

# Justice and Utility in the Classroom: An Attributional Analysis of the Goals of Teachers' Punishment and Intervention Strategies

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There are a multitude of possible reactions that teachers can have toward students who fall below academic standards. Some of these reactions have utilitarian goals, whereas others are punitive. In this study, the authors investigated these reactions, as well as the situations that determine when these different strategies are likely to be used. Both undergraduates playing the role of teachers (Study 1) and actual high school teachers (Study 2) used attributional information in much the same way to guide their choice of responses to academic failure. Controllable causes of failure give rise to punitive and retributive strategies, whereas lack of controllability elicits utilitarian responses. The stability of the cause moderates teachers' responses to failing students. These attributionally guided interventions are mediated in part by inferences of responsibility, emotional reactions of anger and sympathy, and beliefs in the efficacy of the intervention. The implications of this model are discussed in terms of student motivation and classroom performance.

In the public education system, teachers have a considerable amount of freedom to operate their classrooms as they see fit, as long as their system conforms to the guidelines of conduct as mandated by their school district and the law. This leaves teachers with a number of possible interventions for motivating and reprimanding students who fall below their standards of academic achievement. What do teachers do when their students are failing their classes? This is an important issue to address because teachers' reactions to their students can potentially impact students' subsequent motivations, expectations, and behaviors in meaningful ways.

In this article, we apply an attributional model of social justice to the intervention decisions that teachers make when dealing with students who do not perform well (see Weiner, Graham, & Reyna, 1997). With this model, we are able to predict whether these interventions are driven by utilitarian or retributive goals. We hope this information will help us to better understand how beliefs about students impact the strategies teachers use as well as the goals teachers have when using these strategies.

## The Goals and Determinants of Intervention and Discipline

To understand classroom intervention and discipline, one must first analyze the determinants and goals of teachers' feedback,

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behavioral interventions, and disciplinary actions. In many respects, the intervention strategies of the classroom seem to parallel those of the courtroom. In legal arenas, undesirable behavior elicits punishment that can serve either utilitarian or retributive goals (e.g., see Gert, 1988; Rawls, 1955; Vidmar & Miller, 1980). Likewise, in the classroom, a teacher's reactions to a student's undesirable behavior can be classified as utilitarian or retributive. Utilitarian goals are aimed at altering the future behavior of the transgressor (the student) and are achieved through a reduction in the likelihood of the misdeed by the transgressor or by others in that social context—in this case, other students (e.g., Murphy & Coleman, 1990; Wan & Salili, 1996; Wolfgang & Brundenell, 1983; Wynne, 1990). Retributive goals, on the other hand, are oriented toward retaliation for a past wrong rather than on prevention and behavior modification; that is, the goal is to avenge a prior deed rather than to prevent future ones (Feinberg, 1970; Hogarth, 1971; McFatter, 1978). Nontherapeutic punishment is not uncommon in classroom settings and is often chosen as a course of action over more time-consuming, utilitarian interventions (e.g., Suman, 1984).

Quite often, both utilitarian and retributive goals of punishment can be simultaneously achieved with the same action. For example, if a student repeatedly neglects homework assignments, the teacher may give this student detention to reduce the likelihood that the transgression will happen again (utilitarian goal). In addition, the same punishment may also provide "payment in kind" for the student's disrespect of classroom norms (retributive goal). However, whether teachers actually are motivated by the same punishment goals as those in legal domains is an empirical question that was tested in the present studies. This topic has not received much attention in the literature on punishment goals in classroom settings. Most of the research on teachers' punitive and intervention strategies has focused on behavioral and discipline problems in the classroom (e.g., Scott-Little & Holloway, 1992; Tulley & Chiu, 1995; Walker, Greenwood, & Terry, 1994; Wan & Salili, 1996; Wolfgang & Brundenell, 1983; Wynne, 1990). How-

ever, the issue of teachers' punitive responses to academic failure has received little attention (for a few examples, see Clark, 1997; Suman, 1984; Wan & Salili, 1996).

In addition to testing the goals of teachers' interventions, it is important to determine which goals are dominant at a given time. Of course, there are myriad relevant factors that might affect punishment goals and means, including the extremity of the misdeed, the gender of the person rendering judgment, classroom norms, and so on (e.g., see Bailey & Peterson, 1994; Ellsworth & Gross, 1994). In this article, we contend that the perceived cause of a classroom transgression is a critical antecedent influencing punishment goals, decisions, and severity.

### An Attributional Analysis of Behavior

The causes of academic achievement outcomes vary greatly. However, it is well established that all causes, independent of their specific denotation, can be compared and contrasted on three shared properties, or what have been labeled "dimensions of causality" (see Weiner, 1986). Causes can be classified according to their locus or location (internal or external to the actor), stability (whether the cause is enduring across time or temporary), and controllability (whether the cause was subject to the actor's volition). For example, one would most likely categorize a student's absence from school because he or she wanted to go to a movie as internal to the violator and controllable by that person. If there was a history of prior truancy for this reason, then the perceived cause of the transgression would also be construed as stable over time. On the other hand, repeated absence because of the student's severe illness would most likely be perceived as uncontrollable by the student as well as internal to the student and stable. Thus, these two causes—desire to go to a movie and poor health—are construed as identical on two dimensions of causality (locus and stability), but they differ on the property of controllability (respectively, controllable vs. uncontrollable). In summary, even when there is phenotypic dissimilarity, or a qualitative distinction between the causes of each transgression, a genotypic analysis of these fundamental dimensions of causality permits comparison in a quantitative manner along these shared characteristics. In this article, we focus on two of the dimensions of causality: controllability and stability.

### Consequences of Causal Categorization

All of the causal dimensions have psychological significance in that their activation gives rise to particular thoughts, feelings, and actions. Causes of transgressions that are deemed controllable by the pupil, such as failure on an exam because the student did not study, give rise to the inference that the pupil is responsible for his or her negative outcome (see Weiner, 1995, for an examination of the antecedents of responsibility inferences). Assuming some personal involvement, which teachers typically have with their students, an inference of pupil responsibility for a negative outcome can generate anger. This emotion in turn promotes the tendency to respond in a punitive manner. Hence, an involved teacher is likely to be mad at a student who did not do his or her homework because he or she went to a party and is likely to respond punitively (Darley & Zanna, 1982; Fincham & Jaspars, 1980; Shaver, 1985; Schultz, Schleifer, & Altman, 1981).

On the other hand, negative actions and outcomes that can be ascribed to uncontrollable causes—which indicate that the violator of some norm had no freedom to act otherwise—often elicit sympathy and generate prosocial behavior (Weiner, 1995). One tends to feel sorry for the student failing because of low intelligence or poor health, or for the person missing an exam because the bus breaks down. Thus, teachers may offer social support and give them another opportunity to take the exam. Uncontrollability is considered one category of mitigating circumstances that reduces responsibility for an untoward act (see Weiner, 1995).

On the basis of this analysis, we propose the following temporal ordering to capture the effects of perceived causal controllability on punishment and intervention-related decisions:

Transgression → Perceived cause → Controllability of that cause → Inference regarding responsibility → Emotional reaction → Intervention/punishment goal, punishment severity, and so on.

This sequence can be subdivided into two hypothesized components:

1. Transgression → Perceived cause → Cause is controllable → Person is responsible → Anger, no sympathy → Retributive goal, more severe punishment, reluctance to help.
2. Transgression → Perceived cause → Cause is uncontrollable → Person is not responsible → Sympathy, no anger → Utilitarian goal, milder or no punishment, more helping behavior.

These attributional principles interact with the effects of the second key dimension of phenomenal causality: causal stability. If a cause is considered stable, then the effect brought about by that cause would be anticipated to occur again on future occasions (Weiner, 1986). After all, if the cause will reappear, then according to Western logic, so too will the effect. Therefore, one would expect repeated absenteeism given the continual desire to see movies instead of going to class. On the other hand, the person who is late because the bus broke down will be presumed punctual for the next class (unless the school buses are in continual need of repair, in which case the cause will be deemed stable, and lateness will be anticipated).

Causal stability has implications for the efficacy of behavioral interventions. For example, if the cause of a student's poor performance is considered stable, then certain utilitarian goals may not be obtainable. A student who fails because of very low intelligence will likely continue to fail despite sympathetic efforts by teachers and other supporting adults to encourage and motivate this student. On the other hand, given an unstable cause for a student's failure, the student's future is seen as alterable, and a full range of beneficial interventions becomes available to the teacher (see Carroll, 1978; Carroll & Payne, 1976; Hughes, Barker, Kemenoff, & Hart, 1993).

This interplay between attributions of stability and beliefs about the utility of certain interventions involves a dynamic we label "influence efficacy." Influence efficacy refers to an intervener's beliefs about the effectiveness of his or her intervention: Can he or she elicit the desired actions or results in the target person? In this article, influence efficacy includes the perception or belief that the actions of intervening agents (e.g., teachers) can bring about a desired behavior in a target person (e.g., a student). Influence efficacy might be construed as one type of controllability attribu-

**Table 1**  
*Feedback Across the Attributional Dimensions of Controllability and Stability*

Controllability	Stable	Not stable
Controllable	-2.43 (7.11)	-0.73 (6.70)
Not controllable	5.34 (4.70)	5.90 (3.98)

*Note.* Feedback was measured with a scale ranging from -10 (*most negative*) to 10 (*most positive*). Standard deviations are in parentheses.

tion, where controllability is linked to an agent external to the actor who is engaging in the behavior. For example, if a teacher believes he or she can use classroom management strategies to control the disruptive behavior of students, the teacher has high perceptions of influence efficacy. Teachers who have high beliefs of influence efficacy should display a greater use of utilitarian interventions (e.g., Hughes et al., 1993).

On the basis of this analysis, we propose the following sequence to capture the effects of perceived causal stability on intervention decisions:

Transgression → Perceived cause → Stability of that cause → Expectancy of future violation ↔ Teacher influence efficacy → Intervention/punishment goal, severity, method.

This sequence can be subdivided into two hypothesized components:

1. Transgression → Perceived cause → Cause is stable → High expectancy for future transgressions ↔ Low teacher beliefs in influence efficacy → Less focus on utilitarian goals and some utilitarian means.

2. Transgression → Perceived cause → Cause is unstable → Low expectancy for future transgressions ↔ High teacher beliefs in influence efficacy → Greater focus on utilitarian goals and means.

Note that we anticipated a bidirectional relationship between expectancy and influence efficacy: High efficacy increases expectancies just as high expectancies influence beliefs about efficacy.

We examined these issues within the context of reactions of others to exam performance. In two studies, students were described as failing an exam. The failure was manipulated to be due to controllable (effort) or uncontrollable (aptitude or school transfer) causes. Furthermore, the controllable and uncontrollable causes were described as stable (chronic laziness, low natural aptitude) or unstable (temporary lack of effort, late transfer into the

class). The participants (college students in Study 1 and public high school teachers in Study 2) were then asked to indicate the positivity or negativity of feedback they would give the student following the failure. They were also asked to indicate the goals of the feedback: utilitarian or retributive. In addition, inferences of responsibility and affective reactions of anger and sympathy were assessed. These measures were used to examine the factors mediating between the causal ascriptions and the teachers' behavioral reactions.

We anticipated that in both the simulated and real role of teacher, utilitarian goals would predominate overall as determinants of punishment and intervention, which is consistent with the role expectations of a classroom teacher. However, students failing because of controllable, stable factors (e.g., chronic laziness) would elicit more retributive than utilitarian-driven responses. Reactions to failure due to controllable causes such as lack of effort would elicit inferences of responsibility, anger, little sympathy, and relatively high reprimand. Conversely, poor academic performance due to uncontrollable causes (such as low aptitude) would elicit low inferences of student responsibility, low anger, high sympathy, and helping behavior.

Turning to causal stability, unstable causes of poor academic performance would result in high beliefs in influence efficacy, expectations that the undesirable behavior will change, and more utilitarian-driven interventions and punishments. On the other hand, when poor academic performance is deemed stable, expectancies for future success and beliefs in influence efficacy will be low, thus decreasing the endorsement of utilitarian goals.

## Study 1

### Method

#### Participants

Participants were 127 undergraduate students (56 men and 71 women) from the University of California, Los Angeles (UCLA) who were recruited as a convenience sample on the UCLA campus.

#### Materials and Procedures

The participants received a questionnaire with instructions asking them to imagine that they were teachers in a class. They were informed that, as teachers, they had prior knowledge about their students' innate abilities and scholastic diligence. They were also told that, following each exam, they gave students verbal feedback regarding their performance, in addition to a grade. The participants were asked to imagine that they had just admin-

**Table 2**  
*Mean Endorsement of Retribution and Utilitarian Goals for Feedback Across the Attributional Dimensions of Controllability and Stability*

Controllability	Retribution		Utility	
	Stable	Not stable	Stable	Not stable
Controllable	5.48 (1.47)	4.68 (1.84)	4.63 (1.93)	5.56 (1.52)
Not controllable	3.77 (2.01)	3.90 (1.81)	5.31 (1.83)	5.16 (1.78)

*Note.* Goal endorsement was measured on a 7-point scale ranging from 1 (*no endorsement*) to 7 (*high endorsement*). Standard deviations are in parentheses.

istered a test to their class and had to determine the verbal feedback to give to the students who did poorly.

Following the cover page were four vignettes describing students who failed the exam. Each vignette contained causal ascriptions for the students' failure and was based on the combinations of the two causal attribution dimensions of controllability and stability (all causes were internal to the student). This resulted in a 2 (controllable vs. not controllable)  $\times$  2 (stable vs. not stable) repeated measures design. The four students were described in the following manner:

Student A is very smart (high ability). Student A is also very lazy. Student A never does the homework or pays attention in class. Although you know Student A is bright, Student A has never put forth effort in your class. In fact, other teachers have told you that Student A never puts forth effort in any class. Student A did poorly on the exam. [controllable/stable condition; C/S]

Student B is very smart (high ability). Although Student B usually pays attention in class and is fairly diligent with homework, you know that Student B can be flaky at times. Student B did not try very hard on this exam, and did poorly on the exam. [controllable/unstable condition; C/US]

Student C is not very smart (low ability). Regardless of how hard Student C studies, Student C still has difficulty doing well. You know that student C put forth a lot of effort in studying for this exam, but still did poorly. [not controllable/stable condition; NC/S]

Student D is an exchange student who transferred to your school right before the exam. Student D had transferred into your class late, missing some of the lectures that covered the materials that were on the exam, and thus was unable to learn the material in time. Student D tried very hard, but did not have time to master the material. Student D did poorly on the exam. [not controllable/unstable condition; NC/US]

These vignettes were presented in four different orders based on a balanced Latin Square, where each vignette follows and is preceded by every other vignette. Participants were randomly assigned a questionnaire with one of the four orderings.

After reading each vignette, participants rated each student on the controllability and stability of the cause of his or her failure as well as the student's responsibility for the poor performance. Responses were rated on 7-point bipolar scales ranging from 1 (*not at all*) to 7 (*completely*). In addition, participants rated how much anger and sympathy they would feel for the student in their role as teacher as well as to what degree they thought their own behaviors (e.g., reinforcements, feedback, discipline) could influence the student's later performance in their class (the "influence efficacy" variable).

After providing ratings, participants were asked to indicate, on a scale ranging from -10 (*most negative*) to 10 (*most positive*), the feedback they would give to each student. Participants were told that this feedback was in addition to the grade the student got on the test. They were then asked to indicate their goals for giving this feedback in terms of retribution and utility. Retribution was defined for the participants in the following manner: "The person deserves what they get—it is just to do this. That is, the person should be punished and suffer if they deserve it (or not be punished and not suffer if they don't deserve it)." Utility was defined in the following manner: "It will change the future behavior of the person. It is 'instrumental' for them and for society."

Following the definitions, participants rated on 7-point scales of agreement their retributive goals (e.g., "I gave this feedback because it was what the student deserved") and their utilitarian goals (e.g., "I gave this feedback in hopes of improving this student's future performance"). Participants were also asked to indicate the percentage of their feedback that was

motivated by retributive goals and the percentage that was motivated by utilitarian goals (totaling 100%).

To maintain anonymity, participants placed completed questionnaires in an envelope with all of the other completed questionnaires. They were then fully debriefed and thanked.

## Results

### Manipulation Checks

A manipulation check was first conducted to ensure that the attributions participants made for the students' failures concurred with the experimental manipulations of causality. The two conditions representing controllable causes—the lazy student (C/S cause) and the student with a temporary lack of effort (C/US cause)—did receive higher ratings of controllability (6.25 and 5.93, respectively) compared with the low-ability (NC/S cause) and transfer student (NC/US cause) conditions (3.70 and 2.93, respectively),  $F(1, 126) = 350.36, p < .0001$ . Furthermore, the two stable conditions—the lazy student (C/S) and the student with low ability (NC/S)—elicited higher ratings of stability (2.95 and 3.72, respectively) compared with the student with a temporary lack of effort (C/US) and the transfer student (NC/US) (2.32 and 1.95, respectively),  $F(1, 126) = 75.74, p < .0001$ . We note, however, that none of the causes was perceived as very stable.

### Analyses of Feedback and Goal Endorsements With the Attribution Manipulations

A 2 (controllability)  $\times$  2 (stability) repeated measures analysis of variance (ANOVA) was used to test the attributional determinants of the feedback given to students who failed (see Table 1). These data support the prediction that students who failed for controllable reasons would elicit more negative feedback than students who failed because of uncontrollable reasons,  $F(1, 124) = 196.48, p < .001$ . This held true for both the stable (C/S  $M = -2.43$  vs. NC/S:  $M = 5.34$ ) and the unstable (C/US  $M = -.73$  vs.

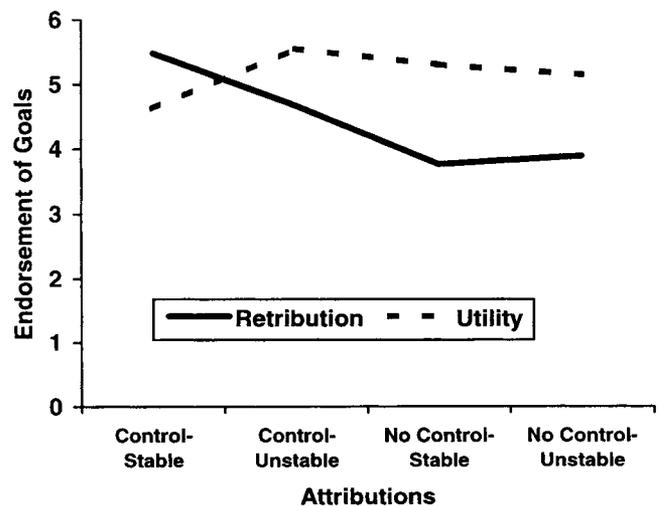


Figure 1. Endorsement of utilitarian and retributive feedback goals across attributions (Study 1).

Table 3  
Correlations Between the Cognitive and Affective Mediators of Feedback and Punishment Goals

Variable	1	2	3	4	5	6	7	8
1. Retribution	—	-.16	.31	.23	.34	-.31	-.02	-.03
2. Utility		—	.02	.00	-.01	.21	-.27	.37
3. Controllability			—	.82	.67	-.52	-.09	-.03
4. Responsibility				—	.59	-.49	-.04	-.09
5. Anger					—	-.52	-.09	-.01
6. Sympathy						—	.06	.20
7. Stability							—	-.32
8. Influence efficacy								—

NC/US  $M = 5.90$ ) conditions ( $ps < .001$ ). There was also an effect of stability on feedback negativity such that students who failed for reasons that were stable—the lazy student (C/S) and the student with low ability (NC/S)—received more negative (or less positive) feedback than did the students whose failure was caused by a temporary lack of effort (C/US) and having been transferred (NC/US),  $F(1, 124) = 14.90, p < .001$  (see Table 1). There was no significant interaction.

An analysis was also conducted to test the hypotheses concerning the effects of the attribution variables on the two punishment goals: retribution and utility. With regard to retribution (see Table 2, Retribution column), we predicted and found that retribution was endorsed more when students failed for controllable reasons (C/S  $M = 5.48$ ; C/US  $M = 4.68$ ) than when the cause of failure was uncontrollable (NC/S  $M = 3.77$ ; NC/US  $M = 3.90$ ),  $F(1, 126) = 65.19, p < .001$ . This was true for both stable and unstable causes (contrast  $ps < .001$ ). Also as predicted, the lazy student (C/S) elicited significantly more retribution than did all the other conditions (contrasts were significant at  $p < .001$ ), resulting in a significant Controllability  $\times$  Stability interaction,  $F(1, 126) = 12.55, p < .001$ .

Whereas retribution was the most endorsed punishment toward lazy students, utilitarian goals of punishment were the least endorsed for these students. This pattern is also reflected in a significant Controllability  $\times$  Stability interaction,  $F(1, 126) = 17.55,$

$p < .001$ . As shown in Table 2 (Utility column), students who failed for uncontrollable reasons (NC/S  $M = 5.31$ ; NC/US  $M = 5.16$ ), as well as the student who failed because of a temporary lack of effort (C/US  $M = 5.56$ ), elicited higher ratings of utilitarian-based punishment compared with the lazy student (C/S  $M = 4.63$ ); all three comparisons were significant at  $p < .01$ .

A test of the differences between the endorsement ratings of the two goals as a function of the attributions revealed a significant Goal  $\times$  Control  $\times$  Stability interaction,  $F(1, 126) = 26.89, p < .001$ . As shown in Figure 1, utilitarian goals of punishment were significantly preferred in all conditions (all  $ps < .001$ ) except in the case of lazy students (C/S), where retributive punishment was significantly preferred over utilitarian punishment,  $F(1, 126) = 13.23, p < .001$ . Ratings of the percentage of feedback that was in the service of these goals showed a similar pattern, with a Goal  $\times$  Control  $\times$  Stability interaction,  $F(1, 126) = 14.03, p < .001$ .

#### An Analysis of the Cognitive and Affective Mediators of Goal Endorsement

To test the predictors of punishment goals as well as the mediators specified in Weiner's theoretical model of social motivation, we conducted a series of mediational models with multilevel path analysis (Lee & Poon, 1992; Lee & Tsang, 1999; Raudenbush, 1995) conducted in EQS Version 6 (Weiner, 1986, 1995). This

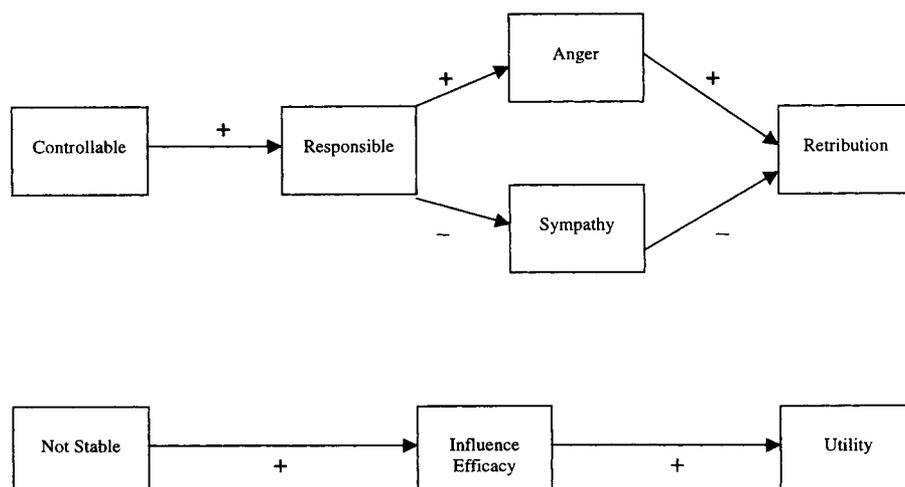


Figure 2. The predicted mediational model between attributions, emotions, and punishment goals.

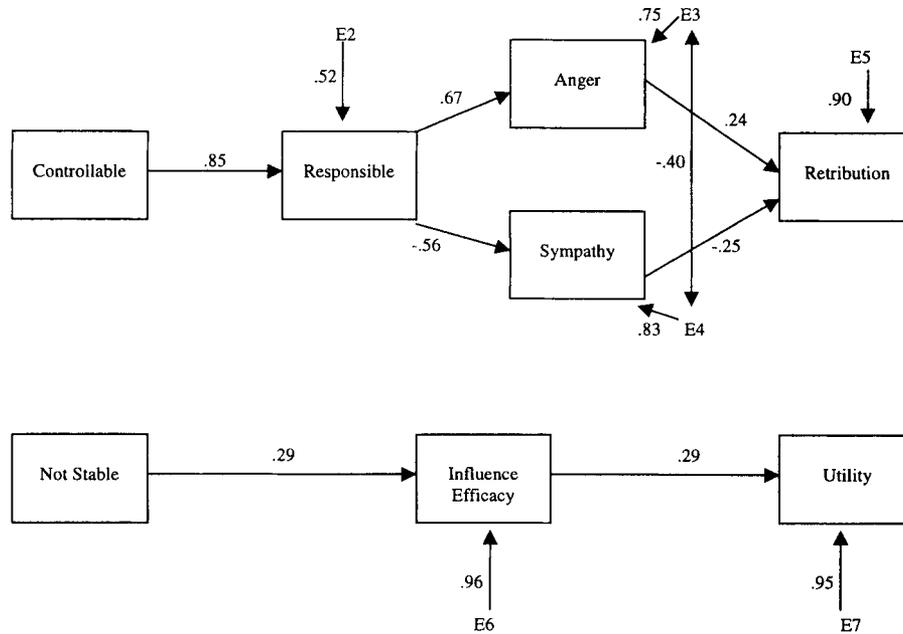


Figure 3. Results of the predicted mediational model between attributions, emotions, and punishment goals (Study 1).

version of EQS allowed us to compute the correlations between our variables (by using the between-rater variability only) and conduct a multilevel analysis to test our proposed theoretical model, while taking into consideration the nested design of the research (with students nested in raters). For each participant, an average rating on each target variable was calculated across the four students evaluated by the participant. This average rating was then subtracted from each participant's rating on that variable for each individual target student, thereby accounting for any within-subject idiosyncrasies in ratings. For example, to get a rating on controllability for Student A, the average controllability ratings of all four students for a particular participant were subtracted from that participant's controllability rating for Student A. This procedure was performed for all variables for each of the four students rated by each participant. In the end, this procedure produced a data set composed of ratings for each target student with the within-subject variance subtracted out, resulting in 508 observations (127 participants  $\times$  4 targets) for each variable (some variables may have had missing values). This new data set was then used to calculate standard Pearson Product-Moment correlation coefficients between each of our variables (producing an  $8 \times 8$  correlation matrix).

The correlation matrix used in these analyses is presented in Table 3. The path analyses were performed with a maximum likelihood estimation method, and goodness of fit was determined by the comparative fit index (CFI) and the standardized root mean square residual (SRMR) (Hu & Bentler, 1999). Hu and Bentler (1999) have recommended a cutoff value close to .95 for CFI, in combination with a cutoff value of .09 for SRMR, to evaluate model fit.<sup>1</sup>

We hypothesized that perceiving the cause of failure as controllable by the student would result in inferences of student respon-

sibility, which would produce feelings of anger and lack of sympathy toward the student. These emotions, in turn, would elicit a retributive response. We also predicted that perceiving a failure as not stable across time would result in increased beliefs in influence efficacy that, in turn, would lead to a utilitarian response. Also, because anger and (lack of) sympathy are closely related emotions, and there is no theoretical reason to believe that the only similarity they share is due to judgments of responsibility, we assumed the residuals associated with anger and sympathy would be correlated. The base model that reflects these predictions is shown in Figure 2.

Without making any post hoc modifications, the proposed theoretical model showed a very good fit with the data, CFI = .98, SRMR = .065. In addition, all of the theoretically proposed relationships between the cognitive and affective mediators and punishment goals were statistically significant (see Figure 3).<sup>2</sup>

## Study 2

In Study 1, we demonstrated that attributions are a primary determinant of reactions to students who perform poorly in class. However, in Study 1, we did not test the beliefs and reactions of real teachers but instead had undergraduates simulate being teach-

<sup>1</sup> Hu and Bentler (1998) found that, when the sample size is small, the root mean square error of approximation (RMSEA) tends to over-reject substantially true population models. Because our samples are relatively small, we chose to use the standardized root mean square residual (SRMR) to test model fit, which is less sensitive to sample size.

<sup>2</sup> Path coefficients for manifest variables are not necessarily an accurate reflection of comparable paths for latent variables. Consequently, this model might not completely overlap with future models that may use latent variables.

ers. Study 2 is a replication of Study 1, with a high school teacher sample. We anticipated that teachers would use attribution information in much the same way as did the college student sample; that is, attributions of controllability (vs. no controllability) would lead to harsher feedback and more endorsement of retribution. On the other hand, we expected attributions of no control to result in more sympathy toward the student and a greater willingness to use positive reinforcements and utilitarian interventions. Regarding stability attributions, we expected that if students' failures are perceived as unstable (vs. stable), teachers would be more likely to endorse utilitarian goals and interventions and to be more positive in their feedback.

### Method

#### Participants

Participants were 43 high school teachers from the Los Angeles, California area. Their average age was 46 years, and their average number of years teaching was 18. Three of the participants had to be dropped from the study because they failed to fill out the questionnaire properly, resulting in 40 final participants (20 men and 20 women). Participants were recruited at the site of their employment. Questionnaires were placed in teachers' mailboxes. Those teachers who chose to complete the questionnaire placed them in a box that was provided. There was a 20% response rate. Although this is a low response rate, it was not unexpected given the low-profile methods of solicitation permitted by the school district (i.e., mailbox recruitment).

#### Materials and Procedures

The participants received a questionnaire with instructions asking them to imagine that the students presented in the vignettes were their own students and to respond to these students in the manner that they would normally respond given the particulars of the situation presented. Then, the same instructions that were detailed in Experiment 1 were used, and identical data were gathered.

The only deviation from Experiment 1 was that 11-point scales were used, and the feedback measure ranged from 1 (*reprimand or punishment*) to 11 (*praise or reward*) as compared with the -10 to 10 scale used in Study 1. We made this modification in response to feedback from teachers in a pilot version of this study, who suggested changing the scale for simplicity and clarity.

### Results

#### Manipulation Checks

We first conducted a manipulation check to ensure that the attributions the teachers made for the students' failures concurred with the experimental manipulations of causality. The two conditions representing controllable causes—the lazy student and the student with a temporary lack of effort—received higher ratings of controllability (10.05 and 9.63, respectively) compared with the low-ability and transfer student conditions (4.80 and 3.78, respectively),  $F(1, 39) = 319.49, p < .0001$ . Furthermore, the two stable conditions—the lazy student and the student with low ability—elicited higher ratings of stability (7.88 and 7.23, respectively) compared with the student with a temporary lack of effort and the transfer student (3.20 and 3.35, respectively),  $F(1, 39) = 86.93, p < .0001$ . Note that for the high school teacher sample, the stability

manipulation was more effective than for the undergraduate sample.

#### Analyses of Feedback and Goal Endorsements With the Attribution Manipulations

A 2 (controllability)  $\times$  2 (stability) repeated measures ANOVA was used to test the attributional determinants of the feedback given to students who failed (see Table 4). These data support the prediction that students who fail for controllable reasons elicit more negative feedback than do students who fail because of uncontrollable reasons,  $F(1, 39) = 105.26, p < .001$ . Both of the students who failed because of controllable reasons—the lazy student ( $C/S M = 4.93$ ) and the student who failed because of a temporary lack of effort ( $C/US M = 4.85$ )—received significantly more negative feedback than did the students who failed for uncontrollable reasons, that is, the student with low ability ( $NC/S M = 7.82$ ) and the transfer student ( $NC/US M = 7.60$ ),  $ps < .001$ . These data replicate the controllability effect obtained in Study 1. We also anticipated an effect of stability such that students whose failure was deemed stable would elicit more negative feedback than would those students whose cause of failure was unstable. Contrary to predictions and the results from the first study, there was no significant effect of stability on feedback,  $F(1, 39) = .34, ns$ . As in Study 1, there was also no significant interaction.

A 2  $\times$  2 repeated measures ANOVA was also conducted to test the hypotheses concerning the effects of the attribution variables on the endorsements of retribution (Table 5, Retribution column). As we predicted, there was a significant effect of controllability on the endorsement of retributive goals,  $F(1, 37) = 5.29, p < .05$ . Retributive goals of feedback were endorsed more when students failed for controllable reasons ( $C/S M = 7.55$ ;  $C/US M = 7.03$ ) than when the cause of failure was uncontrollable ( $NC/S M = 5.92$ ;  $NC/US M = 6.46$ ). There was no effect of stability, and the Control  $\times$  Stability interaction was nonsignificant. The pattern of means for retribution endorsement is similar to the pattern in Study 1, with C/S causes eliciting the most retribution. However, the interaction failed to reach significance (in part because of a small sample size).

Turning to utilitarian goals (Table 5, Utility column), there perhaps was an overall ceiling effect of endorsement. These teachers strongly endorsed utility, regardless of the cause of the students' failure. We anticipated, and found, that utility was most endorsed when a student's poor performance was perceived as transitory. This effect was marginally significant in spite of the high overall means,  $F(1, 39) = 3.34, p = .07$ . There was no effect

Table 4  
Feedback Across the Attributional Dimensions of Controllability and Stability

Controllability	Stable	Not stable
Controllable	4.93 (2.17)	4.85 (1.92)
Not controllable	7.82 (1.58)	7.60 (1.51)

Note. Feedback was measured on an 11-point scale ranging from 1 (*reprimand or punish*) to 11 (*praise or reward*). Standard deviations are in parentheses.

Table 5  
*Endorsement of Retributive and Utilitarian Goals for Feedback Across the Attributional Dimensions of Controllability and Stability*

Controllability	Retribution		Utility	
	Stable	Not stable	Stable	Not stable
Controllable	7.55 (2.75)	7.03 (2.94)	8.65 (1.97)	9.23 (1.67)
Not controllable	5.92 (3.14)	6.46 (3.35)	9.15 (1.70)	9.40 (1.85)

Note. Goal endorsement was measured on an 11-point scale ranging from 1 (*no endorsement*) to 11 (*high endorsement*). Standard deviations are in parentheses.

for controllability, and the Controllability  $\times$  Stability interaction on the endorsement of utility was nonsignificant.

A test of the differences between the endorsement ratings of the two goals as a function of the attributions revealed a significant goal main effect,  $F(1, 37) = 38.47, p < .001$ . As shown in Figure 4, utilitarian goals of punishment were significantly preferred overall. In the case of the lazy student (C/S), this difference was diminished but still significant ( $p < .05$ ), whereas in the other conditions, this difference was more reliable ( $ps < .001$ ). When the cause of the poor performance was controllable, the endorsements of the two goals was more equivalent, resulting in a Control  $\times$  Goal interaction,  $F(1, 37) = 5.54, p < .05$ . This general pattern of goals was similar to that obtained in Study 1.

#### *An Analysis of the Cognitive and Affective Mediators of Goal Endorsement*

We conducted a similar analysis of the theoretical model with the same statistical procedure that was used in Study 1. To summarize, we tested our model with a multilevel path analysis procedure that takes into account the nested design of the research. This procedure, conducted in EQS Version 6, produced both a correlation matrix (Table 6), and a test of the theoretical model

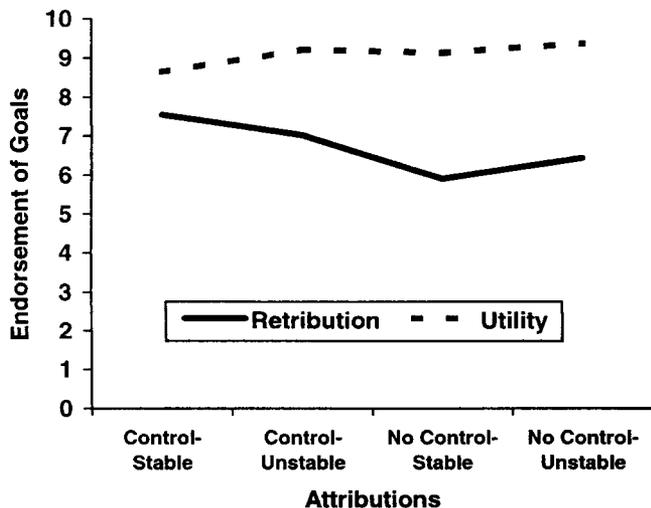


Figure 4. Endorsement of utilitarian and retributive feedback goals across attributions (Study 2).

(Figure 2). Because of the small sample size, these results should be interpreted with caution.

Without making any post hoc modifications, the proposed theoretical model showed a very good fit with the data, CFI = .99, SRMR = .087. In addition, all of the theoretically proposed relationships between the cognitive and affective mediators and punishment goals, with the exception of the angel-retribution linkage, were statistically significant (see Figure 5). Thus, the attributional model proposed to account for the different punishment goals pursued in the classroom is supported by both the student sample as well as our high school teacher sample. And although the teacher sample is small, the pattern of data replicates that of the students, lending support for the validity of the model.

#### General Discussion

In this article, we offer a theoretical framework that can be used to understand and aid in the prediction of the complex and numerous interventions that teachers use when confronting academic failure and transgressions in their classrooms. The attributions teachers make for students' failure determine the goals of teachers' responses to failing students; that is, whether these responses will be utilitarian or punitive in intention. Teachers use retributive actions as well as utilitarian strategies to maintain both fairness and the level of performance they expect of their students.

Beliefs about the causes of students' academic performance result in attribution-specific cognitions (student responsibility and teacher influence efficacy) and emotions (anger or sympathy) that systematically increase the likelihood of engaging in either punitive or instrumental actions toward the student. When failure was due to controllable causes, and particularly when those causes were stable (e.g., a chronically lazy student), then there was an increased likelihood that the goals of punishment were retributive. On the other hand, when failure was caused by uncontrollable factors (e.g., lack of ability) or by antecedents that were alterable by the teacher or student, then reactions were more often guided by utilitarian goals.

These findings are in contrast to the dominant conception of punishment put forth by behaviorists, which states that the goal of punishment is to reduce the probability of a behavior reoccurring in an eliciting stimulus setting. On the contrary, behavioristic motivations are just one of many simultaneous goals that are pursued in the classroom. Punishment and intervention are used not only for operant means but also for establishing and maintaining classroom norms, communicating expectations, and extracting justice.

Table 6  
*Cognitive and Affective Mediators of Feedback and Punishment Goals*

Variables	1	2	3	4	5	6	7	8
1. Retribution	—	.13	.20	.20	.23	-.15	-.12	.06
2. Utility		—	-.04	-.13	-.04	.23	-.20	.33
3. Controllability			—	.86	.62	-.75	.04	-.00
4. Responsibility				—	.57	-.73	.08	-.00
5. Anger					—	-.65	.11	-.04
6. Sympathy						—	-.15	.21
7. Stability							—	-.39
8. Influence efficacy								—

Given utilitarian and retributive goals, teachers have a variety of specific behaviors that they may impose on the students to achieve these goals. These range from sending the student out of class or ignoring the student, to allowing the student extra time to make up for a low grade, and even using praise. A study by Reyna and Weiner (1998) tested this attributional model on the behaviors high school teachers reported as the most common intervention or punishments used in their classrooms. We found that failure caused by factors controllable by the student elicited more punitive, retributive acts such as sending the student out of class or giving the student detention. On the other hand, causal factors that are perceived as uncontrollable, and especially unstable, elicited utilitarian interventions such as giving the student make-up work or encouraging the student with praise. Thus, the model presented in this article seems to be an implicit framework used by teachers in the structuring of classroom norms.

Attributionally based justice principles provide teachers with a reasonable framework for their decisions that can be applied across situations, thereby maintaining fairness and reducing bias or in-

consistency in the way that students are treated. Also, these justice principles allow students to comprehend easily what is expected of them and to anticipate the consequences for their actions. This provides students with a sense of control that may make the classroom environment more comfortable and predictable. A study by Lewis and Lovegrove (1987) showed that students felt more positive about class, and were more respectful toward teachers, when teachers used fair decision rules when dealing with discipline problems; that is, they both punished and rewarded when it was deserved.

Understanding the attributional underpinnings of teachers' reactions to students has additional implications for the way students perceive themselves and the causes of their performance (see Bar-Tal, 1982, for review). Butler (1994) has shown that by the time students reach the elementary grade levels, they are able to decipher a teacher's reactions along attributional lines. Causal beliefs about a student's poor performance, which get communicated through the teacher's reactions, may impact the student's motivation. For example, although continual pity may be an act of

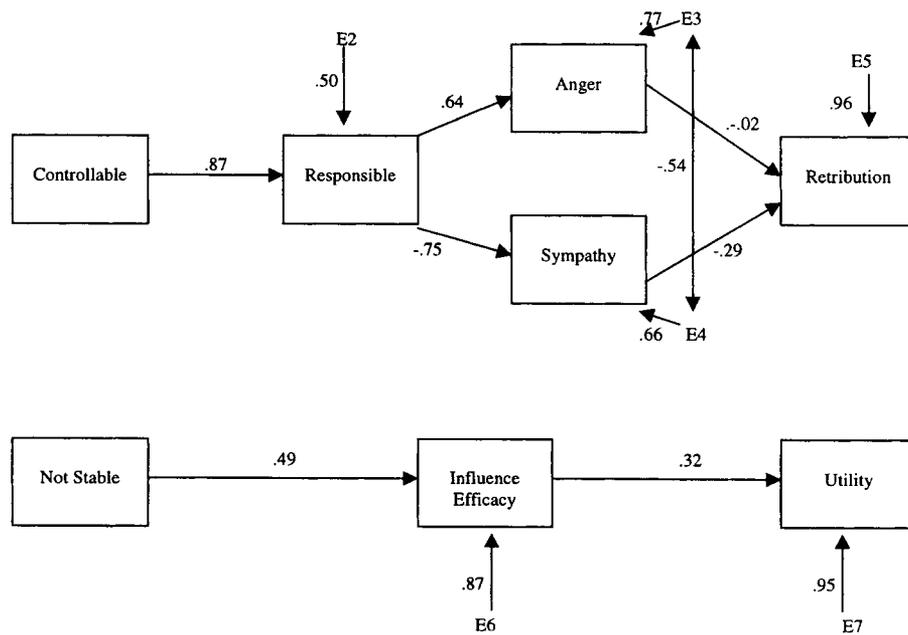


Figure 5. Results of the predicted mediational model between attributions, emotions, and punishment goals (Study 2).

kindness on the teacher's part, the long-term motivational impact for the student may be harmful if the student perceives the pity as a signal that the teacher believes the student is incapable of success (see Clark, 1997; Graham, 1984). With this possibility in mind, future research should investigate the impact retributive and utilitarian reactions from teachers have on the motivation and self-perception of the students.

Of course, scenarios cannot fully capture the host of factors contributing to the formulation of attributional judgments that must be untangled in real classroom environments. Many of the determinants of attributional judgments are ambiguous, and there is likely to be contradictory information in real classroom settings. In addition, the teachers' own behaviors impact the students' motivation and performance in a way that is not addressed in these "slice in time" scenarios. What is important, however, is that regardless of what variables contribute to a final performance attribution—and the dimensional classification of that cause—we argue that the cognitive and emotional consequences of an attribution are represented by the proposed model. However, future research must test these assumptions in natural classroom settings.

In addition, there are social desirability concerns to be considered. Teachers are expected to help children, and it might be considered inappropriate for teachers to admit that they will take retributive action against a student. The fact that these teachers were willing to admit even a moderate degree of punitive motives suggests that social desirability did not completely mask their responses.

In conclusion, our findings suggest that theories of social justice and the distinctions made by philosophers, as well as the metaphor of the classroom as a courtroom, could prove useful in understanding specific reactions to failure and social transgressions in the classroom. In addition to differentiating between retribution and utility, philosophers have also distinguished among the paths to utilitarian ends. These include isolating the offender, rehabilitation, creating fear, and promoting general deterrence (see Weiner et al., 1997). In a classroom setting, isolation might be achieved by having the offender sit in the corner, away from others; promoting general deterrence might be achieved by having the other pupils well aware of the punishment meted out to the offender. The goals and the means of classroom punishment and intervention seem to permit an analysis that uses principles and terms derived from a philosophic analysis of social justice, hence providing a further avenue for exploration of the "classroom as courtroom" metaphor.

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