This review focuses on recent research illustrating how performance goals show positive effects, similar to those of mastery goals. Many studies on students' achievement goals and motivation have relied on two goal structures: mastery and performance. The mastery goal approach had the distinction of being preferred for its adaptive qualities while performance goals were believed to be maladaptive (K. Barron and J. Harackiewicz, 2001). However, present research expands performance knowledge to include performance-approach and performance-avoidance goals. Performance-approach goal students are motivated by competition and the capacity to demonstrate their abilities. Performance-avoidance goal students reveal reductions in intrinsic motivation and persistence. Avoidance goal orientation is also found to have negative consequences by reducing goal opportunities, handicapping, keeping goals private, and reducing self-efficacy and academic control. Outcomes of recent studies show how students are motivated by a variety of achievement goals. (Contains 31 references.) (Author/SLD)
The Effects of Mastery and Performance Goals on College Students' Motivation

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August 16, 2002

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Submitted to ERIC for Possible Publication
Abstract

Many studies on students’ achievement goals and motivation relied upon two goal structures: mastery and performance. The mastery goal approach had a distinction of being preferred for its adaptive qualities while performance goals were believed to be maladaptive (Barron & Harackiewicz, 2001). However, present research expands performance knowledge to include performance-approach and performance-avoidance goals. Performance-approach goal students are motivated by competition and the capacity to demonstrate their abilities. Performance-avoidance goal students reveal reductions in intrinsic motivation and persistence. Avoidance goal orientation is also found to have negative consequences by reducing goal opportunities, handicapping, keeping goals private, and reducing self-efficacy and academic control. Outcomes of recent studies show how students are motivated by a variety of achievement goals.
The Effects of Mastery and Performance Goals on College Students' Motivation

Achievement goal and motivation theorists have spent decades determining individual motives for students' performance. They want to understand how students aspire to learn, why students are motivated to learn and which factors contribute to students' achievement in college. McClelland's (1951) theory explains that students are motivated toward achievement in two ways—in avoiding failures and in attaining successes (as cited in Elliot & Harackiewicz, 1996). Thirteen years later, Dweck and Elliott (1964) divide those two achievement goals into three goal categories: a learning goal which focuses on mastery, a performance goal which focuses on competence, and a performance goal which focuses on avoiding judgments of incompetence (as cited in Elliot & Harackiewicz). During the 1970s and 1980s, other theorists introduce achievement goal approaches to achievement motivation (Elliot & Harackiewicz, 1996).

More recently, educational psychologists Murphy & Alexander (2000) add a fourth category: social goals which focus on high grades and high performance.

This review focuses on research on those abovementioned goals based on Dweck and Elliott's 1964 taxonomy. Although the majority of studies historically link performance goal behaviors to negative motivation applications, this paper reveals recent research illustrating how performance goals show positive effects, similar to those of mastery goals. Additionally, negatively associated avoidance goals are explained and juxtaposed with commitment and academic control remedies.

Review of the Literature

Articles for this review were obtained by searching the online article indexes and databases of Educational Resources Information Center (ERIC) Journals,
findarticles.com, and PsycInfo. The keywords used for searching the databases were achievement goals, achievement goals and college, achievement goals and college achievement, or achievement goals and college learning. The majority of these articles were published between 1996 and 2001. Additional searches by hand included recent articles from *The Journal of Social Psychology, Journal of Personality and Social Psychology, Journal of Applied Psychology, and the Journal of Educational Psychology.*

**Definition of Terms**

Goals are defined as the intention to engage in desired states (outcomes or events), and goal commitments are the frameworks that individuals use to persist in their quests to develop the ability to reach their goals (Austin & Vancouver, 1996; Elliot & Harackiewicz, 1996; VandeWalle, Brown, Cron, & Slocum, 1999; VandeWalle & Cummings, 1997). Some goals are general, for example, why a class is taken, while other goals are specific, for example, what students hope to achieve in their classes (Harackiewicz, Barron, Carter, Lehto, & Elliot, 1997; Harackiewicz, Barron, Elliot, Tauer, & Carter, 2000).

If the hope, or purpose, for the student in class is to achieve as much knowledge as he or she can about the subject or to receive high grades, then these goals are achievement goals (Harackiewicz et al., 1997; Harackiewicz et al., 2000) and can affect the way coursework is approached by the student (Dweck & Leggett, 1988). Contemporary studies typically focus on two achievement goal constructs: mastery goals that focus on mastering the task, and performance goals that focus on demonstrating competence in relation to others (Ablard & Lipschultz, 1998; Church, Elliot, & Gable,
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2001; Elliot & McGregor, 2001; Elliot, McGregor, & Gable, 1999). From these two constructs come many studies on motivation, a student’s use of effort (Wolters, 1998).

**Mastery Goals**

Mastery goals orient the student to focus on competence and also on mastery of the task or content (Elliot et al., 1999; Pintrich, 2000). Students with mastery goals are most likely to be involved in both the task and the learning. As well, these goals have been positively associated with learning and achieving (Church, et al., 2001). This means that students with high levels of mastery goals have high levels of learning and achieving.

Mastery goals are known to “lead to persistence in the face of difficulty, challenge seeking, and intrinsic motivation” (Church et al., 2001, p.43) with an intent on self-development. Pintrich (2000) states that students with mastery goals exhibit higher levels of efficacy, assignment value, interest, and positive affect. He goes on to state that such students exhibit more use of cognitive strategies and perform better as well.

**Performance Goals**

Performance goals arise when the student is focused on how his or her ability and competence levels relate to others. Unlike the mastery goal, the goal of performance is to appear more competent than other students in class. This may produce achievement; however, it may have some negative outcomes.

Theorists tend to relate performance goals to avoidance, lack in motivation, and less stamina toward mastering a task (Church et al., 2001). For example, one problem is that the student may avoid challenging work because it can jeopardize the student’s demonstration of his or her high ability level (Barron & Harackiewicz, 2001). A second problem occurs when the student is involved in an activity that becomes challenging.
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Showing too much effort is equated with a lack in ability, and a performance goals student may not risk that. He or she may quit the activity or task instead of gambling with possible failure (Barron & Harackiewicz). Thus, achievement is limited.

*Bifurcating the Performance Goal Construct*

For the past twenty years, achievement goal studies have emphasized a dichotomy of goal types: mastery and performance (Elliot & McGregor, 2001). As stated earlier, mastery goals concentrate on developing mastery of the task; performance goals focus on the demonstration of competence in relation to others. Those individuals achieving their goals through mastery are thought of as motivated and persistent; those working on achievement by way of performance goals may be less motivated, less persistent. In this view, performance goals are generally believed to be less adaptive in terms of challenge and strategy use (Pintrich, 2000).

Yet, situations may exist where achievement through performance goals may not be less adaptive. Elliot and his coadjutors revise the dichotomy by proposing a new framework. In the newer framework, performance goals are bifurcated into performance-approach goals and performance-avoidance goals (Church et al., 2001; Elliot & Harackiewicz, 1996; Elliot & McGregor, 2001; Pintrich, 2000).

The key ingredient that divides these two performance goals is intrinsic motivation. Intrinsic motivation refers to one’s own enjoyment for and interest in an activity (as cited in Elliot & Harackiewicz, 1996; Harackiewicz & Elliot, 1998). For example, if a student exhibits performance goal traits—such as demonstrating his or her competence in relation to other students’ task mastery—and is intrinsically motivated, then the performance goal classification can be divided to include this positive intrinsic
The intrinsic motivation factor is critical in Elliot and Harackiewicz’s (1996) research study that supports bifurcating the performance goal.

In an effort to see if intrinsic motivation existed within performance groups, Elliot and Harackiewicz (1996) conducted a study. Participants were undergraduates who were given a puzzle with hidden figures to find. The students were divided into separate performance groups and a mastery group; each group was given a little different information about the purpose of the study.

First, all goal groups were given a folder that contained much the same information: The research is on game playing and puzzle solving on hidden figure puzzles. The purpose is to compare students to other students’ ability at solving hidden figure puzzles (Elliot & Harackiewicz, 1996).

Different information was added in the performance-approach group’s folder about hidden figure puzzle solving. Their folder included this additional report: We find that most students are similar in their abilities to solve these puzzles. But, some students stand out as doing quite well. The purpose of this study is to give you the chance to show how good you are at puzzle solving (Elliot & Harackiewicz, 1996).

The performance-avoidance group was given this added information in their folder: We find that most students are similar in their abilities to solve these puzzles. But, some students stand out because they are quite poor at puzzle solving. The purpose of this study is to give you the chance to show that you are not a poor puzzle solver. (Elliot & Harackiewicz, 1996). The mastery group was given this simple report: We are collecting data on your reactions to the puzzle (Elliot & Harackiewicz).
In summing up the various manipulations given to each group, the performance-approach participators were protected from being viewed as having failed. However, performance-avoidance participators were given failure as the only symptom the experimenters could measure. Mastery participants were outwardly given the chance just to find hidden figures in a puzzle (Elliot & Harackiewicz, 1996).

After completing the puzzles, experimenters ostensibly graded them and gave all participants a form indicating they had found a good 80% of the hidden figures. The experimenter then left the room. The participants were told they could do whatever they wished—even if they wished to solve more of the puzzles during the time the experimenter was gone. A concealed video camera filmed the group during this “free-choice” period (Elliot & Harackiewicz, 1996, p.468). This part of the study was crucial in measuring intrinsic motivation. Again, intrinsic refers to the individual’s own interest in the task.

The study found that the mastery group and the performance-approach group sought to find more figures in the puzzle—during the period each group was left alone to do whatever its group members desired. This suggested the existence of intrinsic motivation. The group with significantly less intrinsic motivation was the performance-avoidance group. The results suggested that performance goals that focused on avoiding incompetence rather than approaching the task did adversely affect intrinsic motivation (Elliot & Harackiewicz, 1996). This supported a reorganization of the dichotomy of achievement goals into the tripartite grouping: mastery, performance-approach, and performance-avoidance.
Avoidance

Actively avoiding failure leads to a decrease in intrinsic motivation. For example, even though Elliot and Harackiewicz’s (1996) study incorporates rather low levels of competence such as finding hidden figures in a puzzle, the performance-approach and mastery goals participants measure similar levels of intrinsic motivation for it. This suggests that the approach forms of motivation allow individuals to intellectually “drop down” (p. 472) to the lesson’s level and engage themselves in it. To preserve superior levels of self-competence, avoidance goals interrupt focusing on even a low level task. The “avoidance-motivated individuals [are] unable to ‘lose themselves’ in the task” (p. 472).

However, avoidance-motivated behavior is not entirely negative because of its intrinsic lack. The avoidance participants may value competence, effort, and performance as much as their performance-approach and mastery groups do. This indicates that an avoidance goal may be a good motivator. This is appropriately explained in the sense that the participants are motivated toward high achievement through the goal of avoiding failure.

Avoidance and Student Achievement

Achievement goals for most mastery skills students are their inherent pleasure and improvement of knowledge. For other achievers who have more ego-social goal orientations involved, the inherent pleasure is nearly enough, but feedback via high grades and good evaluations verify their being on the right track (Peverly & Wood, 2001; Somuncuoglu & Yildirim, 1998; Woo & Frank, 2000). In contrast, “the salient goal [for a performance-avoidance goal orientation] is getting work done with the least amount of
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Elliot and Sheldon (1997) find the motive to avoid failure is an antecedent of avoidance goal pursuit and also find negative consequences of avoidance regulation. By avoidance regulation, I mean to say there are consequences of "identifying and blocking all possible paths by which the negative outcome...might occur" (Elliot & Sheldon, 1997, p.173). This antecedent may be harmful to several academic and personal pursuits.

Participants in the study report that the pursuit of avoidance goals "decrease[s] their self-esteem, personal control, vitality" (Elliot & Sheldon, 1997, p.180). Furthermore, avoidance regulation throughout the semester may cause increasingly negative influences on participants' views of their own well-being. Avoidance achievement goal is a key ingredient in the regulation of achievement behavior.

If competence in oneself is connected to one's goal pursuit, and it is a basic psychological necessity (as cited in Elliot & Sheldon, 1997), then not fulfilling this need is harmful to the outcome of one's general well-being. Summarizing this viewpoint, fear of failure leads to the pursuit of avoidance goals. That may lead to psychological exposure and a "host of negative experiences and outcomes" (p.182).

Self-worth is the individual's intrinsic sense of worth and self-acceptance (Martin, Marsh, & Debus, 2001). It is connected to students' avoidance goals in the following manner. If failure is an accepted sign of low ability, then that ushers in a person's sense of low self-worth. Therefore, clever strategies are developed to avoid failure—to avoid the appearance of having low ability and having a low self-worth.
One major strategy is called self-handicapping. Self-handicappers virtually deflect the cause of failure away from ability and make effort accountable (Martin et al., 2001). Examples of self-handicapping may include going out with friends instead of staying home to prepare for a course, procrastinating, or not practicing for the task ahead. This takes the impact off of low ability and places the cause for failure in the form of effort. Other forms of self-handicapping include “exaggeration of obstacles to success” and self-imposed illness (Martin et al., p.87). In the event of failure, there is a ready and acceptable excuse—not lack of ability.

Goal Commitment and Expectancy

Goal commitment is the resolve and persistence in attempting to reach a goal (Hollenbeck, Williams, & Klein, 1989), and it may be a positive method to get students to reach a higher achievement level. Hollenbeck et al. (1989) state if the goals are particularly difficult, students strive to reach higher achievement, assuming there is commitment. Thus, the rise of commitment to difficult goals can result in higher achievement.

As Salancik (1977) notes, there are antecedents of commitment to difficult goals (as cited in Hollenbeck, Williams, & Klein, 1989), and these antecedents raise the level of commitment. One such antecedent is “publicness.” Salancik surmises that people want to appear consistent, and therefore, resist changing their conduct. Given their social desire to appear consistent, people will do what it takes to maintain that appearance of stableness. Hollenbeck, et al. (1989) support Salancik’s antecedent that making difficult goals public can raise commitment.
Another antecedent Hollenbeck et al. (1989) study is Salancik's interpretations on the notion of one's free will to choose the goal. If a student sets his or her own difficult goals, the commitment to them may be more emotionally binding. However, Hollenbeck et al.'s data support that only if those goals are made by high achievers.

A third hypothesis Hollenbeck et al. (1989) analyze is locus of control. If the locus is not internal, then difficult goal attainment may seem beyond the person's capability. "Those with an internal locus of control...[are] more likely to perceive its attainment as within their control" (p.19). The study confirms that those with high achievement need and internal orientation are more likely to commit to difficult goals than those with external orientation and low achievement need.

Other important influences on goal commitment are the beliefs in expectancy and value. A perceived math ability is an expectancy variable, and a perceived significance of math is a value variable (Shah & Higgins, 1997). Commitment to math tasks in performance is positively related to one's value of the subject and one's expectancy of ability (Shah & Higgins). Sometimes, favorable or unfavorable value and expectancy alter the goal commitment and the motivation for it (Duran & Trafimow, 2000; McDonald & Hirt, 1997). It may be important to note that when the goal is considered an accomplishment rather than an obligation, goal commitment deepens (Shah & Higgins).

*Self-Efficacy and Academic Control*

As established earlier, setting higher goals and commitment to them lead to improved performance on tasks (Phillips & Gully, 1997). Therefore, higher goal-setting is desirable in the academic setting. Self-efficacy affects what level a student may choose
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for his or her goals—with a higher sense of self-efficacy producing higher goal choices (Phillips & Gully). Self-efficacy refers to one’s beliefs about his or her own ability to perform a task (Longo, Lent, & Brown, 1992; Nesdale & Pinter, 2000; Phillips & Gully), and it has been associated with persistence and higher performance levels (Chemers, Hu, & Garcia, 2001; Phillips & Gully).

Academic and action controls also typify levels of goal achievement. Academic control includes students’ beliefs about their successes; action control dominates students’ thoughts of failure (Perry, Hladkyj, Pelletier, & Pekrun, 2001). Some exceptionally bright students fail as college freshman. The indication is that action control has predominated.

Conclusions

To better understand achievement goals of college students, research studies on the different characteristics of performance are conducted (Gadzella, 2001). This research brings educators closer to finding out what motivates students to achieve and why some students with high grades seem more preoccupied with failure while others earning high grades aspire to master the task. The data find various achievement goals that affect students’ performance.

Two common approaches begin as a dichotomy: mastery and performance approaches. Mastery goals are related to intrinsic motivation, persistence, and task-mastery. Performance goals are associated with competence relative to others. Performance goals, initially, are related to negative outcomes. When these goals are bifurcated into performance-approach and performance-avoidance goals, more positive value is granted to performance-approach goals. Theorists find the inimical effects on
intrinsic motivation are by means of the performance-avoidance goal, not by performance-approach. In addition, the levels of task involvement and intrinsic motivation are similar in both mastery and performance-approach goal orientations.

Avoidance goals are found detrimental, especially as they reduce students’ successes. For example, in the attempt to avoid failure, students may choose less challenging work, and their learning and exposure to new information are reduced. Avoidance may lead to negative experiences such as anxiety, low perceived competence, and decreased wellness (Elliot & Sheldon, 1997).

Commitment to difficult goals may be a formidable assault on avoidance. Hollenbeck et al. (1989) confirm much of Salancik’s (1977) early theories on commitment. For example, making a difficult goal public raises one’s commitment to completing the task. Also, having the student set the goal level makes attaining that goal more emotionally binding, more likely the student achieves it. And, if the locus of control is an internal orientation, the high achieving student is more likely to commit.

Finally, high self-efficacy and academic control produce higher goal setting. If the student believes he or she has the ability to perform the task, then the student is most likely going to succeed. The student may then have the persistence to master the task and to perform well. Positive feedback—a grade, an evaluation, or a comment—may also increase academic performance and combat avoidance behavior.
Implications

Much research has been done to differentiate between mastery, performance-approach and performance-avoidance goals, and more research is needed to better understand the effects of these achievement goals on students’ motivation to learn. More work is needed to assess interest, control, and commitment. Additionally, there is current interest on how the use of multiple goals (mastery, performance, and avoidance) may be a more optimal outcome to motivate students in achievement pursuits. More research is needed to study how a student can successfully choose between differing goals at different optimal times. Finally, more consideration for the effects of avoidance achievement on personal well-being and adjustment is needed.
References


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