Imagine a teacher who assigns 100 points to every student in her class at the beginning of the semester. She takes away points from students who misbehave during class or do not turn in their homework on time. Another teacher in the next class does exactly the opposite. All students in her class start their new semester with zero points. They accumulate points for every good classroom deed and every assignment they submit on time. Should there be a difference between these two classes in how much students enjoy schooling?

Now imagine parents who frequently express high expectations for their children. They let their children know that they deeply care about how the children are doing in school. They want their children to be...
successful in school, believe the children can achieve well academically, and are ready to provide assistance in every way possible to help their children perform better in school. Owing to their parents’ strong support, the children feel confident about their capabilities to learn and perform in school and try their best to meet their parents’ high expectations…. Or would they?

CHAPTER OVERVIEW

Recent developments in motivation theory and research have significantly advanced our knowledge of motivational phenomena in school. Investigators are now in a far better position to discuss which motivational beliefs and perceptions are important to students, how these beliefs and perceptions are created and maintained, and under what circumstances each of these beliefs and perceptions plays a critical role in determining students’ cognitive, affective, and behavioral responses. Researchers have also discovered that students’ motivational beliefs are heavily affected by contextual factors such as salient teaching and evaluation practices in the classroom or perceived parental expectations.

Whereas the general pattern of relationships between contextual factors and students’ motivation is more or less clearly established with U.S. samples, direct applicability of the findings to students in other countries is yet to be tested. Evidence on the possible factors that could moderate motivation-context relationships is also currently lacking or inconsistent. For example, identical feedback from a teacher could engender positive feelings toward schooling in some students but neutral or even negative feelings in others. Parents’ high expectations are generally known to boost children’s confidence toward academic learning. However, there is a possibility that such high expectations produce unintended, detrimental effects for certain subgroups of children, especially when accompanied by conditional support or social comparative remarks.

In light of these observations and the general theme of the present volume, we pursued three objectives in this chapter. Our first objective was to test whether the pattern of relationships between learning environment and students’ motivation and affect, obtained largely among U.S. students, could be replicated in Korean contexts. We thought it was essential to first check the comparability of these relations across countries because different relations would suggest different instructional implications for effective schooling. Our second objective was to discover potential moderators that either amplify or alleviate contextual influences on individual students’ motivation and affect. Again, if there existed
different relationships between the characteristics of learning environments and students' motivation in the presence of some moderators, it would be important to discover these moderators in order to be able to maximize the positive impacts and minimize the negative impacts of particular learning environments. Our final objective was to put one hypothesized moderator to the test by experimentally manipulating performance feedback, easily the most prominent factor in classroom teaching, and examining if its impact on subsequent motivation indeed differed across different types of the presumed moderator.

We begin this chapter with a brief overview of the relationships between student motivation and contextual factors, paying a particular attention to the types of perceived learning environments that either facilitate or harm students' motivation and learning. We then discuss the general characteristics of Korean classrooms and the unique role of parental expectations in Korean students' motivation in school. Finally, findings from two empirical studies follow, illustrating Korean students' responses to perceived learning environment, parental expectations, and performance feedback. Results suggest that students react differently to the same contextual influences according to the strengths of their personal performance-oriented achievement goals.

**PERCEIVED LEARNING ENVIRONMENT AND STUDENT MOTIVATION**

Among a host of motivational beliefs and perceptions that are deemed important to students' successful functioning in school, the following prove to be somewhat more useful than others for explaining and predicting students' achievement-related strivings.

**Personal Motivational Beliefs**

*Academic self-efficacy* refers to students' subjective convictions that they could successfully carry out given academic tasks at desired levels (Schunk, 1991). A strong sense of self-efficacy helps students to choose challenging tasks (Bandura & Schunk, 1981), demonstrate effort and resilience in accomplishing a given task (Bandura & Schunk; Schunk, 1982, 1983), and use more effective cognitive and self-regulatory learning strategies (Pintrich & De Groot, 1990; Zimmerman, Bandura, & Martinez-Pons, 1992; Zimmerman & Martinez-Pons, 1990). *Task value* refers to an incentive to engage in given tasks or activities, which
encompasses perceived importance, perceived usefulness, and intrinsic interest in the tasks and activities (Wigfield & Eccles, 1992). Students’ beliefs of self-efficacy and task value have been powerful predictors of the level and quality of their task performance and their subsequent task choice (Eccles, Wigfield, Schiefele, 1998; Multon, Brown, & Lent, 1991).

Another important set of motivational beliefs that are in the center of the current motivation research is achievement goals (Pintrich, 2003). Achievement goals refer to the underlying purposes or reasons for engaging in achievement-oriented behaviors (Ames, 1992; Dweck & Leggett, 1988; Nicholls, 1984; Urdan & Maehr, 1995). Whereas earlier conceptions of achievement goals distinguished between mastery and performance goals only, more contemporary views recognize three achievement goals, which are mastery, performance-approach, and performance-avoidance achievement goals (Elliot & Harackiewicz, 1996; Middleton & Midgley, 1997; Skaalvik, 1997).

Broadly speaking, students with mastery goals are primarily concerned with improving their competence through task mastery. They are little concerned about how they compare with others and instead focus on acquiring new skills and accomplishing given tasks. Students with performance-approach goals, though ostensibly similar to mastery-oriented students in their pursuit of academic excellence, express a strong desire to impress and outperform others, which is often a primary motivator of their task engagement. Yet for some other students, the main purpose of demonstrating achievement-related behaviors is not to confirm their superiority but to conceal their relative incompetence in front of others, so as to avoid the possibility of failure. These students are said to have taken up performance-avoidance goals. Like beliefs of academic self-efficacy and task value, achievement goals have been linked significantly to diverse indexes of learning and motivation (Elliot, 1999).

**Perceptions of Learning Environment**

Researchers have discovered that students’ motivational beliefs are neither constant nor determined solely by the tasks at hand. Social cognitive theorists posit reciprocal determinism between person, environment, and behavior (Bandura, 1986; Zimmerman, 1989). Consistent with this notion, investigators have identified several contextual variables, more accurately, students’ subjective understandings of their learning environment, which play a significant role in shaping students’ self- and task-related beliefs and behaviors. Perceived goal structures in school and
classrooms, teacher-student relations, peer relations, and parental expectations comprise the list of contextual variables that have been more actively researched.

Perceived school and classroom goal structures, in particular, have attracted much attention from researchers due to their purported direct impact on students’ motivational beliefs. *Perceived school and classroom goal structures* refer to the typical ways with which tasks are presented and completed, important decisions are made, and students are treated and evaluated in school or classroom settings as perceived by the students in those settings. Students perceive *mastery-goal structures* in classrooms where task mastery, effort investment, and individual progress are valued and understanding of the material is emphasized over test scores. In classrooms with mastery-goal structures, students tend to personally adopt mastery achievement goals for themselves.

In contrast, students in classrooms with *performance-goal structures*, where teachers focus on test scores and evaluation, promote competition among students, and reward only the highest achievers, often pursue performance-oriented achievement goals themselves. The goal structure variables are shown to affect not only students’ motivational beliefs such as personal achievement goals, academic self-efficacy, and task value but also students’ use of self-regulatory and self-handicapping strategies and their affective reactions toward schooling (Ames & Archer, 1988; Church, Elliot, & Gable, 2001; Roeser, Midgley, & Urdan, 1996; Ryan & Patrick, 2001; Turner et al., 2002; Urdan, Midgley, & Anderman, 1998; Wolters, 2004).

**CHARACTERISTICS OF KOREAN CLASSROOMS AND KOREAN PARENTS’ EXPECTATIONS**

Ames (1992) proposed six classroom dimensions that must be considered for designing motivationally adaptive learning environments. These dimensions include: Task; authority; recognition; grouping; evaluation; and timing and are widely known by their acronym T.A.R.G.E.T. According to Ames, students display motivated, mastery-oriented behaviors in classrooms where they could find meaningful reasons to engage in tasks and activities; are provided with adequate opportunities to choose among alternatives and participate in important classroom decision-makings; are recognized by their effort rather than their ability; work collaboratively with their peers; are evaluated on the basis of individual progress and improvement toward pre-specified goals and objectives; and are allowed sufficient time to learn and complete assigned tasks.
Bong (2003, 2004) contended that average Korean secondary classrooms do not meet these basic requirements for mastery-oriented learning environments. Indeed, there is a strong indication that the task dimension of Korean classrooms fails to invoke interest and curiosity among their learners. One of the national surveys conducted by the Korea Institute of Curriculum and Evaluation in 2000 showed that almost 70% of Korean students never found their homework to be interesting. Delegating authority to students is also a rare event in Korean classrooms. Classroom communication is usually one-way and dominated by the teacher. The teacher assigns convergent tasks to the whole class and students are seldom asked to choose the classroom activities and homework assignments that they prefer. Perhaps most important, the evaluation system is normative and extremely competitive. As such, students’ relative standings among their peers largely determine the kinds of rewards and recognition they receive in the classroom.

By and large, Korean classrooms exhibit many of the features that typify classrooms with strong performance-goal structures. This might explain why Korean students display one of the lowest levels of interest and self-concepts in many international comparisons, despite their unquestionably outstanding and superior academic performance (e.g., Martin et al., 2001; Mullis et al., 2001). Still, the archetypal relationships between perceived school and classroom goal structures and student motivation in the existing literature mostly hold within Korean secondary classrooms, as demonstrated in previous studies (e.g., Bong, 2005) as well as later in this chapter.

Parental expectations, on the other hand, may serve a rather unique function in Korean students’ psychology. Korean parents view education as an effective means for their children to realize future social and financial successes. Because East Asian cultures promote individuals’ attentiveness to the members in their social network and feelings of obligation to please and not disappoint significant others (Heine, 2001; Markus & Kitayama, 1991; Oishi & Diener, 2001), parental expectations likely wield tangible influence on Korean students’ school-related cognitions and affect. However, investigators do not agree on the exact nature of such influence. Several researchers claimed that Korean parents’ excessively strong desire to expose their children to higher education places heavy pressure on Korean youth to the degree that it interferes with the children’s stress coping (Chung, 1991; Kim, 1992). Others maintain that emotional and social support from parents and teachers are an important motivator for Korean children and they are positively motivated by parental achievement pressure and a sense of
indebtedness toward their parents (Kim & Park, 2005; Kim, Park, & Park, 2000).

PERFORMANCE GOALS AS MODERATORS OF CONTEXTUAL EFFECTS?

It stands to reason that the nature and intensity of students’ reactions to perceived school culture, parental expectations, and specific instructional treatments depend on individual characteristics and motivational profiles. We propose in this chapter that the strength of students’ personal performance goals moderates the effects of contextual influences, especially when such influences render students’ learning environment intimidating and unresponsive.

There is no doubt that heavy and ubiquitous performance-goal emphases in the environment, excessively high parental expectations, and negative performance feedback, commonly encountered in Korean classroom situations, are sources of debilitating motivation and learning for all students. However, their effects may be particularly consequential for students with strong performance-approach goals, who wish to publicly document their superior ability and hence constantly monitor their performance levels and other people’s reactions for supporting evidence. The keen interest in and awareness of others’ thoughts and feelings associated with Asian cultures (Heine, 2001; Markus & Kitayama, 1991) may further contribute to these students’ insecurity in highly taxing learning environments. It is unclear whether the same moderation would occur with respect to performance-avoidance goals.

In the following section, we present results from two empirical studies conducted with Korean students that exemplify the trend of suggested moderation. In Study 1, the conventional relationships between contextual variables and student motivation are replicated, thereby confirming that the findings reported in the literature are indeed applicable to Korean contexts as well. On the same token, the successful replication of existing relationships leaves open the possibility that what we report in this chapter with Korean students may also turn out to be a universal phenomenon. We then examine if there is a difference in these context-motivation relationships according to students’ performance-approach goal levels. In Study 2, we present evidence of interaction between types of performance feedback and levels of personal performance goals on students’ interest and satisfaction on experimental tasks.
STUDY 1

Participants and Procedures

Participants were 389 girls at a public high school in Seoul, South Korea. Their ages ranged from exactly 16 years to 16 years and 11 months. The survey from which the present data came were administered during the second semester and the girls were believed to have acquired sufficient experience in their school setting to accurately respond to context-related questions in the survey. Portions of the data analyzed in this chapter were also used in Bong (2005).

Measures

*Contextual variables.* Items for measuring students’ contextual perceptions were adopted from the Patterns of Adaptive Learning Survey (PALS; Roeser et al., 1996). Five items each assessed perceived mastery-goal structures in school (e.g., “In this school, understanding the work is more important than getting the right answers”) and perceived performance-goal structures in school (e.g., “In this school, teachers only care about the smart students”). Three items from Ethington (1991) were used to assess perceived parental expectations (e.g., “My parents want me to get a good grade in school”).

*Motivation and affect variables.* Students’ self-efficacy for self-regulated learning, academic self-efficacy, task value, feelings of school belonging, and positive school affect were assessed, along with mastery, performance-approach, and performance-avoidance achievement goals. Self-efficacy for self-regulated learning was assessed with a scale used in Zimmerman, Bandura, and Martinez-Pons (1992; e.g., “I’m confident that I can study when there are other interesting things to do”). For assessing academic self-efficacy, five items were adopted from the self-efficacy subscale of the Motivated Strategies for Learning Questionnaire (MSLQ; Pintrich & De Groot, 1990) and PALS (e.g., “I’m certain I can master the skills taught in school this year”). Task value assessment consisted of three items, each referring to perceived importance, perceived usefulness, and interest in school learning.

As regards achievement goals, there were four *mastery goal* (e.g., “Understanding the schoolwork is more important to me than the grade I get”) and three *performance-approach goal* items adopted from PALS (e.g., “I like to show my teachers that I’m smarter than the other students”). Among the three *performance-avoidance goal* items, two were from PALS...
(e.g., “The reason why I study is so that the teacher doesn’t think that I’m not as smart as the other students”).

Items on positive school affect were adopted from Wolters, Garcia, and Pintrich (1992, cited in Roeser et al., 1996; e.g., “I like being in school”). Three items were adopted from PALS for measuring feelings of school belonging (e.g., “I feel that I matter in this school”). All items referred to school learning in general rather than specific subject areas. Portions of the items originally referring to specific subjects were substituted with words such as “school” or “schoolwork.” Table 10.1 reports the mean, standard deviation, and Cronbach’s $\alpha$ of each scale.

**RESULTS**

Replicating existing relationships. The relationships between contextual variables and student motivation were first examined in a confirmatory factor analysis (CFA). Each item functioned as an indicator of the respective context or motivation latent variable. Self-efficacy for self-regulated learning and task value were too highly correlated with other variables and hence removed from the final model. Table 10.2 reports the correlation coefficients among the latent variables.

As can be seen, the pattern of relationships emerged from the present data resembled those reported in the literature. Perceived mastery-goal structures in school positively correlated with Korean high school girls’ mastery goals, feelings of school belonging, academic self-efficacy, and

<table>
<thead>
<tr>
<th>Scale</th>
<th>$M$</th>
<th>$SD$</th>
<th>$\alpha$</th>
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<tr>
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<td>.65</td>
<td>.73</td>
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<tr>
<td>Perceived performance-goal structures in school</td>
<td>2.74</td>
<td>.66</td>
<td>.78</td>
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<tr>
<td>Parental expectations</td>
<td>3.86</td>
<td>.70</td>
<td>.74</td>
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<tr>
<td>Mastery goal</td>
<td>3.51</td>
<td>.64</td>
<td>.61</td>
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<tr>
<td>Performance-approach goal</td>
<td>3.51</td>
<td>.86</td>
<td>.70</td>
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<tr>
<td>Performance-avoidance goal</td>
<td>2.66</td>
<td>.76</td>
<td>.65</td>
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<tr>
<td>Self-efficacy for self-regulated learning</td>
<td>2.97</td>
<td>.52</td>
<td>.81</td>
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<tr>
<td>Academic self-efficacy</td>
<td>3.56</td>
<td>.65</td>
<td>.84</td>
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<tr>
<td>Task value</td>
<td>2.80</td>
<td>.74</td>
<td>.75</td>
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<tr>
<td>Feelings of school belonging</td>
<td>3.03</td>
<td>.76</td>
<td>.81</td>
</tr>
<tr>
<td>Positive school affect</td>
<td>2.95</td>
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<td>.83</td>
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positive school affect. Perceived performance-goal structures in school positively correlated with students’ performance-avoidance goals and negatively correlated with students’ mastery goal, feelings of school belonging, and positive school affect. Perceived mastery- and performance-goal structures in school correlated negatively to each other.

To further replicate previous findings, the predictive relationships among relevant variables reported in Roeser et al. (1996) were mapped onto the present set of variables in a structural equation model. This model was a simple rearrangement of the variables in CFA and hence shared the same fit indexes with the CFA model. Figure 10.1 presents statistically significant paths among the latent variables. Again, the predictive pattern was largely consistent with the existing literature. It is worth noting that perceived parental expectations were a significant predictor of these Korean girls’ performance-approach as well as performance-avoidance goals.

Performance-approach goal moderation. We speculated earlier that students’ personal performance-approach goals might moderate the relationships between contextual variables and personal motivational beliefs. To test this hypothesis, we divided the sample into high and low performance-approach goal groups by a median split and regressed each of the student motivation and affect variables on the set of contextual

<table>
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<tr>
<th>Latent Variable</th>
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<tbody>
<tr>
<td>1. Perceived mastery-goal structures in school</td>
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<tr>
<td>2. Perceived performance-goal structures in school</td>
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<tr>
<td>3. Parental expectations</td>
<td>.19</td>
<td>-.04</td>
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<td>4. Mastery goal</td>
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<td>5. Performance-approach goal</td>
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<td>-.07</td>
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<td>6. Performance-avoidance goal</td>
<td>.02</td>
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<td>-.05</td>
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<td>7. Academic self-efficacy</td>
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<td>-.09</td>
<td>.28</td>
<td>.56</td>
<td>.34</td>
<td>-.03</td>
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<tr>
<td>8. Feelings of school belonging</td>
<td>.51</td>
<td>-.27</td>
<td>.18</td>
<td>.57</td>
<td>.30</td>
<td>-.03</td>
<td>.60</td>
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<tr>
<td>9. Positive school affect</td>
<td>.48</td>
<td>-.20</td>
<td>.14</td>
<td>.54</td>
<td>.26</td>
<td>-.02</td>
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Note: Coefficients greater than .14 in absolute magnitude are significant at p < .05. $\chi^2(490, N = 388) = 852.97, p < .001$ (NNFI = .91, CFI = .92, average standardized residuals = .04).
perception variables. If students’ performance-approach goals moderated these relationships, different relationships would emerge in the high versus low performance-approach goal groups. Indeed, that was what we observed.

Table 10.3 above displays the pattern of moderation by personal performance-approach goals when predicting students’ positive school affect, feelings of school belonging, and task value beliefs from students’ perceptions of the learning context. Regardless of the level of individual students’ performance-approach goals, perceived parental expectations and mastery-goal structures in school were associated with predictive relations of similar nature and magnitude. In comparison, predictive relations demonstrated by perceived performance-goal structures in school differed by students’ personal performance-approach goals. Perceptions of the performance-goal structures in school did not significantly predict students’ motivation and affect-related beliefs in the low performance-approach goal group. However, the same contextual perceptions of the high performance-approach goal students significantly and negatively predicted their personal motivation and affect.

Consistent with the literature, as students perceived a stronger focus on ability and relative superiority in their learning environment, they tended to express more negative motivational beliefs. However, those with strong performance-approach goals appeared to be at particular risk because, as they perceived stronger performance-goal structures in their school, they also reported significantly more negative school affect, weaker feelings of school belonging, and lower task value beliefs toward school learning.

Table 10.4 presents another interesting set of findings regarding the performance-approach goal moderation. When students perceived
higher parental expectations, they generally reported stronger self-efficacy for self-regulated learning and stronger academic self-efficacy. Parental expectations were also a positive predictor of students’ personal performance-avoidance goals. However, when the students were divided into high versus low performance-approach goal groups, the positive motivational pattern associated with perceived parental expectations disappeared in the high performance-approach goal group yet the negative trend on their performance-avoidance goals remained. Those with high performance-approach goals felt more vulnerable as they perceived greater expectations from their parents, whereas those with low performance-approach goals became more confident as they perceived higher parental expectations.

**STUDY 2**

In this study, we explored whether the performance-goal moderation of contextual effects we observed with the correlational data in Study 1 could be replicated in an experimental setting.
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Types of Performance Feedback

Among the many features that exist in any given learning environment, various verbal and nonverbal feedback from the teacher are arguably the most salient factor in students’ perceptions of the learning environment. We thus experimentally manipulated performance feedback on experimental tasks and examined whether the effects of different types of feedback on subsequent motivation differed depending on the level of personal performance goals.

Performance feedback, when used under proper conditions, could improve learners’ task performance by enhancing their intrinsic motivation. However, not all types of feedback are beneficial for developing learners’ intrinsic motivation in the tasks. Research on intrinsic motivation has repeatedly ascertained that only the kinds of feedback that inform learners of the appropriateness and relevancy of their target performance demonstrate positive motivational influence. Performance feedback that either lacks such informational value or is uniformly provided to learners without consideration of individual differences will negatively affect learners’ interest, task performance, or both (Kluger & DeNisi, 1996).

Table 10.4. Performance-Approach Goal Moderation of Perceived Parental Expectation

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<td>Performance-goal structures in school</td>
<td>–.04</td>
<td>–.07</td>
<td>.02</td>
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<td>On academic self-efficacy</td>
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<tr>
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<td>.28***</td>
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<tr>
<td>Performance-goal structures in school</td>
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<td>On performance-avoidance goal</td>
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<td>Parental expectations</td>
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<tr>
<td>Performance-goal structures in school</td>
<td>.23***</td>
<td>.18*</td>
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*p < .05. **p < .01. ***p < .001.
To date, most research on performance feedback has focused on the relationship between feedback type and intrinsic motivation or performance. However, studying the interactive effects between types of feedback, types of tasks, and learners’ individual characteristics could generate results that may be more practical and instructive. For instance, McGraw (1978) suggested that extrinsic rewards or feedback could increase or maintain learners’ interest in quantitative tasks (e.g., speed or algorithmic problems) but they might decrease learners’ intrinsic motivation in qualitative tasks (e.g., heuristic problems involving problem-solving or divergent thinking). We examined the pattern of interaction between feedback type and learners’ individual characteristics, namely, personal performance goals and perceived competence in the present experiment.

**Perceived Competence Interaction**

As described earlier, Korean students are under great pressure to perform well in an intensely competitive atmosphere. The highly performance-focused learning situations in most secondary classrooms tend to push students toward adopting performance goals in their own learning (Ames & Archer, 1988). As such, we speculated that perceived competence, along with personal performance goals, might also play a role in determining Korean students’ motivation.

Perceived competence refers to expectations individuals hold regarding their own capabilities. Harackiewicz and Manderlink (1984) demonstrated that personal perceptions of doing well on the tasks mediated the effects of performance feedback on participants’ intrinsic motivation. That is, learners whose level of perceived competence was high were not as affected by the negative feedback compared to those whose level of perceived competence was low. The latter participants exhibited significantly decreased interest in the task activity after receiving negative feedback. Similar episodes were documented in the classic study of Elliott and Dweck (1988). In their experiment, performance-goal oriented children with low perceived competence responded to failure in a highly maladaptive manner with deteriorated use of problem-solving strategies, negative affect, and attributions of failure to uncontrollable causes. In contrast, performance-goal oriented children with high perceived competence showed reactions to failure similar to those demonstrated by mastery-goal oriented children.

In addition to the performance feedback manipulation in the present experiment, we also manipulated levels of perceived competence within each performance-goal group. Therefore, it was possible to test whether
the performance-goal moderation of feedback effects, if any, would play out differently for individuals with high versus low perceived competence. It should be noted that the approach and avoidance components of the performance-oriented achievement goals were not differentiated in this study. As a result, performance goals assessed in this experiment represented students’ desires to document their superior ability by performing better than others and, at the same time, avoid potential failure by shunning challenging tasks and cutting down effort in the fear of displaying lower ability (Dweck & Leggett, 1988; Elliott & Dweck, 1988).

In sum, the purposes of this experiment were twofold. The primary purpose was to document the performance-goal moderation of feedback effects on subsequent motivation. The secondary purpose was to examine whether the pattern of such moderation differed by not only the feedback type but also the level of perceived competence.

Participants

The sample consisted of 174 seventh graders (89 girls and 85 boys) who were randomly assigned to one of three experimental conditions: gain, lose, and combined. There were 55 students in the gain condition, 60 in the lose condition, and 59 in the combined condition of gain and lose.

Materials and Procedures

Experimental task. The experimental task was a spurious web-based critical thinking test. The test consisted of six subtests: Association; creativity; divergence; productivity; combination; and expression. For example, the productivity test asked students to write as many words as came to mind when seeing a given picture.

Performance feedback manipulation. There were three performance feedback conditions. In the gain condition, no medal was given to students initially. Two medals were then provided for each success trial. Nothing was taken away for failure. In the lose condition, 12 medals were given initially. Two medals were taken away for each subsequent failure but no medal was provided for success trials. In the combined (gain + lose) condition, six medals were given initially. Two medals were provided for each success trial and two were taken away for each failure trial.
Although the feedback was predetermined regardless of students’ actual performance levels, students were led to believe that the feedback was determined by comparing their task performance with the norm in a huge database system. All performance feedback conditions operated under the same contingency plan of three success and three failure trials, ending up with six medals.

*Perceived competence manipulation.* To manipulate students’ feelings of competence toward experimental tasks, a practice session was run. Students received test results that were predetermined according to the experimental condition to which they belonged. Students in the *high competence* condition received test results that showed that their performance earned 91-95 points and ranked in the top 7-9%. Those assigned to the *low competence* condition received test results of 55-66 points and a rank in the bottom 8-15% (see Figure 10.2 for an example of test result screen).

To check if the perceived competence manipulation was successful, students were asked the following question at the end of the experiment: “There were 100 students who performed the same task as you did in this experiment. Where do you think you rank in terms of your task performance?” Students in the high competence condition expected significantly better performance ($M = 47.4$) than did those in the low competence condition ($M = 68.4$), suggesting the manipulation was successful. Students also rated task interest and performance satisfaction at the end of the experiment.

**Measures**

*Performance goals.* We used the Performance Goal Orientation scale of Kwon and Kim (2003), developed on the basis of Meece, Blumenfeld, and Hoyle (1988). This measure includes five items with response scales ranging from 1 = *strong disagree* to 5 = *strongly agree*. A reliability coefficient for this scale was $\alpha = .73$. Students were divided into high and low performance-goal groups by median split.

*Task interest and performance satisfaction.* We assessed students’ interest in the task and satisfaction with their task performance with a scale originally developed by Kim, Kwon, Yoon, So, Kim, and Lee (2004). Several items were adapted to better suit the purposes of the present experiment. Two factors, task interest and performance satisfaction, were extracted in an exploratory factor analysis, constituting evidence of construct validity. Cronbach’s $\alpha$ were .79 and .62 for task interest and performance satisfaction scales, respectively.
A 3 (feedback type; gain, lose, and combined) × 2 (performance goal; high vs. low) × 2 (perceived competence; high vs. low) factorial design was used. Dependent variables were task interest and performance satisfaction scores.

**RESULTS**

In factorial design, interaction effects usually take primacy over main effects. When the interaction effects prove statistically significant, we describe the results mainly in terms of the interaction effects, although some main effects were also statistically significant. Table 10.5 and 10.6 present mean ratings of task interest and performance satisfaction, respectively, for each group.

*Interaction between feedback type and performance goal on task interest.* The interaction between feedback type and performance goal was significant,
$F(2, 162) = 3.83, p < .05$. Students with low performance goals indicated significantly greater interest in the experimental tasks when presented with the gain type feedback than the lose or the gain + lose combined feedback. Those with high performance goals, on the other hand, expressed stronger task interest when the performance feedback included a “lose” component, with the difference between the gain and the lose conditions reaching statistical significance (see Figure 10.3). This suggests that the high performance-goal participants might have been more interested in keeping the given medals and not losing them rather than gaining additional medals. The high performance-goal participants, who were keenly interested in social comparison, might have found the lose type of performance feedback more useful for gauging their relative superiority.

### Table 10.5. Mean Ratings of Task Interest
(Standard Deviations in Parentheses)

<table>
<thead>
<tr>
<th>Perceived Competence</th>
<th>Performance Goal</th>
<th>Feedback Type</th>
<th>Gain</th>
<th>Lose</th>
<th>Combined</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>High</td>
<td></td>
<td>3.43 (.21)</td>
<td>3.91 (.20)</td>
<td>4.05 (.60)</td>
<td>3.79 (.17)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td></td>
<td>3.81 (.21)</td>
<td>3.60 (.19)</td>
<td>3.36 (.21)</td>
<td>3.59 (.13)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>3.62 (.12)</td>
<td>3.75 (.13)</td>
<td>3.71 (.13)</td>
<td>3.69 (.15)</td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
<td></td>
<td>3.56 (.18)</td>
<td>3.85 (.21)</td>
<td>3.64 (.21)</td>
<td>3.67 (.12)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td></td>
<td>3.75 (.27)</td>
<td>3.19 (.19)</td>
<td>3.58 (.18)</td>
<td>3.47 (.17)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>3.61 (.13)</td>
<td>3.48 (.17)</td>
<td>3.61 (.15)</td>
<td>3.57 (.11)</td>
</tr>
<tr>
<td>Total (n = 174)</td>
<td></td>
<td></td>
<td>3.61 (.11)</td>
<td>3.62 (.11)</td>
<td>3.65 (.16)</td>
<td>3.63 (.13)</td>
</tr>
</tbody>
</table>

### Table 10.6. Mean Ratings of Performance Satisfaction
(Standard Deviations in Parentheses)

<table>
<thead>
<tr>
<th>Perceived Competence</th>
<th>Performance Goal</th>
<th>Feedback Type</th>
<th>Gain</th>
<th>Lose</th>
<th>Combined</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>High</td>
<td></td>
<td>3.36 (.22)</td>
<td>2.73 (.20)</td>
<td>2.85 (.22)</td>
<td>2.98 (.20)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td></td>
<td>3.62 (.22)</td>
<td>3.23 (.19)</td>
<td>2.85 (.22)</td>
<td>3.15 (.16)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>3.63 (.13)</td>
<td>2.98 (.17)</td>
<td>2.85 (.19)</td>
<td>3.01 (.15)</td>
</tr>
<tr>
<td>Low</td>
<td>High</td>
<td></td>
<td>3.49 (.18)</td>
<td>3.36 (.21)</td>
<td>2.88 (.22)</td>
<td>3.24 (.17)</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td></td>
<td>3.50 (.28)</td>
<td>2.69 (.20)</td>
<td>3.58 (.18)</td>
<td>3.26 (.20)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>3.50 (.15)</td>
<td>3.01 (.16)</td>
<td>3.23 (.17)</td>
<td>3.25 (.15)</td>
</tr>
<tr>
<td>Total (n = 174)</td>
<td></td>
<td></td>
<td>3.49 (.17)</td>
<td>3.00 (.15)</td>
<td>3.04 (.16)</td>
<td>3.16 (.17)</td>
</tr>
</tbody>
</table>
As long as they lost less medals than did others, it would guarantee their winning.

**Interaction between feedback type, performance goal, and perceived competence on performance satisfaction.** There was a significant main effect of feedback type on performance satisfaction, $F(2, 162) = 6.06, p < .005$. As can be seen in Table 10.6, participants reported the highest level of performance satisfaction when they received the gain type of feedback ($M = 3.49$) than when they did the lose ($M = 3.00$) or the gain + lose combined feedback ($M = 3.04$). This adaptive effect of the gain type of feedback relative to the other two types of feedback was consistently demonstrated across the low and high performance goal groups as well as the low and high perceived competence conditions. It is noteworthy that the latter two feedback conditions both contained a “lose” component.

In addition to the significant main effect of feedback type, the three-way interaction between feedback type, performance goal, and perceived competence also proved significant, $F(2, 162) = 4.92, p < .01$. In the high competence condition, both the high and low performance-goal students rated their performance the most satisfactory when they received the gain type of feedback. Difference in the performance satisfaction scores was statistically significant only among the low performance-goal participants between the gain and the gain + lose combined conditions (see Figure 10.4).

![Figure 10.3](image-url)
The pattern was reversed in the low competence condition. Among the low-competence participants, those with low performance goals were significantly less satisfied with their performance when they received the lose type of feedback than the gain or gain + lose combined types of feedback. There was no significant difference in the performance satisfaction scores between the three feedback conditions among those with high performance goals (see Figure 10.5). The results suggest that the lose type of feedback, which is quite commonly used in school, should be avoided and it is particularly detrimental for students with low competence and low performance goals.

DISCUSSION

Debilitating Effects of Performance-Oriented Environments: A Common Finding

A universal thread across the two studies in this chapter was that students profited from an environment that emphasized task mastery, deep understanding of the learning material, and individual improvement and accomplishment. Students suffered in learning environments that instead stressed relative ability, competition, and evaluations and penalized them for their mistakes. The present results corroborate findings in the extant literature and highlight, once again, the importance of designing mastery-oriented learning environments for effective schooling.

Study 1 demonstrated that Korean high school girls’ perceptions of the mastery-goal structures in their school were associated with many adaptive motivational outcomes. As these girls perceived a stronger emphasis on task mastery than test scores per se, their personal mastery goals, academic self-efficacy beliefs, feelings of belonging to their school, and positive affect while at school also became stronger. The opposite was true for perceived performance-goal structures. As the girls perceived heavier pressure on doing better than others and getting higher test scores, their positive motivation and affect plummeted gradually in the form of weaker personal mastery goals, stronger performance-avoidance goals, weaker feelings of school belonging, and less positive affect toward school.

Analogous results emerged in an experiment. In Study 2, Korean middle school students felt the highest level of satisfaction about their task performance when they were presented with the gain type of feedback. In the “gain” feedback condition, students earned medals for every successful performance but were not punished for the mistakes they
Figure 10.4. Interaction between feedback type and performance goal on performance satisfaction in the high-competence condition.

Figure 10.5. Interaction between feedback type and performance goal on performance satisfaction in the low-competence condition.
made. It is difficult to draw an exact parallel between the perceived learning environment in a natural school setting and artificially manipulated performance feedback in an experiment. Nonetheless, one may still see some resemblance between the attributes of perceived goal structures in Study 1 and performance feedback in Study 2, particularly between the performance-goal structures in school and the “lose” or the “gain + lose combined” feedback conditions. In those two feedback conditions, students were led to believe that they paid for every mistake they committed when they yielded two medals.

Whereas the lose type of feedback might have appeared more straightforward and hence provided more useful information for social comparison purposes, the combined feedback of gain + lose, with which students ostensibly picked up medals when succeeded and lost them when erred, could have been construed as more controlling. Both feedback conditions, therefore, were strongly performance-oriented. It is not surprising that students in the lose and the combined feedback conditions reported substantially less satisfaction at the end of the experiment compared to those in the gain feedback condition, although there was no difference in the final number of medals remaining across all three feedback conditions.

Many students are confronted with performance-goal oriented environments where competition and social comparisons are constantly taking place. They compete for limited tangible rewards such as grades. As demonstrated in numerous studies in the field as well as the present chapter, students who receive controlling feedback in the form of directions, orders, deadlines, or possibility of losing points for the mistakes they make are bound to relinquish intrinsic motivation and exhibit less voluntary effort for learning new things. If controlling feedback cannot be avoided for whatever reason, we suggest that teachers and practitioners try to use “gain” types of feedback as much as possible. Since the gain type of feedback seems beneficial to positive motivation and affective reactions regardless of individual students’ level of personal performance goals, it would likely prove effective in classrooms where diverse groups of students are learning together, each pursuing different goals and objectives.

**Nature of Performance Goal Moderation:**

**Some Conflicting Findings**

Another common finding of this chapter was that students’ personal performance goals moderated the effects of their learning environments. The nature of this moderation, however, was not consistent across the two studies. Korean high school girls in Study 1 were more vulnerable to
external pressure such as performance-goal structures in school and perceived parental expectations when they held strong performance-approach goals. As these girls perceived a stronger emphasis on performance and ability in their school environment, they exhibited more negative feelings toward school, a weaker sense of belonging to their school, and lower task value toward school learning. These girls also demonstrated stronger orientations toward performance-avoidance goals, as they perceived higher parental expectations. The girls who did not endorse performance-approach goals as strongly, in contrast, appeared more resilient to the same achievement press in their learning environment. The motivation of these girls with relatively weak performance-approach goals was not affected by their perceptions of the harsh and competitive school environment. Further, their perceptions of stronger parental expectations enhanced their academic and self-regulatory self-efficacy beliefs.

In Study 2, Korean middle school students with high performance goals reported higher task interest when they received either the lose or the gain + lose combined feedback than when they did solely the gain type of feedback. Those with relatively weak performance goals showed the reverse pattern and reported the highest interest in the experimental tasks in the gain feedback condition. A similar pattern was observed with regard to students’ performance satisfaction but only in the low perceived competence group. Specifically, even among those with low perceived competence, the taxing environment created by the lose type of feedback appeared especially harmful to students with low but not high performance goals because they displayed the lowest level of satisfaction with their task performance.

The seeming incongruity between the two sets of results may reflect differences in the nature of the two studies. Others’ opinions and evaluations are believed to loom larger for students with strong performance goals. When these students perceive a heavy focus on their relative standings and strong achievement pressure from significant adults in their environment, they are bound to feel increasingly more insecure and anxious about the possibility of failure and letting others learn about their incompetence. This was demonstrated in Study 1, where only the students with high performance-approach goals significantly lowered their positive affect and feelings of belonging to their school and significantly raised their performance-avoidance goals as they perceived a greater performance press in their school environment.

Results of Study 2, however, suggest a possibility that when the results of task performance do not carry much tangible consequence (i.e., grades), these students might actually crave for information that could be used to more accurately evaluate their performance in comparison to
others in their immediate reference group. In the “gain” type of feedback condition, performers were not punished for their mistakes, whereas they did pay for every seeming failure by having their points deducted in the “lose” type of feedback condition. If individuals wished to compare their own performance capabilities to those of their peers, the “lose” type of feedback would appear to provide more useful information. Nevertheless, teachers and practitioners should keep in mind that there is a danger that students may end up with stronger dissatisfaction with their performance when the results of comparisons are not favorable and eventually turn to performance-avoidance goals (see, e.g., Bong, 2005).

CONCLUSION AND DIRECTIONS FOR FUTURE RESEARCH

It is worth noting that the conflicting pattern across the two studies regarding students’ performance goals bears similarity to the current argument in the achievement goal literature on the adaptive role of performance goals in highly competitive and taxing situations (see, e.g., Harackiewicz, Barron, Pintrich, Elliot, & Thrash, 2002; Kaplan & Middleton, 2002). More specifically, research with K-12 populations has repeatedly demonstrated the motivationally maladaptive nature of performance-goal structures in the learning environment as well as learners’ personal performance goals, including both performance-approach and performance-avoidance. In contrast, studies conducted with college samples have demonstrated that performance-approach goals can have some positive effects such as improved performance and thus should not be actively discouraged without first considering the type of learning situations in which students are asked to function (Harackiewicz et al.; McGregor & Elliot, 2002).

Often, the adaptive nature of performance goals most clearly materializes in experimental settings that involve competition but no serious consequence, just like the one in Study 2. Future research should examine tenability of the present conjecture that performance goals might operate as a positive short-term motivator for trivial tasks but will ultimately lead students to motivationally unhealthy paths as the stakes of performing poorly become increasingly high. Longitudinal studies in naturalistic settings seem best suited for answering questions on the performance-goal moderation observed in this chapter.

It is premature to reach any definitive conclusion regarding the moderating role of performance-oriented achievement goals on the basis of only two studies. Nevertheless, the particularly negative reactions of the high performance-goal students to various environmental presses in actual Korean classrooms make us wonder, contrary to the arguments by
some, if adopting such goals can ever prove truly beneficial for students’ motivation, learning, and performance under the normal learning circumstances.

REFERENCES


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