OVERCOMING FAILURE: AN EXPLORATION OF PSYCHOSOCIAL CHARACTERISTICS AND INTERVENTIONS THAT BEST HELP STUDENTS SUCCEED AFTER ACADEMIC FAILURE

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By Julie E. French

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Abstract

This paper provides an overview and analysis of the literature on psychosocial characteristics of resilient students who successfully overcome failure, as well as interventions designed to assist students in developing and strengthening those characteristics. Major theories reviewed include attribution theory, achievement goal theory, and regulatory focus theory. Interventions include attributional retraining, feedback intervention, self-compassion and praise designed to shift goal-orientation and/or self-esteem. The most resilient students seem to be those who attribute failure to external, unstable and controllable causes, pursue learning goals, and have a prevention focus that defines success as the avoidance of failure. While many interventions have been developed to assist these students, attributional retraining seems to be the most research-based and effective.
Background of the Study

Failure is an inevitable experience of the human condition, and for many students, college is often the place where they experience academic failure for the first time. Some students are able to overcome failure and go on to successfully complete a college degree, but for others, failure can mark the end of their formal education. Failing a course in college is correlated with dropping out altogether (McGrath and Braunstein, 1997), and between 20 and 30 percent of college students do not finish their first year (Barefoot, 2004).

Researchers have identified a phenomenon known as the paradox of failure, in which “disproportionate numbers of bright students fail their first year of university, after having met stringent admissions criteria” (Perry, 2001, as cited in Haynes et al., 2009, p. 228). Perry (2003) suggested psychosocial factors play a much larger role in determining which students succeed and which fail in college because students admitted to college have already demonstrated an aptitude for the work. These psychosocial variables are “generally considered to include a range of noncognitive variables related to personality, belief systems, motivation, and emotion, among others” (Haynes et al., 2009, p. 228).

As many factors beyond students’ control can play a role in their academic success, the field of psychology has produced research that shows that these psychosocial factors, including the way people think about learning and interpret life events, can have a profound impact on the way they respond to failure and their ability to overcome it. The attribution theory of achievement proposes that the way people explain their successes and failures can be classified along three different dimensions: locus of causality, stability and controllability (Weiner, 1985). For example, students will explain the cause of a failed course as either the fault of themselves or the fault of others (locus of causality), as something that is likely to change over time or to
remain fixed (stability), and as something that they can control or not, such as their intelligence (controllability). The theory holds that those who attribute the cause of their failure to external sources that are unlikely to change and are out of their control are less likely to successfully overcome a failure compared to those who attribute failure to causes within their control and able to change over time.

Other related theories have also been developed in the past several decades around achievement and motivation. Dweck (1986, 2000) has conducted extensive research into producing theories of intelligence and achievement goals. Her research shows that those who view intelligence as fixed are motivated to prove their intelligence and avoid challenge or the appearance of failure, while those with a more flexible view of intelligence seek to learn continually and see failure as a growth opportunity, enabling them to overcome failure much more readily. A student’s thinking about intelligence would in turn determine whether that student adopted a learning goal orientation or a performance goal orientation.

Finally, Higgins (1997) developed the regulatory focus theory, which suggests people have three representations of themselves: the actual self, the ideal self and the “ought” self. Her research shows that if people focus on the ideal self compared to the actual self, they define success as a positive outcome and tend to respond better to successes, while people who focus more on the qualities they feel they ought to have define success as the absence of a failure and they tend to respond more to failure (Idson, Liberman, & Higgins, 2000).

Various methods have emerged from these theories to assist students in modifying their thinking about failure and their own self-efficacy. A great deal of research is available on attributional retraining and its effectiveness to increase motivation and achievement among college students (Haynes Stewart et al., 2011) as well as feedback intervention (Kluger & DeNisi,
The researcher seeks to identify characteristics of students who successfully overcome academic failure and determine what methods are most successful in helping all students experiencing an academic failure to develop those characteristics. The study was conducted using two research questions: “What psychosocial characteristics do students possess that allows them to overcome failure well?” and “How can those who work with students experiencing failure help them overcome failure and succeed academically?”

**Review of the Literature**

The purpose of this paper is to determine the psychosocial traits and characteristics that help students successfully overcome academic failure, as well as to determine how to better assist students experiencing failure to develop those characteristics.

The first section, discussing characteristics of resilient students, will include an overview of 1) attribution theory, which has been used to identify styles of explaining failure that resilient students possess, 2) achievement goal theory, which describes the types of goals pursued by resilient students, and 3) regulatory focus theory, which describes goals of resilient students from a slightly different approach. The second section will provide descriptions of strategies that have been found to help students overcome failure by 1) modifying students’ explanatory styles to be more resilient through attributional retraining, 2) encouraging students to pursue resilient goals through appropriate praise, and 3) providing appropriate feedback designed to encourage resiliency after failure through feedback intervention.

**Traits of Resilient Students**

Much of the research on resilient students who are able to overcome failure well is derived from several theories of achievement and motivation, namely the attribution theory of
motivation, achievement goal theory, and regulatory focus theory. Using the frameworks of these theories, this section will explore characteristics of students who successfully overcome failure. These characteristics include styles of explaining success and failure, ways of thinking about goals and regulatory focus. Much of the research is focused on improving academic achievement and preventing academic failure, and less so on traits of students who have already experienced failure. The most relevant literature was more limited in scope and focused almost exclusively on first-year psychology students, but still offered valuable insight.

**Attribution theory.** The first of these theories, the attribution theory of motivation, proposes that the way people explain their successes and failures determines their emotions and future actions, including their ability to overcome failure (Weiner, 1985). For students in particular, the way they explain successes and failures can impact their level of effort, attitude, grades and productivity, even for students of equal ability (Perry, Stupnisky, Daniels & Haynes, 2008). According to Weiner (1985), examining the causes of a negative outcome and then acting to change those causes is what allows a person to overcome failure.

In the attribution theory, every potential explanation for a success or failure has three different dimensions: locus of causality, stability and controllability. When examining locus of causality, a student could attribute failure to either an internal cause such as his own lack of effort or ability, or an external cause such as poor instruction or a difficult test. The second dimension, stability, describes whether the perceived cause of failure is relatively fixed, such as ability, or likely to change over time, such as effort. Controllability, the third dimension, refers to the amount of control a person has over various causes, such as effort, which is perceived as highly controllable, compared to fatigue or luck, perceived as uncontrollable. (Note: In other theories, the phrase “locus of control” is often used. Weiner (1985) used locus of causality in his
theory to distinguish it from the third dimension of controllability, noting that although a cause may be internal, it is not necessarily under the student’s control, such as ability or fatigue.) The following paragraphs will describe these three dimensions in greater detail and how they affect students’ ability to overcome failure.

Research on the locus of causality is connected most strongly with emotional reactions (Eccles & Wigfield, 2002). Students who attribute failure to an internal cause, such as low ability or effort, are more likely to experience shame, guilt, and lowered self-esteem, while those who attribute failure to an external cause, such as test difficulty, are more likely to be angry (Weiner, 1985). Attributions to external causes protect self-esteem and are more likely to draw sympathy from others instead of rejection, which Perry et al. (2008) labeled the “best excuses” (p. 466).

While the locus of causality appears to have a great impact on self-esteem, researchers are divided on the effects of self-esteem and its influence on achievement. Some argue that high self-esteem leads to increased motivation and academic success, and others that it is irrelevant or harmful, making it hard to determine whether internal or external attributions are more important for overcoming failure (Valentine, DuBois & Cooper, 2004). Valentine et al. (2004) conducted a meta-analysis of self-beliefs, including self-concept, self-esteem and self-efficacy, and found that positive self-beliefs can impact academic achievement, but the effect size was fairly small. However, more recent research that sought to verify this finding instead found that increased self-esteem, especially if it is unwarranted, may actually harm students’ academic performance. Forsyth, Lawrence, Burnette & Baumeister (2007) attempted to help students who received a D or F on an exam by encouraging them with messages aimed at raising self-esteem, but these students’ performance on their final exam was even worse than the control group, prompting
enough concern that the researchers believe that to continue similar experimental research would be unethical.

Other research has shown that emotions associated with locus of causality may not play as strong of a role in overcoming failure as much as earlier researchers believed. In studies comparing performance on midterm and final exams of more than 500 Belgium students, Van Overwalle, Mervielde and De Scuyter (1995) failed to find a connection between emotions and long-term achievement. The researchers theorized this was because the emotions reported by students after failing an exam do not last long enough to affect performance on a final exam three months later. However, because Belgium universities place more emphasis on individual exam scores than American universities do, these results may not be transferrable.

Although research around the locus of causality dimension by itself is inconclusive, more research points toward the stability and controllability dimensions as better predictors of student success and ability to overcome failure. These two dimensions are also often explained in combination with the locus of causality.

In early explanations of attribution theory, the stability dimension was tied to expectancy theory, in that “stable attributions increase the expectation or certainty that the same result will recur” (Van Overwalle et al., 1995, p. 61). Thus, a student who attributes failure to a cause that is perceived to be stable, such as low ability, is likely to expect that failure will reoccur. A student who attributes failure to an unstable cause such as lack of effort, poor note-taking or bad strategy, however, is able to expect different results if he changes his level of effort, takes more notes or uses a better study strategy (Perry et al., 2008).

Both effort and ability are associated with the internal locus of causality, but the variable of stability creates different emotional reactions depending on whether the students perceives the
cause to be likely to change. Van Overwalle et al. (1995), for example, found that attributing failure to a stable cause would increase feelings of despair and anxiety. These feelings combined with the expectation that failure is likely to continue mean that the chances of a student overcoming failure that is attributed to a stable cause are lower than another student attributing failure to unstable causes. The second student is more likely to overcome failure successfully.

The earliest research within the three main dimensions of the attribution theory of motivation focuses on the aspect of controllability. Research on learned helplessness, which emerged even before Weiner (1985) published his theory, showed that students could learn to be helpless and essentially become paralyzed to change when they felt they could not control the outcome of a situation (Seligman, 1975, as cited in Forsyth et al., 2007). A few years later, Diener and Dweck (1980, as cited in Forsyth et al., 2007) found that “students who regularly attribute their grades to factors they control are more successful than those who think they do not control their academic outcomes” (p. 450).

Several studies have been completed on perceived control, defined as “students’ subjective belief about his/her ability to influence or predict important academic outcomes” (Perry, 1991, as cited in Haynes, Perry, Stupnisky, & Daniels, 2009, p. 229). Perry, Hladkyj, Pekrun, and Pelletier (2001) studied a class of first-year students and found that those who felt more in control of their academics were more motivated and earned higher grades. Three years later, those students with high perceived control withdrew from fewer courses and had higher GPAs than students who felt less in control (Perry, Hladkyi, Pekrun, Clifton, & Chipperfield, 2005).

More recently, Perry et al. (2008) identified a continuum of controllability where the more controllable factors that were used to explain a failure, the higher students’ level of
motivation. Students at the low end of the continuum attributed their poor performance to both internal and external factors beyond their control such as low ability, test difficulty, poor teaching and bad luck. These students were most likely to have low motivation because it prevented them from seeing opportunities to resolve issues that may have led to the failure. Students who attributed their failure to just one controllable cause — low effort — had more motivation to change. However, if increasing effort failed to improve their performance, the alternative explanation was to blame themselves. The students who performed the best had a “self-protective” explanation that involved both two internal controllable causes (low effort and poor strategy), and two external uncontrollable causes (hard tests and bad teachers). They took the most responsibility for their failure but also had higher expectations for the future and earned better grades and GPAs. These “self-protective” students were able to change the controllable causes but still protect their egos by also blaming external, uncontrollable causes.

The three dimensions of attribution theory are often interwoven and make combinations that can determine how likely a student is to overcome failure. Those who attribute the causes of their failure to external sources that are unlikely to change and are out of their control are the least likely to successfully overcome a failure. Those who attribute failure to internal causes that they can change over time are much more likely to be successful in the future. Perry et al. (2008) determined that explanations that were both controllable and unstable were “functional,” because they “foster academic engagement as reflected in class attendance, note-taking and study habits” (p. 470). Causes that are uncontrollable and stable, on the other hand, were “dysfunctional,” because they “undermine motivation and achievement-striving, implying that failure cannot be changed volitionally and is likely to continue in the future” (p. 470).
Haynes et al. (2009) described an “exacerbation cycle” in which combined dysfunctional attributions to internal, stable and uncontrollable causes create a cycle that is hard to escape. “The continual use of such pejorative attributions to explain poor academic performance can result in a downward spiral wherein negative emotional states contribute to continued poor academic performance, which then further undermines emotional functioning, and so on” (Haynes et al., 2009, p. 234).

All three attributional dimensions were rarely studied simultaneously, but when combined, the analysis quickly becomes complex. Additionally, although the Perry et al. (2005, 2008) studies included more than 2,500 students, data on individual students was only available over a six-month period and was limited to Canadian first-year psychology students. The researchers concluded their results were not predictive long-term, and like many of these studies, the results were not causal, only correlational.

Achievement goal theory. A second theory that is often used to explain academic resiliency is the achievement goal theory that focuses on two varying views of intelligence and two different types of goals, both of which influence the ability to overcome failure (Dweck, 1986, 2000). This research shows that those who view intelligence as fixed are motivated to prove their intelligence and avoid challenge or the appearance of failure, while those with a more flexible view of intelligence seek to learn continually and see failure as a growth opportunity, enabling them to overcome failure much more readily. Students’ thinking about intelligence then determines the types of goals they pursue, either learning goals or performance goals.

According to Dweck (2000), the students most able to overcome failure are those who view intelligence as malleable and focus on learning rather than performing — or proving — their intelligence. Students with learning goal orientation tend to use adaptive strategies such as
exerting more effort or changing strategies when faced with failure, but those who pursue performance goals often avoid difficult tasks and act helpless when they face failure.

Various other researchers have confirmed these findings. Roedel and Schraw (1995) tested all three aspects of Dweck’s (2000) theory, including beliefs about intelligence, goal orientation and behavior determining academic performance, and found that college students’ beliefs about intelligence could impact the type of goals they pursue and in turn determine how they respond to challenges. Hoyert and O’Dell (2008) found that students pursuing learning goals earned much higher grades after failing a test than students who pursued performance goals. A second study comparing traditional and nontraditional students found the same results, that regardless of age, students with learning goals earned higher grades than those who did not. The older students were more likely to pursue learning goals and earned higher grades on average (Hoyert & O’Dell, 2009).

However, research is conflicting on the exact relationship between goal orientation and academic achievement (Eppler, Carsen-Plentl, & Harju, 2000). Roedel and Schraw (1995) found students could pursue both learning/mastery and performance goals simultaneously, but only the strength of their learning goal would impact academic achievement. Harackiewicz, Barron, Tauer & Elliot (2002) found that performance goals actually led to increased academic performance, but mastery goals helped students sustain interest in a given area. Roebken (2007) also suggested that students could pursue both types of goals, and that certain performance goals, such as outperforming other students, could actually enhance their academic performance as long as they also had mastery goals. Other research suggests that goal orientation is less significant when students are performing well, but once they experience failure, those pursuing performance
goals exhibit characteristics of learned helplessness and depression, while those pursuing mastery goals remain more optimistic (Eppler et al., 2000).

With the exception of Roebken (2007), these studies were mostly correlational, not conducted on students experiencing failure, and limited to first-year students. Roedel and Schraw (1995) suggested further experiments where students’ choices had real consequences, and Eppler et al. (2000) noted a need to study “experimentally induced failure” (p. 369).

**Regulatory focus theory.** The third theory, regulatory focus theory, examines goals based on whether students are primarily seeking to promote success or prevent failure by their actions (Higgins, 1997). The theory suggests that people have three representations of themselves: the actual self, the ideal self and the “ought” self. Higgins’ (1997) research shows that if students focus on the ideal self compared to the actual self, they have what is called a promotion system and define success as a positive outcome. They tend to be motivated by success. Students who focus more on the qualities they feel they ought to have operate under a prevention system and define success as the absence of a failure. They tend to be motivated to avoid failure. Researchers have found that those with a prevention focus are more successful after a failure than those with a promotion focus (Idson & Higgins, 2000).

Shu and Lam (2011) set out to identify which focus led to the most adaptive student behavior, that is, students who were “resilient after failure but not complacent after success” (p. 725). While they did not find a group motivated by both success and failure, they confirmed that students with a prevention focus were the most persistent after experiencing a failure, suggesting that “failure is not necessarily de-motivational” (p. 727).

This theory had the least amount of research related to overcoming failure. While both studies cited used experimental designs, both had small samples and tests that were not tied to
real-world outcomes. Additionally, Shu and Lam (2011) cautioned that their results were specific to Chinese students, citing research that people from Western cultures are more likely to have a promotion focus and persevere after success, while those from Asian cultures are more likely to have a prevention focus and be more persistent after failure (Heine et al., 2001, as cited in Shu & Lam, 2011).

**Strategies to Help Students Overcome Failure**

While the first half of this paper explored the psychological traits that enable students to be resilient and overcome failure, the second half will focus on methods used to help students become more resilient and succeed academically, even after experiencing a failure. These methods include attributional retraining, using praise to either bolster self-esteem or encourage the development of a growth mindset, and feedback intervention. Attributional retraining has the largest body of research with multiple similar studies, but research on changing students’ goal orientations is quite divided, particularly on the topic of self-esteem. Even less research on feedback intervention was available.

**Attributional retraining.** Attributional retraining (AR) is one method that educators have created to help students develop resiliency by taking more responsibility for their academics and reframing how they think about success and failure (Haynes, Perry, Stupnisky, & Daniels, 2009). The typical protocol for AR includes a pre-training assessment of psychosocial variables such as perceived control, optimism and attribution style. Once students receive their first grades, they are then asked to rate their “perceived success” on the test and in college generally, and encouraged to think about the reasons for the quality of their performance. The “induction” phase, when students are introduced to the components of AR, includes a presentation about controllable factors of academic performance in either video or handout form.
This is followed by a group discussion to reinforce concepts, an aptitude test designed to be failed so that students can practice what they have learned, a writing assignment for further reflection, and finally a handout for students to take home as future reference and reinforcement. The final step is a post-AR assessment several months after the initial training (Haynes et al., 2009).

Research dating back to 1982 has explored the effectiveness of attributional retraining in both laboratory and field settings. Wilson and Linville (1982) studied “vulnerable freshmen” who had GPAs below a 3.5 at the end of their first semester, were worried about their academic performance and thought they could have done better. Those who received AR treatment received a pamphlet and watched a video that emphasized that poor academic performance could be temporary, thus attempting to change students’ attributions from stable to unstable causes. Students who received AR improved their GPA after the end of their second year in school and were less likely to have dropped out than those who did not go through the training. Noel, Forsyth, and Kelley (1987) used a similar video method that encouraged students to switch from external to internal explanations for poor performance, resulting in higher grades in a particular college class. Van Overwalle (1989) studied attempts to shift attributions of students who had failed a midterm exam from uncontrollable to controllable factors with a video emphasizing increased effort and better study strategies. Students who received the training earned higher grades on the remaining class exams than those who did not receive the training. Perry and Penner (1990) and Menec, Perry, Struthers, and Schonwetter (1994) performed similar studies in laboratory settings and found comparable results, that students “at-risk” for failure benefitted from AR focused on improving controllable causes of failure, such as effort and strategy.

More recent research has continued to document that AR focused on controllable
explanations such as lack of effort or poor strategy positively impacts future academic achievement (Haynes et al., 2009). Researchers have found that compared to similar students who do not receive AR, those who do receive training withdraw from fewer courses (Ruthig, Perry, Hall, & Hladkyj, 2004), have increased motivation (Haynes et al. 2008), feel more control over their academic performance, and are less likely to suffer negative consequences of over-optimism (Haynes et al. 2006).

The majority of this research has been conducted on first-year psychology students, but most included randomized control groups in order to rule out alternative explanations. The earliest studies on AR found positive effects on achievement, but they were conducted on at-risk students who had not yet experienced failure (Wilson & Linville, 1982, 1985; Noel, Forsyth, & Kelly, 1987; Menec, Perry, Struthers, & Schonwetter, 1994; Perry & Penner, 1990; Ruthig et al., 2004). Only a few of the studies focused on the effectiveness of AR for students who had already experienced failure. Perry et al. (2010) studied students who failed their first psychology test compared to the students who earned average or high test grades. They found that students who received AR in the low and average achievement group significantly improved individual exam grades, final course grades and overall GPA during their first year compared to students who did not receive AR. Students who earned the highest grades and arguably did not need the training showed no significant differences on later exam grades. Perry and Struthers (1994, as cited in Haynes et al., 2009) also conducted research on perceived failure, that is students who may not have objectively failed, but failed to meet their own personal standards of performance. Students who perceived their performance as a failure and received AR had higher test scores and final grades compared to students who did not receive training, even when high school grades were used to ensure no differences in actual academic ability.
**Praise: Boosting self-esteem or shifting mindsets.** Researchers have also examined the effects of praise on improving students’ academic performance and helping them overcome failure. Two schools of thought seem to exist: praise of a person designed to improve self-esteem and praise of a person’s effort designed to encourage continued effort. Studies done on children have found that praising intelligence temporarily boosts self-esteem, followed by several negative effects such as choosing less challenging tasks, decreased motivation and giving up more easily when faced with setbacks. However, children who were praised for effort were much less likely to exhibit those patterns after a failure (Kamins & Dweck, 1999).

Aronson, Fried, and Good (2002) found similar results applying those methods to college students. In a study designed to counteract the “stereotype threat” in African-American college students, they found that praising effort, designed to foster a view of intelligence as malleable instead of fixed, increased both African-American and White students’ GPAs and enjoyment of school work.

Other studies focused solely on boosting self-esteem have seen less promising results. Although Valentine et al. (2004) found a modest impact of self-esteem on academic performance in their meta-analysis, they determined that “interventions that are aimed solely at improving students’ views of themselves” were ineffective (p. 129). And although their study was much smaller, Forsyth et al.’s (2007) research design allowed them to draw causal conclusions that boosting self-esteem might actually be harmful. Students who had experienced failure actually did worse after being encouraged to continue to think highly of themselves. Baumeister, Campbell, Kruger, and Vohs (2003) conducted a survey of the literature regarding self-esteem and recommended “using praise to boost self-esteem as a reward for socially desirable behavior and self-improvement” (p. 1). They followed this recommendation with the analysis that “praise
that bolsters self-esteem in recognition of good performance can be a useful tool to facilitate learning and further improve performance in the future. Praising all the children just for being themselves, in contrast, simply devalues praise and confuses the young people as to what the legitimate standards are” (Baumeister et al., 2003, p. 39).

As an alternative to boosting self-esteem, Neff, Hsieh, and Dejitterat (2005) suggested aiming to boost self-compassion after conducting two studies on college students experiencing failure on difficult exams. Compared to self-esteem, self-compassion focuses more on being kind to oneself and taking a nonjudgmental attitude toward failure. Although the studies were correlational, their findings suggest that self-compassion helps students pursue more mastery-oriented goals by “freeing individuals from the debilitating consequences of harsh self-criticism, isolation, and over-identification in the face of failure” (p. 283-4).

**Feedback intervention.** Feedback interventions (FI), defined by Kluger and DeNisi (1996) as “actions taken by (an) external agent(s) to provide information regarding some aspect(s) of performance” have been researched for over a century, and practiced much longer than that, if one considers feedback interventions such as receiving a grade on a test (p. 255). Historically, many studies have shown that feedback interventions were motivational and would improve performance unless it was too negative, but little research was available specific to overcoming failure. A meta-analysis by Kluger and DeNisi (1996) determined that many moderating factors contribute to the success of feedback and whether or not it motivates the person receiving such feedback to improve performance. In their study, feedback often led to improved performance, but in one-third of the cases, it did not.

They found that feedback directing attention to specific tasks or learning processes improved performance, while feedback directing attention to the person, such as grades, could
hurt performance, even when the feedback was positive. In one study, “grades increased ego involvement but did not affect performance relative to no-FI control, whereas task-focused FI (specific comments) increased task involvement and consequently performance” (Butler, 1987, as cited in Kluger & DeNisi, 1996, p. 267). Overall, praise, discouraging feedback or feedback that was likely to harm self-esteem all shifted attention to the self rather than the specific task and were less effective (Kluger & DeNisi, 1996).

Feedback was most effective when it was given in conjunction with a goal about a familiar task. The feedback had to focus on the actual task rather than the person performing the task or their abilities, and often included the correct answer and the reason why it was correct. Even with those parameters, the researchers concluded feedback intervention was not always effective (Kluger & DeNisi, 1996). Alternatives to feedback intervention included simply providing more information about how to correctly perform a task without providing feedback on performance, or creating learning environments that encouraged trial and error so that external feedback would be less necessary (Balzer et al., 1989; Brehmer, 1980, as cited in Kluger & DeNisi, 1996).

Shu and Lam (2011) conducted tests of feedback intervention and its effectiveness on students with different regulatory focuses. They cautioned that educators should be more cognizant of individual differences when giving feedback, in that students with a prevention focus may be more motivated by negative feedback, while those with a promotion focus may not benefit from feedback. In all three methods — feedback intervention, praise and attributional retraining — individual differences seem to be key, just as individual differences in personality, explanations of failure and the goals pursued can determine how successful a student will be at overcoming failure.
Summary of the Study

College is often a place where students face academic failure. For some students, failure of an exam leads to failing a class and eventually leaving school altogether. But other students are able to overcome their initial failures and go on to successful academic careers. The purpose of this study was to determine what characteristics students possess that help them successfully overcome failure and examine interventions to assist students in developing those characteristics and overcoming failure. The researcher posed the research questions “What psychosocial characteristics do students possess that allow them to overcome failure well?” and “How can those who work with students experiencing failure help them overcome failure and succeed academically?”

Traits of Resilient Students

The traits of resilient students include their specific explanations for success and failure, and the types of goals they pursue. In this paper, the research was organized around three theories: attribution theory of motivation, achievement goal theory, and regulatory focus theory.

Bernard Weiner (1985) proposed the attribution theory of motivation, and his research provided empirical evidence that a person’s explanation of success and failure determines his ability to persevere. These attributions have three dimensions: the locus of causality, stability and controllability. Weiner (1985) and other researchers have found that the most resilient and successful students attribute their failures to unstable and controllable causes, such as the amount of effort put into studying, instead of innate ability or luck (Van Overwalle et al., 1995; Perry et al., 2008). In two related studies, Perry et al. (2001) and Perry et al. (2005) found that first-year students who felt more in control of their academics were more motivated and earned higher grades. These results held true in their later longitudinal study (Perry et al., 2005). Perry et al.
(2008) also identified a continuum of controllability where the most motivated students used the most controllable factors to explain their successes and failures.

Research also exists on the locus of causality dimension of attribution theory, but it is much less clear. Weiner (1985) theorized that students who attribute failure to internal causes are more likely to experience shame, guilt, and lowered self-esteem, while those who attribute failure to an external cause are more likely to be angry. Perry et al. (2008) confirmed that external attributions were most likely to protect self-esteem, but the research on self-esteem and its benefits is highly contested. Van Overwalle et al. (1995) failed to find a connection between emotions and long-term achievement, and the meta-analysis conducted by Valentine et al. (2004) found only a modest impact of positive self-beliefs on achievement. Forsyth et al. (2007) found that attempts to boost self-esteem actually hurt performance and warned against conducting similar experiments for ethical reasons. This was only one study with a relatively small sample size, however, so does not seem to overrule the Valentine et al. (2004) study completely.

The second theory, Carol Dweck’s (1986, 2000) achievement goal theory, describes the most resilient students as those who view intelligence as malleable and pursue learning goals rather than performance goals. Several studies confirmed that both learning and performance goals could predict academic achievement (Roedel and Schraw, 1995; Eppler et al., 2000; Harackiewicz et al., 2002). However these studies were correlational and did not focus specifically on students experiencing failure. Hoyert and O’Dell (2008, 2009) found that once students experience failure, pursuing learning goals is most effective in overcoming that failure.

The third theory, regulatory focus, identified two different goals that students might pursue that affect resiliency. The theory suggests that students who define success as a positive outcome have a promotion focus and are motivated to succeed, while students who define
success as avoiding failure have a prevention focus and are motivated to avoid failure (Higgins, 1997). Idson and Higgins (2000) found that students with a prevention focus were most successful in overcoming a failure. Shu and Lam (2011) confirmed these findings, but cautioned that their results were culturally dependent, as other studies have found people from Western cultures are more likely to persevere most after success, while those from Asian cultures are more likely to persist more after failure (Heine et al., 2001, as cited in Shu & Lam, 2011).

**Strategies to Help Students Overcome Failure**

The second research question examined interventions to help students overcome failure, including attributional retraining, praise to boost effort or self-esteem, and feedback intervention.

Attributional retraining (AR) is based on attribution theory and includes an assessment of attribution style and training on one of the three attributional dimensions (Haynes et al., 2009). Multiple studies have found AR to be an effective method (Wilson & Linville, 1982; Noel, Forsyth, & Kelly, 1987; Van Overwalle, 1989; Perry & Penner, 1990; Menec et al., 1994; Ruthig et al., 2004). These studies, however, were focused on preventing failure and promoting achievement, and only a few have been conducted specifically on overcoming failure (Perry & Struthers, 1994, as cited in Haynes et al., 2009). Perry et al. (2010) administered AR in a study of nearly 500 first-year students who failed an exam and found a significant effect on their achievement compared to the control group. This was the most relevant study on overcoming failure, and it would benefit from replication and further inquiry.

The second method examined to help students overcome failure was using praise to boost either effort or self-esteem. While Valentine et al. (2004) found a modest impact of self-esteem on academic performance in their meta-analysis, they determined that aiming only to boost self-esteem was ineffective in improving performance. Forsyth et al. (2007) found these
types of interventions downright harmful, and that students who experienced failure actually did worse after attempts to boost their self-esteem. The preferred interventions involved praising students for their effort, or focusing on self-compassion rather than self-esteem. Kamins and Dweck (1999) found that praising children’s intelligence would temporarily boost self-esteem, but those same students had lower motivation and gave up more easily when faced with setbacks later on than children who were praised for their effort. Aronson, Fried, and Good (2002) found similar results with college students. A third study on self-compassion suggested that students who are taught to be kind to themselves when experiencing failure may be better equipped to persevere than those who are encouraged only to have high self-esteem (Neff et al., 2005).

Feedback intervention was the third method examined. Historically, studies have shown that providing students feedback on performance was motivational and would always improve performance unless it was too negative. However, a meta-analysis by Kluger and DeNisi (1996) found that many prior studies did not meet parameters of good research. They found that feedback was most effective when it focused on the actual task rather than the ability of the person performing the task. Even then, the researchers concluded that feedback intervention was not always effective (Kluger & DeNisi, 1996). Shu and Lam (2011) confirmed some of Kluger and DeNisi’s (1996) findings, that those with a promotion focus may not benefit at all from feedback intervention, especially if the feedback is negative.

Conclusions and Recommendations

Based on the research presented above, it is clear that psychosocial factors impact students’ ability to overcome failure, and that certain interventions can help students develop those traits. More research could be conducted on the best ways to implement AR in actual classroom and advising settings, but enough evidence exists to suggest that colleges and
universities should consider incorporating AR into their academic support services. The research on learning and performance goals also seems promising, although effective interventions are more contested. Further research is need on self-esteem as well as self-compassion and its potential applications in academic settings.

Research in the third area, feedback intervention, was severely limited in this particular study. This researcher could expand the search terms to perhaps find more research, but there did not seem to be much available on using the theory in real-life settings, other than the warning that educators should consider individual differences when working with students.

There were some broader limitations to the research found in this study, including overemphasis on first-year psychology students over relatively short time periods, studies that were primarily correlational, and constructs that are difficult to define and measure. Much of the research focused on preventing failure rather than helping students already experiencing failure.

Overall, research on helping students overcome failure seems important to continue, especially given the high cost of a college and high drop out rates. The theories and methods presented in this paper offer a good foundation for continued research in overcoming failure and promoting academic success.
References


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