Regulatory Fit Explains Students’ Emotional Responses to Graded Speech Assignments

Chris R. Sawyer  
*Texas Christian University, c.sawyer@tcu.edu*

Delwin E. Richey  
*Tarleton State University, drichey@tarleton.edu*

Karley A. Goen  
*Tarleton State University, kgoen@tarleton.edu*

Follow this and additional works at: [https://ecommons.udayton.edu/bcca](https://ecommons.udayton.edu/bcca)

Part of the Higher Education Commons, Interpersonal and Small Group Communication Commons, Mass Communication Commons, Other Communication Commons, and the Speech and Rhetorical Studies Commons

**Recommended Citation**  
Available at: [https://ecommons.udayton.edu/bcca/vol33/iss1/11](https://ecommons.udayton.edu/bcca/vol33/iss1/11)

This Article is brought to you for free and open access by the Department of Communication at eCommons. It has been accepted for inclusion in Basic Communication Course Annual by an authorized editor of eCommons. For more information, please contact frice1@udayton.edu, mschlangen1@udayton.edu.
Abstract

Students’ emotional responses often provide valuable indicators of whether they are languishing or flourishing in their first-year classes, including introductory communication courses. Grading often exerts a strong influence on students’ emotions. However, though students generally have positive moods after receiving high marks and negative ones when their grades are low, the intensity of these responses varies considerably. The current study examines whether Higgins’ (2012) regulatory fit theory accounts for students’ differing moods after receiving grades on introductory speech assignments. According to this perspective, prevention focus students use vigilance to avoid adverse outcomes. Thus, low evaluations provide a regulatory fit for prevention focus students by evoking feelings of alarm or distress that increase vigilance. Promotion focus students use eagerness to make gains progressively. High grades create a regulatory fit for promotion focus students by producing feelings of excitement that contribute to eagerness. When grading does not provide regulatory fit, prevention, and promotion focus, students will experience feelings of relief and discouragement. In the current study, each of these hypotheses was confirmed and support the principle that the fit between student regulatory focus and feedback sign explain student emotional responses to grading. These findings contribute to research and pedagogy in the introductory communication course.
Introduction

During their first year of university study, undergraduates experience a gamut of emotions, ranging from excitement to feelings of being overwhelmed (Habibah et al., 2010; Mudhovozi, 2012). During the first year of college, personal and intellectual growth often coincides with positive emotions, a condition Keyes (2003) calls flourishing. Conversely, languishing occurs when students cannot fulfill their academic aspirations and become disabled by negativity and despair (Knoesen & Naudé, 2018). Evidence of flourishing and languishing abounds in introductory communication courses, which students usually take during the academic first year. Students who flourish emerge from introductory communication courses with better critical thinking (Hunt et al., 2005), improved communication skills (Morreale et al., 2010), reduced communication apprehension (Dwyer et al., 2002), and increased self-perceived communication competence (Westwick et al., 2019). Yet, Hosek et al. (2018) have also identified introductory course students’ experiences that indicate languishing, including poor academic performance on speeches and examinations, problems in managing time, and fear of public speaking. For many poorly performing students, the transition to college is laden with emotional turmoil, including recurring anxiety and depression (Beiter et al., 2015), homesickness (Parker et al., 2005), loneliness (Heinrich & Gullone, 2006), and workload stress (Ong & Cheong, 2009). Messages from teachers can further modulate students’ emotional responses, thereby impacting engagement and learning (Mottet et al., 2006).

Communication scholars have increasingly examined the role of emotions in students’ reactions to instructional feedback. For example, van Doorn et al. (2014) reported that instructors’ emotional expressions when giving feedback influence students’ affect and learning. Richards and Fink (2017) observed that instructor comments marked in red on term papers elicited negative emotions among students and were associated with lower student perceptions of writing skills. Furthermore, grading contributes to a wide variety of feelings that impact instruction (Wrench et al., 2009). Feelings of disappointment, frustration, and anger are associated with earning low marks on examinations and presentations, but high grades evoke...
positive emotion (Westermann et al., 1996). In some studies, emotional responses to grading invigorate learning (Barker et al., 2016). Still, in other research, emotions appear to undermine student engagement (Poorthuis et al., 2015) and contribute to interpersonal conflict between teachers and students (Baer & Cheryomukhin, 2011). Consequently, academic grades can produce widely differing affective responses among students.

Kluger (2001; Kluger et al., 1994; van Dijk & Kluger, 2004, 2010) examined how grading students’ academic work evokes differing responses. In these studies, individual differences in regulatory focus (Higgins, 1997; 2012) contributed to the effects of feedback sign on students’ mood, their psychological arousal, as well as their intentions to work harder on future assignments (van Dijk & Kluger, 2004; 2011). Building on this work, Sawyer et al. (2019) found that academic grades on a preceding speech combined with students’ regulatory focus predicted effort on subsequent speaking assignments. They concluded that these results were consistent with Higgins’ (2012) theory of regulatory fit (Sawyer et al., 2019). However, unlike Kluger’s (2001; Kluger et al., 1994; van Dijk & Kluger 2004, 2010), previous research, Sawyer et al.’s (2019) did not examine the effects of regulatory fit on student mood and arousal. Consequently, the current study extends Higgins’ (2012) theory of regulatory fit to basic course students’ affective reactions on their graded public speaking assignments.

**Literature Review**

**Academic Grades as Instructional Feedback**

Many faculty members believe that giving learners realistic assessments of their academic performance promotes greater student engagement, motivation, and effort (Carless, 2006; Hattie, 2012). Likewise, when administrators are concerned about grade inflation, they frequently urge their faculty to adhere to strict grading standards in their courses. Consequently, instructors generally strive to provide students with rigorous assessments of performance on public speaking assignments. Thus, students often receive lower grades than they expect to earn. Despite the widespread use of instructional feedback, numerous scholars have pointed to a disappointing lack of definitive results from this practice (Price et al., 2010).

Kluger (2001; Kluger & DeNisi, 1998; Kluger et al., 1994; van Dijk & Kluger, 2004, 2010) used academic grades as feedback to examine their effect on student emotion and learning. In these studies, the difference between the scores that
students expected to get on assignments and their actual grades indicated positive or negative feedback. This difference was called grade discrepancy. Feedback was positive when students received scores on course assignments that were higher than they expected. Conversely, grades that were lower than students anticipated were said to convey negative feedback. These studies also examined the mood and arousal of students when instructors used academic grades as instructional feedback. For example, Kluger et al. (1994) found that grade discrepancy directly contributed to student moods’ pleasantness and detected a quadratic and a U-shaped function for psychological arousal and grades. That is, students reported greater arousal when they received evaluations that were much higher or substantially lower than they expected. However, when there was little or no grade discrepancy, less arousal was reported (Kluger et al., 1994). Kluger (2001) reproduced both of these earlier findings, concluding that strong positive and negative emotional reactions were present, respectively, when students exceeded or fell short of their expected levels. Again, positive feelings are associated with higher than expected grades, and negative emotions accompany getting lower than anticipated scores. Kluger and his fellow researchers (Kluger et al., 1994; van Dijk & Kluger, 2004, 2010) attributed the effects of instruction and grading to differences in students’ regulatory focus.

**Students’ Regulatory Focus and Feedback**

Higgins (1997; Molden et al., 2008) argues that for humans to succeed within their physical and social environments, they must satisfy their needs for advancement (e.g., nourishment, growth, and development) and for security (e.g., shelter, safety, and protection). Both progress and security evoke strategies that represent individual differences in self-regulation (Higgins, 1997; 2012). Advancement-oriented individuals continually strive to make gains in life while avoiding non-gains. In contrast, security-oriented individuals’ primary aim is to be protected from threats while avoiding adverse outcomes or losses. These two approaches are promotion and prevention regulatory focus, respectively (Higgins, 1997; 2012). Applied to academic grading, students display promotion focus when they actively improve their GPAs to gain academic recognition. Conversely, students reflect prevention focus when they continue striving to avoid failing to meet the academic standing level required to keep financial aid.

An extension of this perspective called regulatory fit theory (RFT; Higgins, 2012) posits that certain combinations of regulatory focus and feedback sign evoke greater
motivation than others. Negative feedback stimulates greater motivation than does positive feedback among prevention focus students. Conversely, promotion-focused students experience higher engagement levels when the feedback sign is positive rather than negative (Higgins, 2012). Sawyer et al. (2019) examined whether the fit between grades and regulatory focus explains student motivation level on future speaking assignments. In their study, getting lower scores on a speech assignment represented a regulatory fit with prevention regulatory focus students (Sawyer et al., 2019). Likewise, high grades on speaking assignments reflected regulatory fit with promotion focus students (Sawyer et al., 2019). According to Higgins’ (2012) RFT, prevention focus students practice vigilance when receiving negative feedback, and students with promotion focus respond to positive feedback with eagerness.

According to RFT, the degree of fit between regulatory focus and feedback sign is consistent with the circumplex theory of emotion (Higgins, 2012; Posner et al., 2005). In his circumplex theory of emotion, Russell (1980) posits that various combinations of pleasantness and arousal form emotions. According to RFT (Higgins, 2012), feedback sign will directly contribute to the pleasantness of emotions, but students will experience differing arousal levels depending on regulatory fit. For example, a regulatory fit occurs when prevention focus students receive grades on classroom speaking assignments that were lower than expected. The resulting state is negative emotions and heightened levels of arousal or distress. Conversely, regulatory non-fit for prevention focus students occurs when they receive higher than expected grades that engender relief feelings. These emotional responses are consistent with vigilance, as described in Higgins’ (2012) RFT.

Consequently, the following hypotheses were advanced:

**H1:** There will be a positive association between regulatory fit for prevention focus students (vigilance) and feelings of distress after getting grades on speech assignments.

**H2:** There will be a negative association between regulatory fit for prevention focus students (vigilance) and relief feelings after getting grades on speech assignments.

According to Higgins’ (2012) RFT, positive feedback is congruent with the eagerness strategy used by promotion focus students. Thus, a regulatory fit occurs for promotion focus students when they get higher than anticipated grades, which
evoke highly aroused positive feelings such as excitement. However, when promotion focus students receive negative feedback, they will experience low arousal negative feelings such as sadness or discouragement. These emotional reactions are in line with the eagerness strategy in RFT (Higgins, 2012). Consequently, the following hypotheses were advanced:

H3: There will be a positive association between regulatory fit for promotion focus students (eagerness) and feelings of excitement after getting grades on speech assignments.

H4: There will be a negative association between regulatory fit among promotion focus students (eagerness) and feelings of discouragement after getting grades on speech assignments.

Hypothesized affective responses based on regulatory fit appear in Table 1.

**Instructional Feedback Orientations**

Communication scholars often define instructional feedback as the knowledge that students receive from instructors concerning their performance on assignments such as public speeches (King et al., 2000; Smith & King, 2004). According to this perspective, students regulate their engagement in a class by comparing their current performance levels with an objective standard known as the feedback standard gap (FSG: Kluger & DeNisi, 1996). That is, the FSG acts on the students by creating a type of cognitive pressure to improve (Smith & King, 2004). Thus, students will work harder to enhance class performances when the FSG is more extensive when it is small (Kluger & DeNisi, 1996).
Among the challenges of using instructional feedback is that the FSG frequently produces unexpected results and can even be counterproductive. In their extensive and oft-cited meta-analysis, Kluger and DeNisi (1996) reported that although feedback yields a moderately positive effect on performance overall (Cohen’s d = .41), feedback also appeared to diminish performance in 38% of the studies they reviewed. According to Kluger & DeNisi (1998), the FSG can simultaneously stimulate improved performance for some students but undermine others. King et al. (2009) have proposed that certain response biases could help account for students’ variant reactions to instructors’ constructive criticism. They further contend that these instructional feedback orientations should enable researchers “to explore, test, and possibly extend FIT [feedback intervention theory]” (King et al., 2009, p. 257). Specifically, students appear to differ concerning whether they value instructional feedback (Feedback Utility), experience discomfort when receiving feedback (Feedback Sensitivity), prefer to receive feedback in private (Feedback Confidentiality), and plan to remember their instructors’ remarks (Feedback Retention). Previous instructional communication studies have reported associations between feedback orientations and apprehension (Malachowski et al., 2013). Likewise, Sawyer et al. (2019) found support for feedback orientations as predictors of student effort on future speaking assignments. Consequently, instructional feedback orientations should contribute uniquely to the regulatory congruence
perspective in explaining student emotions after receiving grades of classroom speech assignments. Based on these preceding studies, the following hypothesis is advanced:

H5: Instructional feedback orientations will predict emotions that students will report after receiving grades on classroom speaking assignments.

**Method**

**Participants**

Participants were 160 (68 male, 92 female) undergraduate students enrolled in introductory public speaking courses offered by two universities located in the southwest. Both institutions support large residential student populations and require a basic communication or public speaking course as part of their general education curricula. Approximately half of the study participants (n = 83) were from a selective private university with low transfer students. The remaining participants (n = 77) were from a regional public university with a more inclusive student profile and higher transfer students. Combined, the majority of study participants self-identified as Caucasians (n = 132, 82.5%), with 8.0% (n = 13) identified themselves as Hispanic Americans, 2.5% (n = 4) as Asian Americans, 2.5% (n = 4) as African Americans, 2.5% (n = 4) as Middle Eastern, and 1.9% (n = 3) described themselves as Other. In terms of academic classification, 54.5% (n = 87) were first-year college students, 15.0% (n = 24) were sophomores, 7.1% (n = 11) were juniors, and 5.0% (n = 3) were seniors. Study participants ranged from 18 to 23 years of age (Mean = 19.38 (1.08) years).

This data-bearing sample consisted of students who volunteered for a study of grading in undergraduate communication courses. This study’s protocol was approved by the Institutional Review Board (IRB) at the two institutions described above. As per the approved IRB protocol, study participants at both institutions were at least 18 years of age, enrolled in introductory communication courses, and gave their written informed consent before beginning the study. Students who declined to participate in the grading study were allowed to complete alternative, non-study related assignments and was a standard procedure for studies of human subjects at both institutions. Every prospective study participant who met the
eligibility criteria and had signed an Informed Consent Form received an email from the Principal Investigator containing an anonymous survey link (Qualtrics.com). Thus, all study participants gave their informed consent according to their respective universities’ IRB policies and completed an online survey described in the procedures section below.

**Procedures**

**Regulatory Focus Induction.** Each study participant completed a multi-part online survey on grading in introductory communication courses. After confirming that they had previously given their informed consent, study participants provided demographic information. Random procedures then assigned participants to a two-stage process for regulatory focus. First, study participants completed a priming task, which consisted of writing an essay. Half of the study participants wrote a brief essay comparing their duties and obligations as adults to those they had during childhood. The remaining participants wrote a short essay comparing their ideals and aspirations during childhood to those they now have as adults. Previously, Higgins (Frietas & Higgins, 2002; Higgins et al., 1994) used these two essay prompts to induce prevention and promotion regulatory focus.

In the second stage of the regulatory focus induction, study participants read descriptions of typical classroom public speaking assignments. The survey instructed the respondents who completed the priming essay for prevention focus to assume that they needed to make high grades in the course to keep from losing financial aid. This vignette stressed that without earning a high score on the speech, they might have to take on more student loan debt or drop out and work instead of attending school. Describing the potential loss of financial aid reinforced the prevention focus priming task and promoted greater vigilance. For respondents who completed the promotion focus essay, the survey instructed them to assume that making a high grade in the course would make them eligible for a prestigious academic program. This vignette reinforced the priming task for promotion focus by describing how making higher speech scores could lead to career advancement.

**Grading Manipulation.** The next section of the survey explained how the course instructor had graded a previous major speaking assignment, described as an informative speech, 7 to 10 minutes in length, and worth 20% of the final course grade. Half of the study participants in each regulatory focus condition assumed that the instructor had awarded them a much lower speech score than expected. As a
result, they were less likely to receive a high grade in the course. The remaining half of respondents assumed that the instructor had given them a much better speech score than they expected to receive and that they were now more likely to receive a higher grade in the course. These statements manipulated feedback sign as used in previous research on grading (Kluger, 2001; van Dijk & Kluger, 2004, 2010). That is, negative feedback results from lower than expected grades, and positive feedback means that speech grades were higher than students anticipated. Study participants estimated a numerical score for the speech based on this grading manipulation.

**Other Study Measures.** Participants then completed van Katwyk et al.’s (2000) Job-related Affective Well-being Scale (JAWS) and King et al.’s (2009) Instructional Feedback Orientations Scale (IFOS). Additionally, all study participants completed a measure of trait receptivity to feedback, as described below.

**Instrumentation**

All study participants completed King et al.’s (2009) Instructional Feedback Orientations (IFOS) scale. The IFOS provides indicators of the response biases of students when receiving feedback from their instructors. The IFOS measures the usefulness of instructors’ comments (feedback utility), student sensitivity to receiving criticism (feedback sensitivity), the need to avoid public embarrassment from feedback (feedback confidentiality), and the intention to retain feedback for future use (feedback retention). Study participants also completed the Job-related Affective Well-being Scale (JAWS; van Katwyk et al., 2000). The JAWS taps the four combinations of mood pleasantness (Negative v. Positive) and arousal (Low Arousal v. High Arousal) in Russell’s (1980) circumplex model of affect. The following emotional reactions served as dependent variables in the subsequent analyses; Distress (Negative Valence, High Arousal), Discouragement (Negative Valence, Low Arousal), Excitement (Positive Valence, High Arousal), and Relief (Positive Valence, Low Arousal). Third, all participants completed Linderbaum and Levy’s (2010) Feedback Orientation Scale (FOS), which measures trait receptivity to feedback. The FOS served as a control variable for the hierarchical multiple regression analyses.

**Manipulation Checks**

The following manipulation checks ensured that students complied with the procedures for inducing regulatory focus. Three communication studies researchers inspected each essay. The researchers removed from the data set the participants’
responses who either failed to write a response to their assigned prompt or did not comply with its instructions. This step was used as a precaution because survey respondents completed their surveys online and were not under direct supervision when writing the essays. The average length of time required to complete the online survey was just under 20 minutes. Consequently, the research team removed twenty-two respondents who failed to comply with all study instructions.

All participants estimated the numerical grade they would receive based on the speech grade manipulation. Participants used a 0 – 100 scale for this estimate. The average estimate for higher than expected speech grades (Positive Feedback Sign) was 90.71 (7.32). The average estimate for lower than anticipated speech grades (Negative Feedback Sign) was substantially less at 77.82 (9.82). The average expected grade in the current study (84.26 (10.79)) was similar to those reported by Booth-Butterfield (1989; 86.8 (4.7)) and Larseingue et al. (2012; 86.10 (9.86)). These data were consistent with previous research on expected grades in the introductory communication course and show that respondents were complying with survey instructions.

**Coding for Regulatory Fit Variables**

Aiken and West (1991) advise researchers to use effect coding for categorical predictors in multiple regression analysis. In effects coding, researchers represent the comparison with -1 and contrast group with +1. Any groups not involved in the contrast are assigned a value of “0” (Aguinis, 2004; Aiken & West, 1991). The research team also used effect coding to represent regulatory fit for vigilance and eagerness by generating coded vectors for feedback sign, prevention focus, and promotions focus. The researchers coded positive feedback with “1” for and “-1” for negative feedback. The research team followed Higgins’ (2012) recommendations for prevention focus (-1, 0) and promotion focus (1, 0). In the current study, Vigilance = Feedback Sign X Prevention Focus; Eagerness = Feedback Sign X Promotion Focus. A summary of this coding scheme appears in Table 2.
Table 2  
*Coding Scheme for Regulatory Fit (Vigilance and Eagerness) as Responses to Speech Grades*

<table>
<thead>
<tr>
<th>Study Conditions</th>
<th>FB Sign</th>
<th>Prevention RF</th>
<th>Promotion RF</th>
<th>Vigilance</th>
<th>Eagerness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention Focus x Lower Grades</td>
<td>-1</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Prevention Focus x Higher Grades</td>
<td>1</td>
<td>-1</td>
<td>0</td>
<td>-1</td>
<td>0</td>
</tr>
<tr>
<td>Promotion Focus x Higher Grades</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Promotion Focus x High Grades</td>
<td>-1</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>-1</td>
</tr>
</tbody>
</table>

Vigilance = FB Sign x Prevention RF  
Eagerness = FB Sign x Promotion RF  
For both Vigilance and Eagerness 1 = Fit, -1 = Non-Fit
Data Analysis

The current study examined two explanations for student emotions in response to academic grading, whether feedback response biases, regulatory fit, or some combination of these explains the emotions student experience after receiving grades on a classroom speech. Consequently, the research team used hierarchical multiple regression analysis to test all study hypotheses. There were four such tests, one for each hypothesis, and each regression analysis used the same steps. In the first step, Linderbaum and Levy’s (2010) Feedback Orientation Scale served as the control variable. Next, the four subscales of King et al.’s (2009) Instructional Feedback Orientations Scale entered as a block. Then the appropriate regulatory fit variable entered during the last step. Vigilance or the regulatory fit variable for prevention focus students appeared in the tests for H1 and H2. Eagerness or the regulatory fit variable of promotion focus students appeared in the tests for H3 and H4.

Several factors can compromise hierarchical multiple regression analysis with categorical predictor, including low power due to insufficient overall sample size, unequal sample sizes among study subgroups, and the use of raw scores rather than centering. Before analyzing our data, we used the G*Power 3.1 software program (Faul et al., 2009) to conducted power analyses of values from previous feedback research (van Dijk & Kluger, 2004; 2010). Based on the averages for effect size (d=.43) and observed power (1-β = .9504) in previous studies, we estimated that the minimum sample size for the current study was N=158. The sample size for the current (N=160) exceeds that figure. Further, the sample sizes for the four experimental conditions (i.e., negative v. positive feedback x prevention v. promotion regulatory focus) were kept equal (n=40). Last, measures of instructional feedback orientation were mean-centered.

Results

Descriptive statistics, reliability, and correlation estimates for all variables appear in Table 3. H5 predicted that instructional feedback orientations would predict student emotions. The IFOS measures of feedback utility, sensitivity, confidentiality, and retention entered each of the four hierarchical regression equations as a block.

H1 predicted that the distress experienced by prevention focus students would vary directly with the regulatory fit. Specifically, compared to getting higher speech grades, prevention-focused speakers will experience increased emotional distress when they receive lower than expected speech scores. Further, H2 predicted that
vigilance would be inversely related to relief. According to Higgins (2012), this pattern is consistent with a regulatory fit for prevention focus students. That is, negative feedback will increase vigilance among prevention focus students, but that they will become less vigilant and more contented when awarded higher grades. These hypotheses were tested by a hierarchical multiple regression model that used trait feedback receptivity at Step 1, instructional feedback orientations at Step 2, and a coded vector representing vigilance at Step 3. Last, a block representing interactions between vigilance and each instructional feedback orientation entered at Step 4. A summary of the analysis for H1 appears in Table 4 and for H2 in Table 5. Feedback Utility and Vigilance respectively accounted for 15.0% and 30.9% of the student distress variance after being graded. As predicted, the relationship between vigilance and student distress was positive. Therefore, H1 and H5 were both supported in this test.
Table 3

Means, Standard Deviations, Reliability Estimates, and Correlation Coefficients for All Continuous Variables in the Study

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Receptivity to Feedback</td>
<td>77.75</td>
<td>7.27</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Feedback Utility</td>
<td>4.92</td>
<td>.58</td>
<td>.18</td>
<td>.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Feedback Sensitivity</td>
<td>2.35</td>
<td>.88</td>
<td>-.06</td>
<td>-.56</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Feedback Confidentiality</td>
<td>4.16</td>
<td>1.00</td>
<td>-.07</td>
<td>-.02</td>
<td>.26</td>
<td>.83</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Feedback Retention</td>
<td>4.57</td>
<td>1.01</td>
<td>.02</td>
<td>.45</td>
<td>-.52</td>
<td>-.01</td>
<td>.77</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Excitement about Grade</td>
<td>19.63</td>
<td>10.41</td>
<td>-.06</td>
<td>.22</td>
<td>-.07</td>
<td>-.11</td>
<td>.01</td>
<td>.96</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Relief about Grade</td>
<td>19.97</td>
<td>10.33</td>
<td>-.05</td>
<td>.21</td>
<td>-.10</td>
<td>-.13</td>
<td>-.02</td>
<td>.90</td>
<td>.95</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Distress about Grade</td>
<td>17.61</td>
<td>8.72</td>
<td>.07</td>
<td>-.30</td>
<td>.33</td>
<td>-.16</td>
<td>-.18</td>
<td>-.76</td>
<td>-.80</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>9. Discouragement with Grade</td>
<td>16.39</td>
<td>7.31</td>
<td>.05</td>
<td>-.29</td>
<td>.38</td>
<td>.17</td>
<td>-.24</td>
<td>-.74</td>
<td>-.75</td>
<td>.90</td>
<td>.82</td>
</tr>
</tbody>
</table>

*p < .05.  b p < .01.

Numbers that appear in bold on the diagonal represent coefficient alpha reliability estimates.
Table 4
Summary of Hierarchical Regression Analysis for Receptivity to Feedback, Feedback Orientations, and Vigilance as Predictors of Students’ Distress with Speech Grades (N = 160)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th>Model 2</th>
<th></th>
<th>Model 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE(B)</td>
<td>β</td>
<td>B</td>
<td>SE(B)</td>
<td>β</td>
</tr>
<tr>
<td>Receptivity to Feedback</td>
<td>0.09</td>
<td>0.10</td>
<td>.07</td>
<td>0.16</td>
<td>0.09</td>
<td>.13</td>
</tr>
<tr>
<td>IFOS Utility</td>
<td></td>
<td></td>
<td></td>
<td>-3.41</td>
<td>1.40</td>
<td>-.23&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>IFOS Sensitivity</td>
<td></td>
<td></td>
<td></td>
<td>1.93</td>
<td>1.00</td>
<td>.19</td>
</tr>
<tr>
<td>IFOS Confidentiality</td>
<td></td>
<td></td>
<td></td>
<td>0.97</td>
<td>0.68</td>
<td>.11</td>
</tr>
<tr>
<td>IFOS Retention</td>
<td></td>
<td></td>
<td></td>
<td>0.22</td>
<td>0.77</td>
<td>.03</td>
</tr>
<tr>
<td>Vigilance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7.81</td>
</tr>
<tr>
<td>ΔR²</td>
<td>.01</td>
<td></td>
<td>.15</td>
<td></td>
<td>.309</td>
<td></td>
</tr>
<tr>
<td>F for ΔR²</td>
<td>0.82</td>
<td></td>
<td>6.89&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
<td>88.37&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
</tbody>
</table>

Note: Superscript letters indicate the level of significance, as follows: <sup>a</sup>p < .05; <sup>b</sup>p < .01. R² = .465 (F<sub>6,153</sub> = 22.18, p< .01).
Table 5

*Summary of Hierarchical Regression Analysis for Receptivity to Feedback, Feedback Orientations, and Vigilance as Predictors of Students’ Relief Concerning Speech Grades (N = 160)*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th></th>
<th></th>
<th>Model 2</th>
<th></th>
<th></th>
<th>Model 3</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE(B)</td>
<td>β</td>
<td>B</td>
<td>SE(B)</td>
<td>β</td>
<td>B</td>
<td>SE(B)</td>
<td>β</td>
</tr>
<tr>
<td>Receptivity to Feedback</td>
<td>-0.07</td>
<td>0.11</td>
<td>-0.05</td>
<td>-0.16</td>
<td>0.11</td>
<td>-0.11</td>
<td>-0.06</td>
<td>0.10</td>
<td>-0.04</td>
</tr>
<tr>
<td>IFOS Utility</td>
<td>5.53</td>
<td>1.72</td>
<td>0.31b</td>
<td>0.53</td>
<td>1.61</td>
<td>0.03</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFOS Sensitivity</td>
<td>0.41</td>
<td>1.23</td>
<td>0.03</td>
<td>0.60</td>
<td>1.05</td>
<td>0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFOS Confidentiality</td>
<td>-1.52</td>
<td>0.84</td>
<td>-0.15</td>
<td>-0.55</td>
<td>0.73</td>
<td>-0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IFOS Retention</td>
<td>-1.45</td>
<td>0.96</td>
<td>-0.14</td>
<td>-0.65</td>
<td>0.82</td>
<td>-0.06</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vigilance</td>
<td></td>
<td></td>
<td></td>
<td>-8.37</td>
<td>1.09</td>
<td>-0.57b</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ΔR²</td>
<td>.002</td>
<td></td>
<td>.09</td>
<td>.344</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| F for ΔR²             | 0.35          |         | 3.78a   | 58.93b        |         |         |

*Note: Superscript letters indicate the level of significance, as follows: a p < .05; b p < .01. R² = .344 (F6,153 = 13.37, p < .01)*
In a second hierarchical multiple regression analysis, Feedback Utility and Vigilance accounted for 9.0% and 34.4%, respectively, in student relief after being graded. In this case, the relationship between vigilance and relief was negative, as predicted. These results support H2 and H5.

H3 predicted a direct relationship between eagerness and student excitement after being graded. That is, compared to getting lower speech grades, promotion focus speakers will experience increased excitement and enthusiasm when they earn higher than expected grades on speaking assignments. Further, H4 predicted that eagerness would be inversely related to discouragement. According to Higgins (2012), this pattern is consistent with eagerness or regulatory fit for promotion focus students. That is, promotion focus students will become excited when receiving positive feedback but will become less eager and even discouraged when they get lower grades. These predictions were tested by two hierarchical multiple regression models that used trait feedback receptivity at Step 1, instructional feedback orientations at Step 2, and a categorical variable coded for Eagerness at Step 3. Also, a block representing interactions between eagerness and each instructional feedback orientation entered at Step 4. A summary of these analyses appears in Table 6 and Table 7. Feedback Utility and Eagerness accounted for 2.9% and 36.1% of the student excitement variance after being graded. Moreover, the relationship between eagerness and excitement was positive, as predicted. Therefore, H3 and H5 were both confirmed in this test.

Additionally, Feedback Utility and Eagerness contributed 17.2% and 29.2% of the variance in student discouragement. As predicted, the analysis detected an inverse relationship between eagerness and discouragement. Therefore, H4 and H5 were both confirmed in this test.
### Table 6

Summary of Hierarchical Regression Analysis for Receptivity to Feedback, Feedback Orientations and, Eagerness as Predictors of Students’ Excitement about Speech Grades (N = 160)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE(B)</td>
<td>β</td>
</tr>
<tr>
<td>Receptivity to Feedback</td>
<td>-0.08</td>
<td>0.11</td>
<td>-.06</td>
</tr>
<tr>
<td>IFOS Utility</td>
<td>5.70</td>
<td>1.74</td>
<td>.32b</td>
</tr>
<tr>
<td>IFOS Sensitivity</td>
<td>1.02</td>
<td>1.24</td>
<td>.09</td>
</tr>
<tr>
<td>IFOS Confidentiality</td>
<td>-1.37</td>
<td>0.85</td>
<td>-.13</td>
</tr>
<tr>
<td>IFOS Retention</td>
<td>-0.89</td>
<td>0.97</td>
<td>-.09</td>
</tr>
<tr>
<td>Eagerness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ΔR²</td>
<td>.003</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F for ΔR²</td>
<td>0.51</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Superscript letters indicate the level of significance, as follows: a p < .05; b p < .01. \( R^2 = .443 \) (\( F_{6,153} = 20.31, p<.01 \))
### Table 7

Summary of Hierarchical Regression Analysis for Receptivity to Feedback, Feedback Orientations, and Eagerness as Predictors of Students’ Discouragement with Speech Grades (N = 160)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE(B)</td>
<td>β</td>
</tr>
<tr>
<td>Receptivity to Feedback</td>
<td>0.05</td>
<td>0.08</td>
<td>.05</td>
</tr>
<tr>
<td>IFOS Utility</td>
<td>-1.85</td>
<td>1.16</td>
<td>-.15</td>
</tr>
<tr>
<td>IFOS Sensitivity</td>
<td>2.07</td>
<td>0.83</td>
<td>.25</td>
</tr>
<tr>
<td>IFOS Confidentiality</td>
<td>.83</td>
<td>.57</td>
<td>.11</td>
</tr>
<tr>
<td>IFOS Retention</td>
<td>-.33</td>
<td>.64</td>
<td>-.05</td>
</tr>
<tr>
<td>Eagerness</td>
<td>-.33</td>
<td>.64</td>
<td>-.05</td>
</tr>
</tbody>
</table>

| ΔR²                       | -.002   | .172    | .292    | .036    | .799  |
| F for ΔR²                 | .002    | .172    | .292    | .036    | .799  |

Note: Superscript letters indicate the level of significance, as follows: a p < .05; b p < .01. R² = .466 (F(6,153) = 22.26, p<.01)
Discussion

The current study examined the effects of grading on student emotion in introductory communication courses and replicated the previous work by the Kluger research team (2001; Kluger et al., 1994; van Dijk & Kluger, 2004, 2010). Each of these previous studies detected positive associations between feedback and how students felt afterward. Students reported positive moods when they earned higher grades on their classroom assignments than they expected to receive. Students reported negative moods when their speech grades were lower than they expected. Moreover, the degree of fit between the sign of instructional feedback and students’ regulatory focus explained differing emotions reported by students. Each fit condition produces its own set of affective responses. Compared to non-fit, the congruence between feedback and regulatory focus evokes greater psychological arousal. Some students become energized when faced with losing ground academically (vigilance) or enervated when they progress toward attaining a valued goal (eagerness). In summary, assigning low grades on speaking assignments works better for students who are predisposed to minimize errors but giving high speech grades appears to work better for students who strive for constant progress. Taken together, the findings in the current study confirm Higgins’ (2012) principle of regulatory congruence, defined as the degree to which instructional feedback matches the self-regulation of students.

One potential limitation of the current study is the use of hypothetical scenarios to induce students’ regulatory focus and manipulate grades on speaking assignments. This methodology was employed to circumvent the ethical dilemma of awarding grades to students other than those they earned on speeches in introductory courses. Future researchers should replicate the current study using retrospective methods with students who have taken an introductory communication course earlier in their undergraduate career. Instead of manipulating grading discrepancy, students would report whether the grade on an actual assignment was higher or lower than expected and how that made them feel. In addition to the instruments used in the current study, study participants would complete a self-report measure of trait regulatory focus, such as the Regulatory Focus Questionnaire (Higgins et al., 1997).

Promotion-focused students who receive higher grades will experience excitement and will exert more effort in their next speeches. Prevention-focused students will experience a sense of relief when they receive higher scores than they expect. In turn, they will be less likely to expend more effort in future assignments.
These patterns are consistent with enthusiasm in the former condition and ‘just
going through the latter’s motions.’ Moreover, promotion-focused students receiving
positive feedback should adopt a mastery orientation in which they strive to cultivate
more natural and conversational speech delivery. Students with promotion focus
strive to achieve greater communication competence not merely eliminate mistakes
in performance. Course directors and instructional designers should consider how
regulatory focus and the goal orientations impact students’ speaking assignments.

Communication scholars believe that instructional feedback orientations also
account for students’ differing responses to grading (King et al., 2009; Sawyer et al.,
2019). The current study provides some support for this position. That is, feedback
utility explained between 2.9% and 17.2% of the variance in how students feel after
being graded. Consequently, researchers should employ measures of feedback utility
in future studies of grading in introductory communication courses.

Recent studies in communication have tied feedback intervention theory (FIT;
Kluger & DeNisi, 1996) to an array of constructs including facework, immediacy,
and communication climate (Dannels et al., 2011; Kerssen-Griep et al., 2008;
Kerssen-Griep & Witt, 2012; Martin & Mottet, 2011; Trees et al., 2009; Witt &
Kerssen-Griep, 2011) and communication apprehension (Malachowski et al., 2013).
According to FIT, students will exert the same effort regardless of their moods or
feedback sign (Kluger, 2001). Likewise, communication scholars have thus
conducted instructional feedback studies under the assumption that neither feedback
sign nor students’ emotional reactions were relevant to their research questions.
However, the current study results show that the degree of fit between regulatory
focus and the grades students earned on speech assignments accounted for between
29.2% and 36.1% of the students’ emotional states’ variance. Future researchers
should examine whether regulatory fit impacts how other communication constructs
operate in instructional feedback. For example, To what extent will students’
regulatory focus impact how they process written critiques of speech performances
in the introductory communication course? Will prevention focus and promotion
focus students experience different face threats? If so, should instructors use
alternate strategies to mitigate face threats based on students’ regulatory focus?

Additionally, there are areas of practical application for regulatory congruence in
conducting the introductory communication course. The first is how students’ goal
orientations help develop public speaking skills (CF; Booth-Butterfield & Booth-
Butterfield, 1993; De Grez et al., 2009; Motley, 1990). Prevention-focused students
who receive negative feedback on their first speeches will adopt a performance
orientation when approaching their subsequent class speaking assignments. They will prepare more diligently, take a structured approach to preparation by aligning their content and delivery with the published grading criteria and their instructors’ remarks. The goal here is that eliminating errors will lead to a higher grade on the next assignment that, in turn, will minimize the prospects for negative consequences, such as losing a scholarship.

Increasingly basic courses are being presented online or have more instructional components delivered through platforms such as Blackboard or Design to Learn (D2L). These new learning environments create virtual communities in which instructors take on the role of leader by designing course activities, guiding students’ discussion, and providing feedback (Rubin & Fernandes, 2013). Previous research indicates that the core motivational characteristics to which leaders appeal can also strengthen their followers’ commitment (Hamstra et al., 2014). According to Kark and van Dijk (2007), cognizance of individual differences in regulatory focus can improve transactional and transformational leadership styles. Thus, the principle of regulatory congruence benefits the teacher as a leader who must conduct the introductory communication course using new instructional technologies. Teachers should emphasize precise adherence to rules and stress clearly stated standards with prevention-focused students, who are accustomed to maintaining greater vigilance. Likewise, teachers of online introductory communication courses can adopt leadership behaviors designed to inspire and encourage their promotion-focused students, such as encouraging goal-setting and coaching feedback as to progress toward these goals. In so doing, students with either type of regulatory focus will ascribe more value and importance to the course’s learning outcomes, will be less likely to be disengaged, or fail to meet deadlines for key deliverables. Future researchers should examine the messages of highly effective teachers in terms of regulatory congruence to test whether this principle improves performance online and the traditional classroom.

**Conclusion**

As a general rule, students with emotional engagement are more likely to achieve desired learning outcomes (Weiss, 2000). The current study examined four emotional responses – distress, excitement, relief, and discouragement. Some emotional states are conducive to learning, but others will deactivate students’ motivation (Jarrell et al., 2017). According to Pekrun (2006), although negative motivational states such as distress frequently stimulate effort, frustration, and disappointment often cause
students to disengage. Likewise, excitement and enthusiasm promote sustained work, but contentment and relief contribute to coasting (Pekrun, 2006). Regulatory fit helps to explain differential responses to grading feedback reported by previous instructional scholars. Under conditions of low grades, prevention-focused students will experience distress that, in turn, spurs increased effort in upcoming speech assignments. However, the disappointment experienced by their promotion-focused counterparts will probably diminish their engagement. Students will act out of a sense of urgency in the former case and feel demoralized in the latter.

Languishing is a problem in higher education because it not only diminishes students’ mental health (Moore et al., 2019), but it frequently results in psychologically damaging stigma (Goldman, 2018; Smith & Applegate, 2018). When designing courses, basic course instructors should account for students’ negative emotions after receiving performance evaluations. These can lead to disengagement and even dropout (Arroyo et al., 2014; Pekrun, 2006). Grading can evoke intense emotional reactions among students causing errors in person perception (Mast & Ickes, 2007) and misinterpretation of arousal (van Boven et al., 2009). These, in turn, complicate various dimensions of instructional communication, including teacher credibility (Ledbetter & Finn, 2018; Teven, 2007), affective learning (Bolkan, 2015), teacher immediacy (Allen et al., 2006), classroom injustice (Horan et al., 2010) and instructor misbehavior (Sideling et al., 2011). Consequently, basic course instructors should examine how regulatory fit and non-fit impact student reactions to evaluation, in part to assist their students in aligning their emotions with academic engagement.

References
https://doi.org/10.1080/03634520500343368


