up studies in which escalation is actually observed are needed in order to test the ability of the model(s) to explain the rebuff phenomenon itself.

Second, the experimental scenario was not a typical compliance gaining situation. Subjects may have seen themselves as instructors more than influencers, which may have impacted their reactions to their team's failure. Especially given that subjects consistently blamed themselves for failure and attributed success to their partner, it is possible that they saw the team's failure as the result of their own poor descriptive abilities or the difficulty of the task, not their partner's uncooperativeness. A more conventional compliance-gaining task might lead to a different pattern of goals, perhaps one more consistent with the oft-argued efficiency-appropriateness dialectic. Alternatively, anger at partner might play a larger explanatory role in a compliancegaining situation where the other person was more clearly responsible for a lack of compliance. Either way, follow up studies utilizing alternative designs are needed to examine the degree to which the nature of this scenario determined subjects' behavior.

Third, very few people in the experimental condition admitted that their team did poorly each time. When the question about whether the team performed well or poorly was added to the questionnaire, the intent was simply to sort the control subjects from the experimental subjects. Instead, the question had the unintended result of revealing subjects' inability to evaluate their team's performance objectively. Perhaps subjects responded in this way due to the perceived difficulty of the task. If subjects thought the drawing task was very difficult to complete correctly, even a failed attempt may have seemed laudable. The cover story may also have impacted participants' answers. Because they thought the task was intended to evaluate teamwork, subjects may have overinflated responses about their performance in order to demonstrate their faith in the team. Although this finding was interesting, it made the blame measures impossible to evaluate as intended. Almost no subjects answered the blame items after both Tasks 1 and 2, meaning trends in blame over time could not be assessed. Furthermore, clean relationships between anger and blame could not be evaluated for most of the experimental subjects, rendering the path model of the rebuff phenomenon untestable in its proposed form.

A final limitation was the mediocre fit of the measurement model for the pretest goals items. The substantial improvement in the fit of the items after the first and second task suggests that subjects may have found the items ambiguous or unclear initially, developing a better understanding of their meaning after having participated in the task. Although the improvement in fit following the task is somewhat encouraging, it would be preferable to conduct additional rounds of validation to ensure the goals constructs were really captured adequately.

Future Directions

Moving forward, it would be beneficial to conduct a follow-up study with a more traditional compliance gaining scenario, perhaps replicating the design developed by Mikolic et al. (1997) and Pruitt et al. (1997), which was able to elicit message escalation from subjects. Doing so would provide an opportunity to reexamine the effects of anger and goals on message choices. Whether or not the results were replicated would help illuminate any situational variables that moderate the relationships of interest. For example, the unexpected pattern in goal importance in this study may have been a function of the skills-based nature of the task. It may be that the relationships observed in a more conventional compliance-gaining situation would be more consistent with the literature on the rebuff phenomenon. Actually observing the rebuff phenomenon in a follow up study would also help indicate if the model developed here is generalizable to compliance-gaining message choice in many situations, or if the model is an artifact of the design of this particular study.

There were also two unexpected findings in this study that deserve additional exploration. First, the patterns of blame and attribution during the task were the opposite of what was anticipated, and were inconsistent with both the fundamental attribution error and the self-serving bias. During the drawing task, subjects tended to blame themselves for failure and attribute success to their partner, whereas the pilot test scenario garnered the opposite responses. Further exploration of moderators of the patterns of attribution would be a potentially fruitful venture.

Second, not only were the importance ratings of the goal types positively correlated, all four were negatively correlated with anger; most strongly so for primary goal importance. Goals theorists often talk about compliance-gaining as a tradeoff between efficiency (primary goal) and appropriateness (secondary goals), which implies that a negative relationship should emerge whenever the two are incompatible (as they purportedly are after a rebuff). It would be useful to replicate this finding and to explore possible situational variables that moderate these relationships. On the other hand, if primary and secondary goals are consistently positively related, there are several possible interpretations. First, there may not really be a trade-off between efficiency and appropriateness in compliance-gaining situations. If positive compliancegaining strategies are actually more effective, or are perceived to be so, there is little reason for the two to exist in conflict. Second, people may be unaware of what they need to do to reach their goals. If people are generally unaware that negative messages are more efficient than positive ones (or if this is not actually the case), then people may be similarly unaware that sacrificing secondary goals is adaptive when dealing with a rebuff. Third, people may simply be unable to report on their goals adequately. If selfperception is sufficiently poor, the disconnect between reported goals and 'actual' goals may be such that the correlation between measures of goals and behavior is poor. After

all, arguing that behavior is goal-directed is meaningless if it is nigh impossible to assess what those goals are accurately.

Conclusion

Although the pattern of messages described to follow a rebuff was not observed in this study, a model was successfully developed to explain the compliance-gaining behavior that was observed. Findings suggest that anger, particularly anger at oneself, has an important role in predicting the valence of messages used in a compliancegaining situation, but goals do not. Additionally and unexpectedly, anger at self was a positive predictor of message valence. This study lays the groundwork for additional research on the attributions made in such situations, the situational variables of import, and the nature of goals, which will continue to enhance understanding of compliancegaining behavior. APPENDICES

APPENDIX A: PILOT MEASURES

Online Survey Part 1: Prompt

Imagine you are the team leader on a project and you have been assigned to work with another person in your class. The project accounts for a large part of your grade, so you want to do well on it. You told your partner how to do an important part of the project, but he or she did things all wrong, and now you need to get him or her to redo that part before you meet again next week. On top of this, your partner seems to have a really poor attitude—he or she doesn't seem to care about doing well or be motivated to get things right. How would you feel in this situation?

Table A1.Online Survey Part 1: Measures

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I would blame my partner for the problem.					
I would feel my partner was responsible for the problem.					
I would feel the problem was my partner's fault.					
I would feel the problem had occurred because of my partner's actions.					
I would feel the problem would not have happened if it weren't for my partner.					
I would blame myself for the problem.					
I would feel I was responsible for the problem.					

Table A1 (cont'd).

I would feel the problem was my fault.			
I would feel the problem had occurred because of my actions.			
I would feel the problem would not have happened if it weren't for me.			
I would be angry at my partner.			
I would be frustrated with my partner's behavior.			
I would be mad at my partner.			
I would be upset with my partner.			
I would be furious at my partner.			
It would be very important to me to convince this person to cooperate.			
I would be very concerned about getting what I wanted in this situation.			
I really wouldn't care that much whether he or she cooperated or not. (R)			
Whether or not this person cooperated would have important personal consequences for me.			
Although I would want the person to cooperate as I asked, it really wouldn't be that important an issue. (R)			
I would be concerned with making a good impression in this situation.			

Table A1 (cont'd).

I would be very conscious of what was appropriate and			
inappropriate in this situation.			
I would be concerned with putting myself in a "bad light" in			
this situation.			
I wouldn't want to look stupid while trying to get this person to			
cooperate.			
Getting what I wanted would be more important than			
preserving our relationship. (R)			
I wouldn't really care if I made the other person mad or not. (R)			
I would not be willing to risk possible damage to the			
relationship in order to get him or her to cooperate.			

Note. Goals items are from Dillard et al. (1989). The items in the table are grouped by scale for ease of reference. The order in which they were presented during the pilot test was randomized for each subject.

Online Survey Part 2: Failure Condition Prompt

Now imagine that despite the difficulties you experienced, you and your partner received a **terrible** grade on the project. How would you feel?

Table A2.

Online Survey Part 2: Failure Condition Measures

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I would blame my partner for the poor grade.					
I would feel my partner was responsible for the poor grade.					
I would feel the poor grade was my partner's fault.					
I would feel the poor grade had been given because of my partner's actions.					
I would feel the poor grade would not have been given if it weren't for my partner.					
I would blame myself for the poor grade.					
I would feel I was responsible for the poor grade.					
I would feel the poor grade was my fault.					
I would feel the poor grade had been given because of my actions.					
I would feel the poor grade would not have been given if it weren't for me.					

Table A2 (cont'd).

I would be angry at my partner.			
I would be frustrated with my partner's behavior.			
I would be mad at my partner.			
I would be upset with my partner.			
I would be furious at my partner.			

Note: The order in which the items were presented during the pilot test was randomized for each subject.

Online Survey Part 2: Success Condition Prompt

Now imagine that despite the difficulties you experienced, you and your partner received an **excellent** grade on the project. How would you feel?

Table A3.

Online Survey Part 2: Success Condition Measures

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I would attribute the good grade to my partner.					
I would feel my partner was responsible for the good grade.					
I would feel the good grade was due to my partner's actions.					
I would feel the good grade had been given because of my partner's actions.					
I would feel the good grade would not have been given if it weren't for my partner.					
I would attribute the good grade to myself.					
I would feel I was responsible for the good grade.					
I would feel the good grade was due to my actions.					
I would feel the good grade had been given because of my actions.					

Table A3 (cont'd).

I would feel the good grade would not have been given if it weren't for me.			
I would be angry at my partner.			
I would be frustrated with my partner's behavior.			
I would be mad at my partner.			
I would be upset with my partner.			
I would be furious at my partner.			

Note. The order in which the items were presented during the pilot test was randomized for each subject.

APPENDIX B: MAIN EXPERIMENT MEASURES

Online Survey Part 1: Threshold Prompt

You have been working hard on a group project, but one of your partners, John, has really been slacking off. You are very frustrated with his actions so far, and you want him to help out by writing a section of the group paper you need to do. How likely would you be to use each of the following techniques to get John to contribute to the paper?

Table B1.

Online Survey Part 1: Threshold Measures

	Definitely Would Not Use	Probably Would Not Use	Might or Might Not Use	Probably Would Use	Definitely Would Use
You offer to buy John a coffee if he helps out with the paper.					
You threaten to email the professor that John has been slacking unless he helps out with the paper.					
You point out that if John helps out with the paper, your group will be able to get a good grade on the project and in the class.					
You point out that if John does not help out with the paper, your group will not be able to get a good grade on the project or in the class.					
You try to be as friendly and nice as possible to get John in the "right frame of mind" to help out with the paper.					

Table B1 (cont'd).

You buy John a coffee and tell him you expect him to help out with the paper.			
You email the professor that John has been slacking off and tell John that you will continue to send daily negative reports about him until he helps out with the paper.			
You point out that you have done a lot of hard work on the project and John owes it to you to do his part to help out on the paper.			
You tell John that he will feel proud if he helps out with the paper.			
You tell John that it is morally wrong for any group member to leave the work to everyone else, so he should help out on the paper.			
You tell John that he will feel ashamed of himself if he doesn't help out with the paper.			
You tell John that any responsible and hardworking person would help out with the paper.			
You tell John that only a lazy and selfish person wouldn't help out with the paper.			

Table B1 (cont'd).

You tell John that you really need his help on the paper and that you wish he would contribute as a personal favor to you.			
You tell John that your whole group will think very well of him if he helps out with the paper.			
You tell John that your whole group will think very poorly of him if he doesn't help out with the paper.			

Note. Items are adapted from the Marwell and Schmitt (1967) typology of compliance gaining strategies. These items were intended to tap threshold, as discussed by Hunter and Boster (1987).

Online Survey Part 2: Verbal Aggressiveness Prompt

Now, think more generally about situations in which you try to get people to comply with your wishes. Indicate how often each statement is true for you personally when you try to influence other persons.

Table B2.

Online Survey Part 2: Verbal Aggressiveness Measures

	Almost Never True	Rarely True	Occasion ally True	Often True	Almost Always True
I am extremely careful to avoid attacking individuals' intelligence when I attack their ideas. (R)					
When individuals are very stubborn, I use insults to soften the stubbornness.					
I try very hard to avoid making others feel bad about themselves when I try to influence them. (R)					
When people refuse to do a task I know is important, without good reason, I tell them they are unreasonable.					
When others do things I regard as stupid, I try to be extremely gentle with them. (R)					
If individuals I am trying to influence really deserve it, I attack their character.					
When people behave in ways that are in very poor taste, I insult them in order to shock them into proper behavior.					

Table B2 (cont'd).

I try to make people feel good about themselves even when their ideas are stupid. (R)			
When people simply will not budge on a matter of importance I lose my temper and say rather strong things to them.			
When people criticize my shortcomings, I take it in good humor and do not try to get back at them. (R)			
When individuals insult me, I get a lot of pleasure out of really telling them off.			
When I dislike individuals greatly, I try not to show it in what I say or how I say it. (R)			
I like poking fun at people who do things which are very stupid in order to stimulate their intelligence.			
When I attack persons' ideas, I try not to damage their self- concepts. (R)			
When I try to influence people, I make a great effort not to offend them. (R)			
When people do things that are mean or cruel, I attack their character in order to help correct their behavior.			

Table B2 (cont'd)

I refuse to participate in arguments when they involve personal attacks. (R)			
When nothing seems to work in trying to influence others, I yell and scream in order to get some movement from them.			
When I am not able to refute others' positions, I try to make them feel defensive in order to weaken their positions.			
When an argument shifts to personal attacks, I try very hard to change the subject. (R)			

Note. These items are drawn from the verbal aggressiveness scale developed by Infante and Wigley (1986).

Lab Pretest: Prompt

As you just heard, the study you are participating in today focuses on leadership, communicative competence, and teamwork. Please answer the following background items related to the task.

Table B3.

Pretest Personality Inventory Filler Measures

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I like having authority over other people.					
I am often unhappy because I do so many things alone.					
I have a strong will to power.					
I see myself as a good leader.					
I have nobody to talk to.					
I am assertive.					
I am going to be a great person.					
Everybody likes to hear my stories.					
I am often unhappy because I am so withdrawn.					
I am witty and clever.					
I often feel I cannot tolerate being so alone.					
I like to take responsibility for making decisions.					

Table B3 (cont'd)

	Image: select	Image: selection of the

Table B3 (cont'd).

I am no longer close to anyone.			
I like to look at myself in the mirror.			
I am more capable than other people.			
My interests and ideas are not shared by those around me.			
I would be willing to describe myself as a strong personality.			
I expect a great deal from other people.			
I often feel shut out and excluded by others.			
I like to look at my body.			
I really like to be the center of attention.			
I am a born leader.			
I often feel left out.			
I would prefer to be a leader.			
I am apt to show off if I get the chance.			
I often feel completely alone.			
When I play a game I hate to lose.			
I often feel unable to reach out and communicate with those around me.			
People just naturally gravitate toward me.			

Table B3 (cont'd)

I think I am a special person.			
I often feel starved for company.			
I know that I am good because everyone keeps telling me so.			
People always seem to recognize my authority.			
I often feel isolated from others.			
I always know what I am doing.			
I have a natural talent for influencing people.			
It often seems that people are around me but not with me.			
I can make anybody believe anything.			
I am envious of other people's good fortune.			
I can read people like a book.			
My social relationships are superficial.			
No one really knows me well.			

Note. The table contains the items from the Narcissistic Personality Inventory proposed by Raskin and Hall (1979), of which only those featured in Emmons (1984) were included. The table also includes items from the UCLA Loneliness Scale (Russell, Peplau, & Ferguson, 1978). The items from the two scales were pooled and entered into the table in random order.

Table B4.Pretest Mood Inventory Measures

	Not at All	Slightly	Moderately	Very	Extremely
Angry					
Frustrated					
Mad					
Upset					
Нарру					
Pleased					
Ecstatic					
Satisfied					
Sad					
Guilty					
Ashamed					
Bored					
Excited					
Impatient					

Note. The first four items were intended to provide a baseline for those retained from the anger scale based on the pilot CFA. The rest are filler items.

Table B5.Pretest Goal Importance Measures

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
It is very important to me to convince my teammate to cooperate during the task.					
I am very concerned with getting what I want during the task.					
I care that my teammate follows my instructions during the task.					
It matters to me that my teammate and I are able to cooperate well during the task.					
Convincing my teammate to do what I ask is one of my major concerns in this situation.					
I am concerned with making a good impression in this situation.					
I am concerned with putting myself in a "bad light" in this situation.					
It is important that my teammate has a positive opinion of me.					
I care that my partner has a positive impression of me after this task is over.					
I want my teammate to think well of me.					

Table B5 (cont'd).

During this task, I will be careful to avoid saying things that are socially inappropriate.			
I am very conscious of what is appropriate and inappropriate in this situation.			
I don't really care if my partner finds what I say during the task disagreeable. (R)			
It is important to me to avoid saying anything that my partner would find offensive during the task.			
I am willing to say things during the task that my teammate might find inappropriate. (R)			
Getting what I want during the task is more important than preserving my relationship with my teammate. (R)			
I don't really care if I make my teammate mad or not during the task. (R)			
I do not want to hurt my teammate's feelings.			
It is very important me that my teammate and I part on good terms after the task is over.			

Table B5 (cont'd)

I want to avoid doing anything that might upset my teammate			
during the task.			

Note. The items in black are those from the Dillard et al. (1989) scales that survived the pilot CFA. The items in blue were generated following the pilot study. The items in the table are grouped by scale for ease of reference—primary goal importance, then self-presentation goal importance, then appropriateness goal importance, then relational resource goal importance. The items were presented to subjects in random order.

Lab Post-Test: Prompt

Please reflect on the task you just completed and answer the following items.

Table B6.

Post-Test Performance Measure

	Well	Poorly
In general, I feel that our team performed		

Note. This was the general performance item administered on the post-test. Whether subjects answered *well* or *poorly* determined whether they answered the items in Table B7 or B8.

Table B7.

Post-Test Blame/Attribution Measures When Good Performance Indicated

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I attribute our team's good performance on the task to my teammate.					
I feel my teammate was responsible for our team's good performance on the task.					
I feel our team's good performance was due to my teammate's actions.					
I feel our team's performance was good because of my teammate's actions.					

Table B7 (cont'd).

I feel our team's performance would not have been good if it weren't for my teammate.			
I attribute our team's good performance on the task to myself.			
I feel our team's performance was good because of my actions.			
I feel our team's good performance was due to my actions.			
I feel I was responsible for our team's good performance on the task.			
I feel our team's performance would not have been good if it weren't for me.			

Table B8.Post-Test Blame/Attribution Items When Poor Performance Indicated

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I blame my teammate for our team's poor performance on the task.					
I feel my teammate is responsible for our team's poor performance on the task.					
I feel our team's poor performance was my teammate's fault.					
I feel our team's poor performance occurred because of my teammate's actions.					
I feel our team's performance would not have been poor if it weren't for my teammate.					
I blame myself for our team's poor performance on the task.					
I feel I am responsible for our team's poor performance on the task.					
I feel our team's poor performance was my fault.					
I feel our team's poor performance occurred because of my actions.					

Table B8 (cont'd).

I feel our team's performance would not have been poor if it			
weren't for me.			

Note. Both Table B7 and B8 hold the partner-blame/attribution and self-blame/attribution items, written to have either a positive or negative connotation, respectively. The flexibility was written into the survey to accommodate subjects with differing perceptions of the team's success. The distinction mirrors the one made in the pilot study between the success condition and the failure condition. The subject filled out only one table or the other during the post-test.

Table B9.Post-Test Emotion and Filler Measures

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I am happy with my teammate.					
I am pleased with my teammate.					
I am satisfied with my teammate's behavior.					
I am angry at my teammate.					
I am frustrated with my teammate's behavior.					
I am mad at my teammate.					
I am upset with my partner.					
I am happy with myself.					
I am pleased with myself.					
I am satisfied with my actions so far.					
I am angry at myself.					
I am frustrated with myself.					
I am mad at myself.					
I am upset at myself.					
I am enjoying working with my teammate on the task.					

Table B9 (cont'd).

I am enjoying participating in the task.			
Our team worked well together during the task.			
Our team seemed to "click" during the task.			
I felt comfortable leading our team during the task.			
I felt our team performed as well as we could during the task.			

Note. This table includes the anger items retained from the pilot CFA (angry, frustrated, mad, upset), this time written to tap both anger at partner and anger at self. The rest of the items are fillers.

Table B10.Post-Test Goal Importance Measures

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
It is very important me that my teammate and I part on good terms after the task is over.					
During this task, I will be careful to avoid saying things that are socially inappropriate.					
It is very important to me to convince my teammate to cooperate during the task.					
It is important to me to avoid saying anything that my partner would find offensive during the task.					
It is important that my teammate has a positive opinion of me.					
I am willing to say things during the task that my partner might find inappropriate.					
I care that my teammate follows my instructions during the task.					
I don't really care if my partner finds what I say during the task disagreeable.					
I am concerned with making a good impression in this situation.					

Table B10 (cont'd).

I am very concerned with getting what I want during the task.			
Convincing my teammate to do what I ask is one of my major concerns in this situation.			
I do not want to hurt my teammate's feelings.			
It matters to me that my teammate and I are able to cooperate well during the task.			
I don't really care if I make my teammate mad or not during the task.			
I am concerned with putting myself in a "bad light" in this situation.			
Getting what I want during the task is more important than preserving my relationship with my teammate.			
I am very conscious of what is appropriate and inappropriate in this situation.			
I want to avoid doing anything that might upset my teammate during the task.			
I care that my partner has a positive impression of me after this task is over.			
I want my teammate to think well of me.	 		

Note. These items remain the same as the goal importance items in the pretest.
APPENDIX C: CONFRIMATORY FACTOR ANALYSIS TABLES

Table C1.

Final Results of CFA: Pilot Part 1

	PB	SB	А	PG	IGS	IGA	RG	М	SD
Partner-blame/attribution (α = .85)									
 I would blame my partner for the problem. I would feel my partner was responsible for the problem. I would feel the problem was my partner's fault. I would feel the problem had occurred because of my partner's actions. I would feel the problem would not have happened if it weren't for my partner. 	.65 .76 .78 .74							3.64 3.93 3.91 3.97 3.75	0.87 0.74 0.75 0.75 0.83
Self-blame/attribution ($\alpha = .86$)									
 I would blame myself for the problem. I would feel I was responsible for the problem. I would feel the problem was my fault. I would feel the problem had occurred because of my actions. 		.77 .70 .82 .74						2.08 2.45 2.15 2.15	0.88 1.10 0.92 0.91
I would feel the problem would not have happened if it weren't for me.		.68						2.18	0.93

Table C1 (cont'd).

	PB	SB	А	PG	IGS	IGA	RG	М	SD
Anger (α = .82)									
 I would be angry at my partner. I would be frustrated with my partner's behavior. I would be mad at my partner. I would be upset with my partner. 			.77 .65 .72 .78					3.82 4.12 3.86 4.07	0.78 0.83 0.79 0.76
Primary goal importance (α = .55)									
1. It would be very important to me to convince this person to cooperate.				.62				4.11	0.81
I would be very concerned about getting what I wanted in this situation.				.62				3.90	0.79
Interaction goal importance: Self-presentation (α = .58)									
1. I would be concerned with making a good impression in this situation.					.64			3.13	0.94
I would be concerned with putting myself in a "bad light" in this situation.					.64			3.10	1.00
Interaction goal importance: Appropriateness (α = . 61)									
 In this situation, I would be careful to avoid saying things that were socially inappropriate. 						.66		3.62	0.90
2. I would be very conscious of what was appropriate and inappropriate in this situation.						.66		3.76	0.82

Table C1 (cont'd).

	РВ	SB	А	PG	IGS	IGA	RG	М	SD
Relational resource goal importance (α = .59)									
1. Getting what I wanted would be more important than preserving our relationship. (R)							.65	2.64	0.94
2. I wouldn't really care if I made the other person mad or not. (R)							.65	2.82	0.99

Note: Column labels are the abbreviations for each factor; PB = partner-blame/attribution, SB = self-blame/attribution, and so on. The means for the reverse coded items were calculated after recoding.

Table C2.Final Results of CFA: Pilot Part 2

				Suco	cess	Fail	ure
	PB	SB	А	М	SD	М	SD
<i>Partner-blame/attribution</i> (α = .94)							
1. I would blame my partner for the poor grade. / I would attribute the good grade to my partner.	.83			2.41	0.99	3.85	1.02
2. I would feel my partner was responsible for the poor/good grade.	.94			2.38	0.93	4.11	0.80
3. I would feel the poor grade was my partner's fault. / I would feel the good grade was due to my partner's actions.	.91			2.43	0.93	4.04	0.85
4. I would feel the poor/good grade had been given because of my partner's actions.	.84			2.40	0.91	4.04	0.86
5. I would feel the poor/good grade would not have been given if it weren't for my partner.	.85			2.35	1.02	3.96	0.90
Self-blame/attribution (α = .95)							
 I would blame myself for the poor grade. / I would attribute the good grade to myself. 		.88		3.66	0.84	2.32	1.04
2. I would feel I was responsible for the poor/good grade.		.91		3.73	0.80	2.39	1.05
3. I would feel the poor grade was my fault. / I would feel the good grade was due to my actions.		.90		3.75	0.83	2.22	0.98
 I would feel the good/poor grade had been given because of my actions. 		.90		3.70	0.84	2.35	0.99
5. I would feel the good/poor grade would not have been given if it weren't for me.		.85		3.77	0.79	2.13	0.95

				Suc	cess	Fail	ure
	PB	SB	А	М	SD	М	SD
Anger (α = .94)							
1. I would be angry at my partner.			.92	2.68	1.06	4.04	0.89
2. I would be frustrated with my partner's behavior.			.79	3.25	1.10	4.19	0.86
3. I would be mad at my partner.			.94	2.74	0.99	4.02	0.93
4. I would be upset with my partner.			.91	2.80	1.10	4.19	0.83
5. I would be furious with my partner.			.82	2.38	1.03	3.61	1.16

Note. Column labels are the abbreviations for each factor; PB = partner-blame/attribution, SB = self-blame/attribution, and so on. The means for the reverse coded items were calculated after recoding.

Table C3.Final Results of CFA: Main Experiment, Pretest

	А	PG	SPG	AG	RG	M	SD
Anger (α = .73)							
1. Angry	.91					1.17	0.53
2. Frustrated	.67					1.44	0.75
3. Mad	.75					1.13	0.45
4. Upset	.28					1.31	0.63
<i>Primary goal importance (</i> α = .66)							
1. It is very important to me to convince my teammate to cooperate during the task.		.63				3.72	0.78
2. I care that my teammate follows my instructions during the task.		.49				3.93	0.52
3. It matters to me that my teammate and I are able to cooperate well during the task.		.49				4.13	0.61
4. Convincing my teammate to do what I ask is one of my major concerns in this situation.		.67				3.59	0.86
Self-presentation goal importance (α = .80)							
1. I am concerned with making a good impression in this situation.			.53			3.15	1.04
2. It is important that my teammate has a positive opinion of me.			.96			3.24	1.02
3. I care that my partner has a positive impression of my after this task is over.			.62			3.51	0.89
4. I want my teammate to think well of me.			.73			3.55	0.89

Table C3 (cont'd).

	А	PG	SPG	AG	RG	М	SD
Appropriateness goal importance (α = .69)							
1. During this task, I will be careful to avoid saying things that are socially				.78		3.90	0.88
 I am very conscious of what is appropriate and inappropriate in this situation. 				.51		4.03	0.74
3. I don't really care if my partner finds what I say during the task disagreeable (R)				.44		3.01	1.12
4. I am willing to say things during the task that my teammate might find inappropriate. (R)				.66		3.80	0.95
Relational resource goal importance (α = .55)							
1. Getting what I want during the task is more important than preserving my relationship with my teammate. (R)					.29	3.49	0.92
2. I do not want to hurt my teammate's feelings.					.56	3.84	0.99
I want to avoid doing anything that might upset my teammate during the task.					.82	3.85	0.79

Note. Column labels are the abbreviations for each factor; A = anger, PG = primary goal importance, and so on. The means for the reverse coded items were calculated after recoding.

Table C4.Final Results of CFA: Main Experiment, Post-Test 1

	PB	SB	PA	SA	PG	SPG	AG	RG	М	SD
Partner-blame/attribution (α = .94)										
 I blame my teammate for our team's poor perform task / attribute our team's good performance on the teammate. 	ance on the .87 e task to my								-	-
2. I feel my teammate was responsible for our team's performance on the task.	poor / good .91								-	-
 I feel our team's poor / good performance was my fault / due to my teammate's actions. 	teammate's .90								-	-
 I feel our team's poor performance occurred / performan	ermance was .94								-	-
I feel our team's performance would not have been if it weren't for my teammate.	poor / good .76								-	-
Self-blame/attribution (α = .92)										
1. I blame myself for / attribute our team's poperformance on the task (to myself).	oor / good	.84							-	-
2. I feel our team's poor performance occurred / performance occurre	rmance was	.83							-	-
 I feel our team's poor / good performance was my f my actions. 	ault / due to	.92							-	-
4. I feel I am responsible for our team's poor / good j on the task.	performance	.83							-	-
5. I feel our team's performance would not have been if it weren't for me.	poor / good	.78							-	-

Table C4 (cont'd).

	PB	SB	PA	SA	PG	SPG	AG	RG	М	SD
Anger at partner (α = .96)										
 I am angry with my teammate. I am frustrated with my teammate's behavior. I am mad at my teammate. I am upset with my partner. 			.96 .87 .99 .86						1.58 1.65 1.56 1.56	0.60 0.66 0.55 0.55
Anger at self (α = .89)										
 I am angry at myself. I am frustrated with myself. I am mad at myself. I am upset at myself. 				.88 .65 .94 .81					1.93 2.17 1.80 1.87	0.87 1.07 0.71 0.81
Primary goal importance (α = .79)										
1. It is very important to me to convince my teammate to cooperate during the task.					.88				3.89	0.52
2. I care that my teammate follows my instructions during the task.					.67				4.07	0.52
3. It matters to me that my teammate and I are able to cooperate well during the task.					.67				4.00	0.66
 Convincing my teammate to do what I ask is one of my major concerns in this situation. 					.55				3.51	0.88

Table C4 (cont'd).

	PB	SB	РА	SA	PG	SPG	AG	RG	М	SD
Self-presentation goal importance (α = .92)										
1. I am concerned with making a good impression in this situation.						.77			3.48	0.79
2. It is important my teammate has a positive opinion of me.						.88			3.69	0.77
3. I care that my partner has a positive impression of my after this task is over.						.91			3.51	0.81
4. I want my teammate to think well of me.						.91			3.69	0.69
Appropriateness goal importance (α = .72)										
1. During this task, I will be careful to avoid saying things that are socially inappropriate.							.63		3.77	0.93
2. I am very conscious of what is appropriate and inappropriate in this situation.							.63		3.87	0.78
3. I don't really care if my partner finds what I say during the task disagreeable. (R)							.53		3.62	0.87
4. I am willing to say things during the task that my teammate might find inappropriate. (R)							.71		3.77	0.94

Table C4 (cont'd).

	PB	SB	PA	SA	PG	SPG	AG	RG	М	SD
Relational resource goal importance (α = .56)										
1. Getting what I want during the task is more important than preserving my relationship with my teammate. (R)								.41	3.41	0.89
2. I do not want to hurt my teammate's feelings.								.71	3.85	0.91
3. I want to avoid doing anything that might upset my teammate during the task.								.54	3.96	0.63

Note. Column labels are the abbreviations for each factor; PB = partner-blame/attribution, SB = self-blame/attribution, and so on. The means for the reverse coded items were calculated after recoding. Means and standard deviations are not reported for partner blame/attribution and self-blame/attribution because the response depends upon the set of items answered.

Table C5.Final Results of CFA: Main Experiment, Post-Test 2

	PB	SB	PA	SA	PG	SPG	AG	RG	М	SD
Partner-blame/attribution (α = .95)										
1. I blame my teammate for our team's poor performance on the task / attribute our team's good performance on the task to my teammate.	.92								-	-
2. I feel my teammate was responsible for our team's poor / good performance on the task.	.95								-	-
3. I feel our team's poor / good performance was my teammate's fault / due to my teammate's actions.	.92								-	-
4. I feel our team's poor performance occurred / performance was good because of my teammate's actions.	.95								-	-
5. I feel our team's performance would not have been poor / good if it weren't for my teammate.	.73								-	-
Self-blame/attribution (α = .94)										
1. I blame myself for / attribute our team's poor / good performance on the task (to myself).		.92							-	-
2. I feel our team's poor performance occurred / performance was good because of my actions.		.94							-	-
3. I feel our team's poor / good performance was my fault / due to my actions.		.97							-	-
4. I feel I am responsible for our team's poor / good performance on the task.		.88							-	-
5. I feel our team's performance would not have been poor / good if it weren't for me.		.66							-	-

Table C5 (cont'd).

	PB	SB	PA	SA	PG	SPG	AG	RG	М	SD
Anger at partner (α = .96)										
 I am angry with my teammate. I am frustrated with my teammate's behavior. I am mad at my teammate. I am upset with my partner. 			.89 .88 1.03 .91						1.61 1.71 1.60 1.57	0.67 0.77 0.60 0.61
Anger at self (α = .96)										
 I am angry at myself. I am frustrated with myself. I am mad at myself. I am upset at myself. 	.93 .90 1.01 .90							1.77 1.72 1.64 1.68	0.88 0.82 0.73 0.80	
Primary goal importance (α = .86)										
1. It is very important to me to convince my teammate to cooperate during the task.					.78				3.96	0.60
2. I care that my teammate follows my instructions during the task.					.84				4.03	0.54
3. It matters to me that my teammate and I are able to cooperate well during the task.					.79				4.01	0.79
4. Convincing my teammate to do what I ask is one of my major concerns in this situation.					.69				3.65	0.82

Table C5 (cont'd).

										1	
		PB	SB	PA	SA	PG	SPG	AG	RG	М	SD
Self-pı	resentation goal importance (α = .93)										
1.	I am concerned with making a good impression in this situation.						.80			3.57	0.86
2.	It is important my teammate has a positive opinion of me.						.89			3.66	0.81
3.	I care that my partner has a positive impression of my after this task is over.						3.53	0.81			
4.	I want my teammate to think well of me.						.89			3.69	0.75
Appro	priateness goal importance (α = .83)										
1.	During this task, I will be careful to avoid saying things that are socially inappropriate.							.86		4.06	0.74
2.	I am very conscious of what is appropriate and inappropriate in this situation.							.68		4.00	0.64
3.	I don't really care if my partner finds what I say during the task disagreeable. (R)							.71		3.67	0.90
4.	I am willing to say things during the task that my teammate might find inappropriate. (R)							.74		3.83	0.99

Table C5 (cont'd).

	PB	SB	PA	SA	PG	SPG	AG	RG	М	SD
Relational resource goal importance (α = .77)										
1. Getting what I want during the task is more important than preserving my relationship with my teammate. (R)								.49	3.41	1.03
2. I do not want to hurt my teammate's feelings.								.97	3.87	0.92
3. I want to avoid doing anything that might upset my teammate during the task.								.77	3.91	0.85

Note. Column labels are the abbreviations for each factor; PB = partner-blame/attribution, SB = self-blame/attribution, and so on. The means for the reverse coded items were calculated after recoding. Means and standard deviations are not reported for partner blame/attribution and self-blame/attribution because the response depends upon the set of items answered.

Table C6.Final Results of CFA: Verbal Aggressiveness

		А	В	М	SD
Verba	Aggressiveness – Aggressive Items (α = .87)				
1.	When individuals are very stubborn, I use insults to soften the stubbornness.	.67		2.15	0.94
2.	When people refuse to do a task I know is important, without good reason, I tell them they are unreasonable.	.27		2.85	1.06
3.	If individuals I am trying to influence really deserve it, I attack their character.	.74		2.21	1.19
4.	When people behave in ways that are in very poor taste, I insult them in order to shock them into proper behavior.	.91		2.10	1.10
5.	When people simply will not budge on a matter of importance I lose my temper and say rather strong things to them.	.72		2.38	1.11
6.	When individuals insult me, I get a lot of pleasure out of really telling them off.	.68		2.24	1.04
7.	I like poking fun at people who do things which are very stupid in order to stimulate their intelligence.	.71		2.40	1.10
8.	When nothing seems to work in trying to influence others, I yell and scream in order to get some movement from them.	.68		2.53	1.25
Verba	l Aggressiveness – Benevolent Items (α = .72)				
1.	I am extremely careful to avoid attacking individuals' intelligence when I attack their ideas.		.56	3.78	0.94
2.	I try very hard to avoid making others feel bad about themselves when I try to influence them.		.42	3.63	1.28
3.	When others do things I regard as stupid, I try to be extremely gentle with them.		.47	3.31	0.87
4.	I try to make people feel good about themselves even when their ideas are stupid.		.55	3.56	0.97
5.	When people criticize my shortcomings, I take it in good humor and do not try to get back at them.		.37	3.31	1.12

Table C6 (cont'd).

	А	В	М	SD
6. When I dislike individuals greatly, I try not to show it in what I say or how I say it.7. When I attack persons' ideas, I try not to damage their self-concepts.8. I refuse to participate in arguments when they involve personal attacks.		.43 .48 .69	3.31 3.43 4.01	0.89 1.07 0.80

Note. Listwise *N* = 68. A = Aggressive Factor, B = Benevolent Factor.

APPENDIX D: DRAWINGS



Figure D1. Task 1 drawing.



Figure D2. Task 2 drawing.

APPENDIX E: CODING PROTOCOL AND SAMPLE TRANSCRIPTS

Coding Protocol

Part I. Categorization

The first part of coding for this project involves sorting messages into categories. Each category has its own numerical code:

- 1 Simple direct request
- 2 Request with emphasis
- 3 Reinforcement
- 4 Encouragement
- 5 Apology
- 6 Reprimand
- 7 Interjections
- 8 Cohesive statement positive outcome
- 9 Cohesive statement negative outcome
- 10 Other

The descriptions of each category, with examples, are as follows:

1. Simple direct request

Simple direct requests are statements that direct another to do something or that describe something that needs to be done. They do not include embellishments beyond the instruction itself.

Examples:

- "The very bottom right triangle is green."
- "Now make a cross in the middle of diamond, touching all four points."

2. Request with emphasis

Requests with emphasis are similar to simple direct requests, but they include embellishments that expand the request and add to its weight. They may also involve repetition.

Examples:

- "Make a diamond in the middle of the box just like the first diamond. The diamond only!"
- "Looking at the square again: BOTTOM LEFT is green."

3. Reinforcements

Reinforcing messages are positive remarks made when someone has correctly done as they were instructed to during the task.

Examples:

- "Perfect."
- "Good job with the shapes."

4. Encouragement

Encouraging messages are positive remarks meant to urge someone to keep going after a mistake or to urge them to continue performing as they have been. These messages are similar to reinforcing messages, but they are future-oriented rather than pastoriented.

Examples:

- "You can do this."
- "You had the right idea."
- "Good, but in the opposite direction."
- "Nice try."

5. Apology

Apologies take responsibility for a mistake or a poor performance.

- "Alright, my bad."
- "Sorry."

6. Reprimands

Reprimands are negative remarks made after a mistake, and are specifically directed at the other person.

Examples:

- "No!"
- "Are you even paying attention in there?"

7. Interjections

Interjections, in this case, refer only to negative interjections made after a mistake. Unlike reprimands, they are not directed at the other person.

- "Shit. Other way around."
- "Poop."

8. Cohesive statement – positive outcome

Cohesive statements emphasize the team aspect of the task and encourage bonding. This category covers any occasion where the bonding is specifically over a positive outcome, often when the task has been completed successfully.

Examples:

- "And boom goes the dynamite."
- "Damn we're good."

9. Cohesive statement – negative outcome

Cohesive statements emphasize the team aspect of the task and encourage bonding. This category covers any occasion where the bonding is specifically over a negative outcome, often when the task has not been completed successfully. These messages may often be ameliorative, minimizing the negative outcome by focusing on the positive team bond.

Examples:

- "We totally had it."
- "We were sooo close."

10. **Other**

This category will include everything that does not fit into one of the other seven categories. Something should only be coded other when it is definitely different than the defined categories—as many messages as possible should be given a meaningful label.

Distinguishing separate messages:

Some phrases will clearly have only one message, but others may include multiple messages. When multiple messages are included in a single sentence, each part of the sentence should be treated separately. For example, "Shit. Other way around. My bad. blue is on the right white on the left in the two smallest triangles." should be coded as:

Message number	Message category
1.1	6
1.2	5
1.3	1

Message length:

During this part of coding, **message length** will also be recorded for each message. The message length is defined here as the number of words in the message. When a single sent message is broken down into multiple messages, like in the example above, the word count should be given for each:

Message number	Message category	Message length
1.1	6	4
1.2	5	2
1.3	1	14

Part II. Determining category valence

The second part of coding involves determining how positive or negative each of the seven categories is. After all messages are categorized, the list of messages in each category will need to be examined to get a general idea of how positive or negative the messages are as a group. The entire category will be rated on the following scale:

-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5
Extre	emely	Ν	eutral		Extreme	ely				
nega	tive		р	ositi	ve					

All of the messages in the '**Other**' category will also be rated individually on the same scale.

Sample Transcript 1: Subject 19

Task 1

think of the masking tape as a giant square. separate it into four small squares perfect! now separate the top left and bottom right squares with diagonal lines (top right croner to bottom left corner) separating them into two triangles perfect ok for the top left square.... separate the right half of the square which is a tringle in half with a line from the bottom right corner of the square to the divided line exactly now separate that triangle you made in half the smallest one so the left half traingle in half into two smaller triangles yep! ok the top half of that top left square is purple the bottom left triangle right below the purple is blue so the left half of the divided triangle you just made that was my bad ok the blue part is the riht half of that triangle you just made sorry! the bottom left square now the left triangle is also blue the right half of that is orange the left half of the top right square is red the bottom right of the bottom right square is green good job!

Task 2

make a center diamond on the square that is the duct tape. meaning the top of the diamond is at the top of the square and left point is on the left side of the square...etc...

exactly

now make a square in the middle of that diamond (all corners touching the diamonds sides)

perfect!

inside that square make another diamond (all points touching the sides of that square) inside the smallest square

dived that diamon down the middle that smallest diamond with a line perfect now divid it in half again (with a perpendicular line to the line you just drew) the top right traingle in the giant square is blue the bottom right triangle in the giant square is purple the bottome left corner to the giant square is orange the top left triangle to the giant square is green the top right triangle in the little square is red the bottom left triangle in the little square is green the bottom right triangle in the little square is green the bottom right triangle in the little square is green the bottom right triangle in the top left squadron of the small square is blue the top left triangle of the bottom right squadron of the smallest square is orange great job!

Sample Transcript 2: Subject 35

Task 1

draw a large rectangle that takes up most of the white board. Equal width and length on all sides nice try, how about this, draw 4 squares.2 on bottom and 2 on top connect them the sqaures are equal lengths and wideths top left draw a diangonal line from the top right corner to the bottom left color the left side of that purple from the middle of the opp side of that box draw a right triangle color it blue thats incorrect actually wait draw a diagonal line from the top of the right triangle you just drew the triangle you just made, cut the left one in half now thats a triangle color it blue make a diamond of the entire thing no

Task 2

draw the same type square

ahh fuck actually draw a big ass diamond in the middle of the square

left outside side of that color green

bottom left orange, top right blue and bottom right purple

all outside sides

keep going, after your done draw a square of equal length and width in the middle of the diamond

make a small diamond in the middle of the square

make that diamond into 4 quadrents

top left quadrent color blue...... bot left leave white but color the outside green

now on to the right side top right inside quadrent leave white.. outside of that make red bot left color inside orange

great job

ENDNOTES

ENDNOTES

- ¹ For example, the goal may switch from one of gaining compliance to one of attacking the target who rebuffed the request. Stein and Levine (1990) assert that "the plan accompanying anger is often destructive and harmful to others," (p. 65). In addition, "there are many instances of anger where the primary goal of the injured party is simply to destroy the agent who caused intentional harm," (Stein & Levine, 1990, p. 67; also see Wilson et al., 1998).
- ² Results were the same when mean imputation was used to deal with missing data.
- ³ All five anger items were initially examined, including the one that was dropped from the first CFA.
- ⁴ Direct effects of threshold and verbal aggressiveness on most positive, most negative, and average message valence were also examined. There was insufficient evidence to conclude either variable had an effect of any of the three.
- ⁵ Subjects who knew the confederate or the experimenter (N = 12) tended to use more positive messages than subjects who did not. There was a substantial effect on the valence of most positive message used, t (59.00) = 4.32, p < .001, r = .49; as well as on the average message valence, t (69) = 2.66, p = .01, r = .31, during Task 1. There was insufficient evidence that these differences extended to Task 2 for either the valence of the most positive message used or the message valence, nor was there evident that the valence of the most negative message used differed at either time point.

With these subjects removed, the 2 (time points) x 2 (conditions) ANOVAs of compliance gaining were conducted again to examine any differences. For the most positive message used, the pattern of results was the same, although the effect of time got somewhat stronger, *F* (1, 58) = 3.22, *p* = .08, partial η^2 = .05. The effect of condition was also slightly weaker, *F* (1, 58) = 1.61, *p* = *ns*, partial η^2 = .03. For the most negative message used, the pattern of results was also the same, although the main effect of condition was slightly larger, *F* (1, 58) = 1.80, *p* = *ns*, partial η^2 = .03. For the average message valence, the effects were somewhat smaller. Evidence for a main effect of condition weakened, *F* (1, 58) = 0.58, *p* = *ns*, partial η^2 = .01; as did that for the condition by time interaction, *F* (1, 58) = 1.07, *p* = *ns*, partial η^2 = .02.

The results of analyses of anger and goals were identical regardless of whether or not these subjects were included. The results of the model tests were also similar. For the set of six original models, fit improved, although the improvement was likely an artifact of the smaller sample size. For Model 1, for example, global fit was excellent, χ^2 (47) = 24.27, p > .99; but there were problematic residuals (the largest was e = .35). The same was true of Model 2, χ^2 (47) = 25.65, p > .99; and Model 3, χ^2 (47) = 25.36, p > .99, suggesting that the explanatory power of the models including self-anger and goals was low. For the models including partner-anger and goals, Model 4 had improved fit, χ^2 (47) = 31.38, p = .96; but also retained problematic residuals (also as high as e = .35). The same was true of Model 5, χ^2 (47) = 31.87, p = .96; and Model 6, χ^2 (47) = 32.36, p = .95.

For the set of six alternate models, fit was also similar. For the model incorporating self-anger and most positive message, there was again one path where local fit was lower than desired (e = .15), but global fit improved, χ^2 (4) = 1.28, p = .87. For the model incorporating self-anger and most negative message, the global fit was slightly worse, χ^2 (4) = 1.87, p = .76, and the errors in the paths were slightly larger, indicating local fit was not as good (largest e = .18). For the model incorporating selfanger and average message valence, there was also one path where local fit was lower than desired (e = .19), but the other paths exhibited excellent local fit; global fit was also excellent, χ^2 (4) = 1.10, p = .90. For the model incorporating partner-anger and most positive message, the path from anger to message was still insubstantial, but fit was excellent, χ^2 (4) = 0.67, p = .96. For the model incorporating partner-anger and most negative message, the path from anger to message was again insubstantial, but fit was even better, χ^2 (4) = 0.57, p = .97. Finally, for the model incorporating partneranger and average message valence, global fit was still good, $\chi^2(4) = 2.14$, p = .71; but there were two paths with large residuals (e = 19 and e = 20), even if these residuals were not larger than would be expected by chance.

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