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Why Students Think They Fail and What Instructors Can Do About It:
An Approach Using Attribution Theory

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Abstract

Seeking to understand what factors contribute to students failing has long been the plight of instructors throughout time. Attribution theory, shaped by Bernard Weiner, can be applied to these situations to determine to what causes both students and instructors attribute failure. It is the combination of a person’s own attributions of the causes of failure in addition to other people’s reactions to failure that work in tandem to influence students’ future actions. It is possible, however, to change a person’s attributions to ones that will lead to increased motivation to aim for success. This paper examines current research and literature to discuss the implications of Weiner’s Attribution Theory in an educational context.
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It is a part of human nature for people to investigate the causes for the outcomes of both life’s successes and failures. More importantly, it is the factors to which people attribute these successes and failures that will have the greatest effect on future action (Siegel and Shaughnessy, 1996). According to Bernard Weiner (2008), the originator of the modern structure of attribution theory and one of the leading voices in the study and application of the theory, making these attributions is necessary in order for a person to change the behaviors that have led to negative outcomes. This desire to seek causes extends to all areas of a person’s life, including academic successes and failures. A student’s perception of the causes of failure affects the degree to which the student will come to expect to fail again in the future. How can knowing this help an instructor work with students to increase the likelihood of the student achieving academic success? This paper seeks to answer this question by reviewing current research and literature on the theory of attribution to discuss the basic principles of the theory, the implications of applying this theory in instructional settings, and evaluate a study in the use of Attributional Retraining.

Basic Principles of Attribution Theory

General Overview

Attribution theory can be linked to theories of motivation, which at one time, were only considered in behavioral views of psychology and learning (Driscoll 2005). However, in the 1960’s and 1970’s a shift began to occur that leaned more towards cognitive views of learning, and researchers sought to understand why some rewards resulted in increased behavior but while others did not, essentially, what motivates a person to do something (Driscoll 2005). Attribution theory examines this idea and asserts that a person’s interpretation of past experiences, or
attributions for causes of an outcome, will determine future behaviors, mirroring tenets of objectivism where knowledge is acquired through one’s experiences with one’s environment.

As outlined in Driscoll (2005), there are only three facets into which a person’s attributions for causes of events can be classified: locus, stability, and controllability. First, locus refers to causes that a person perceives to be internal or external. Internal causes are those that lie inside of the person, such as ability, effort, and mood. External causes are those that are outside of the person, such as other people’s attitudes or clear instructions for a task. Second, stability describes the degree to which a cause is changeable over time. Stable causes, such as ability, are those that typically are not expected to change over time, whereas unstable causes, such as luck or illness, are those that are fickle and will likely change over time. Lastly, controllability describes the degree to which a person perceives they are able to control the cause of failure or success (Driscoll, 2005). Hence, an example of a controllable cause would be the amount of effort a person puts into achieving a task, and an example of an uncontrollable cause would be bad weather making a person late for class. Driscoll (2005) also emphasizes that a cause can be classified in more than one facet, so, for example, a student who attributes failing a test to not spending enough time studying is classifying the cause of failure as internal (“Something I did”), unstable (“I can spend twice as much time studying for the next test”), and controllable (“I can change my behavior, so I can pass other tests in the future”).

Although it may be human nature to seek the causes of events, Weiner (2000) clarifies that people do not try to figure out the causes of every outcome they experience. On the contrary, those outcomes that are perceived as negative, unexpected, or important are the ones that will prompt a person to reflect on the causes of that outcome (Weiner 2000). When a person expects to succeed and does, there is no need to change that behavior, which, in turn, means the
person is not likely to seek the causes that led to the outcome. Likewise, even if a person expects to succeed but fails to do so, if the task is one that is deemed unimportant then, again, seeking the causes of that failure will also be unimportant.

**Motivation and Attribution**

In an article focusing on motivation and attribution, Weiner (2000) details two theories of motivation, the *Intrapersonal Theory of Motivation* and the *Interpersonal Theory of Motivation*, both of which apply principles of attribution theory. To discuss the *Intrapersonal Theory of Motivation*, Weiner (2000) uses the metaphor of people as scientists trying to understand themselves, their environment, and how they should act in their environment. He goes on to explain the process that people go through to obtain the knowledge that will determine the actions they decide to take. First, an event occurs which causes some emotional reaction, such feeling happy or unhappy, satisfied or unsatisfied. If the outcome is negative or results in a negative reaction, the person will most likely feel compelled to determine the cause for the outcome, which can be influenced by a variety of factors, including the person’s history of success or failure or comparing the outcome to other people’s results. Lastly, the person settles on a cause for the undesired outcome (Weiner 2000). It is in this last step that principles of attribution theory appear.

In order for a person’s motivation to be increased or maintained, that person must expect to succeed and value success (Weiner 2000). Therefore, according to the *Intrapersonal Theory of Motivation*, if a person perceives the causes of failure as stable, they will expect the same outcome in the future, whereas perceived unstable causes lead to the person expecting a different outcome in the future. It is this belief, that the situation, and thereby the outcome, can change in the future that increases or maintains a person’s motivation to try again in the future. However, it
is not enough for the person to just expect the situation and outcomes to change in the future; as previously stated, the person must also value success. The value placed on success is derived from emotions associated with both failure and success and is connected to the locus and controllability dimensions of the attribution theory (Weiner 2000). Causes attributed to internal and controllable factors produce feelings of pride, if met with success, or guilt, if met with failure. Equally, causes attributed to internal and uncontrollable factors lead to feelings of shame, humiliation, and embarrassment (Weiner 2000). One can then conclude that greater value will be ascribed to those outcomes that result in positive feelings of pride, which is to say, the causes that are attributed to internal and controllable factors. Ultimately, the combination of a person’s thoughts (expectations) and feelings (value) are the factors that determine future actions (Weiner 2000).

The second theory that Weiner (2000) discusses in his article is the Interpersonal Theory of Motivation, which involves the thoughts and feelings that other people experience as a result of another person’s success or failure. For example, a parent may feel angry when their child fails a test because the child did not study, but may feel sympathy for the child who fails a test despite applying a sincere effort. According to Hereli and Weiner (2002), other people’s perceptions of success and failure shape a large part of a person’s self-concept and emotional make-up. This implies that creating goals, determining measures and causes of success, and changing future behavior are not just an individualistic endeavor, but are determined through a social context. Hereli and Weiner (2002) go on to state, because of this social context that includes other people’s reactions to success or failure, in some instances, people’s reactions to an outcome may be taken into consideration over the outcome itself when determining a future action to take.
Just as there is a process that one follows in Weiner’s (2000) description of the Intrapersonal Theory of Motivation, a similar sequence is followed in the Interpersonal Theory of Motivation. First, there is an outcome of an event which, in turn, leads an involved observer, such as a parent or teacher, to search for and settle upon a cause for the outcome. Based on what this cause is attributed to, the observer draws a conclusion about the person, which elicits a reaction from the observer. If the negative outcome is attributed to factors perceived to be under the person’s control, the observer will most likely feel angry and hold the person responsible for his actions and the outcome. If, on the other hand, the negative outcome is attributed to uncontrollable factors, the observer will most likely feel sympathy for the person and not consider the person to be responsible for the outcome. The general consequence is that causes perceived to be controllable result in retributive actions being taken, while causes perceived to be uncontrollable result in utilitarian action being taken (Weiner 2000).

Attribution in the Classroom

As previously mentioned, motivation and self-concept are largely affected by other people’s perceptions of the causes for one’s success or failure. Reyna and Weiner (2001) discuss the nature of this phenomenon as it appears in the classroom through a study that examined the type of action teachers exhibited dependent upon the teachers’ attributions of students’ negative academic outcomes. In this study Reyna and Weiner (2001) presented both a group of high school teachers as well as a group of college students told to pretend to be teachers with several academic scenarios that depicted different students failing a test but attributing the causes of the failure to factors that varied between controllable vs. uncontrollable, stable vs. unstable, and internal vs. external. The results from examining both groups illustrated that when the study participants perceived the causes of failure to be beyond the student’s control, they did not
consider the student to be responsible for his actions. Therefore, they would feel sympathetic towards the student and their reactions would be utilitarian in nature, which is, focusing on working with the student to change future behaviors. Conversely, Reyna and Weiner’s (2001) study showed that when the study participants perceived the causes of failure to be under the student’s control, they considered the student to be responsible for his actions, which then led to feelings of anger. Consequently, the study participants’ reactions would be retributive in nature, focusing on retaliation and not working with the student to change future behavior, a “you got what you deserved” kind of attitude.

The results of this study are important for instructors for several reasons. Teachers are constantly being called upon to make assumptions about the causes of students’ behavioral and academic outcomes (Reyna 2008). Understanding the theory of attribution and the effects that the teachers’ perceptions can have on the student can lead instructors to intentionally construct a framework for dealing with students’ negative outcomes that will be perceived as fair by the students. This framework will not only be considered fair, but it will be consistent, which leads students to feel like they know what to expect from the instructor. When students know what to expect, they understand that they play a part, or have some control, over the outcomes of their future actions, since part of staying motivated is the belief that the individual has control over the situation to be able to ensure a desired outcome (Reyna & Weiner 2001). Another reason the results of the aforementioned study can be helpful to instructors is in the response they offer to failing students. The overall goal for instructors should be to assist students in achieving success. However, the tendency is for peers and instructors alike to seek retributive action and be somewhat unwilling to help a student when failure is perceived to be the student’s own fault
(Ahles & Contento 2006). Being consciously aware of this concept can inspire instructors to move beyond their personal beliefs and work with the student to achieve success.

Implications for Instruction

Instructing Students

Research has shown that a person is more likely to stay motivated to try a task again in the future if that person has attributed the cause of the original outcome to factors that are unstable and controllable. Because of this occurrence, Driscoll (2005) encourages instructors to focus on teaching learners to recognize that their learning depends on their efforts, which are unstable and within their control, and not their ability, which is generally considered stable and uncontrollable. This approach, however, is in direct contrast to one recommended by Tollefson (2000), who states that rewarding a student’s efforts will not necessarily result in higher levels of motivation. On the contrary, the student may perceive an attribution of success as a result of effort as a reflection on his lack of ability (Tollefson 2000). The student essentially believes, “I must work harder because I’m not good enough,” which can adversely affect the student’s self-concept. Although it may not be productive to focus on a student’s efforts, Hereli and Weiner (2002) suggest that teachers may need to redirect a student’s efforts towards more suitable tasks if the student is consistently failing at a given task. If this strategy is used, instructors should be careful to address the task difficulty and not the student’s lack of ability. For example, an instructor may encourage a student to try a different task by saying, “This problem may be a bit difficult, so let’s try X” instead of saying, “I don’t think you can solve this problem, so let’s try X.” In the second statement, the implication is that the student lacks the ability to do the task, whereas in the first statement, the implication is that the task is difficult and that is why the student is not successful at completing it. Thus, Tollefson (2000), states that teachers should
focus on the student’s involvement with a given task, since the mastery of some task is the overarching goal of instruction.

Research has also shown that people tend to like to do activities they are good at, so their motivation to keep doing that activity is likely to remain high (Siegel & Shaughnessy 1996). For that reason, in an interview reported by Siegel and Shaughnessy (1996), Bernard Weiner recommends that instructors provide students with ample opportunities to practice tasks that have traditionally resulted in negative academic outcomes. The more a learner practices a task, the better they will get at successfully performing that task, which will increase the learner’s expectancy to succeed, an integral component of motivation. In this same interview by Siegel and Shaughnessy (1996), Weiner also suggests that when a student applies sincere effort towards completing a task but fails to do so, it may become necessary for the instructor to change the task, so the student will attribute the failure to task difficulty, an uncontrollable factor and a sentiment that mirrors Tollefson’s (2000) suggestions.

Instructors must be careful in their reactions to students’ academic failures. For example, an instructor may attribute the causes of a student’s failure to low ability, a factor considered to be beyond the student’s control. The instructor, then, will most likely not hold the student responsible for the failure and offer sympathy and unsolicited help to the student. This, in turn, leads the student to also contribute the failure to his lack of ability, though he may not have initially done so. When the student sees the causes of failure to be beyond his control, he will lose motivation and will come to expect failure, causing lowered self-esteem. This lowered self-esteem and expectancy to fail creates an unfortunate cycle of failure in the student’s academic life (Siegel & Shaughnessy 1996).
It is, however, possible for a student’s attributions to change. Before an instructor can help a student to achieve this, though, the learner absolutely must care about succeeding (Siegel & Shaughnessy 1996). If the learner places little to no value on success, he will not care about the causes of failing. In the interview conducted by Siegel & Shaughnessy (1996), Weiner states that the instructor needs to determine what may act as incentives towards changing the learner’s value of and motivation towards achieving success. Once the instructor determines that the learner does place value on success, there are a number of strategies that can be used to work with the learner to change his attributions. Some examples that Weiner mentioned are role models, reinforcement, and persuasion; though he is careful to state that, at the time of the interview, there had not been enough research done on the topic to determine which could be used as best methods (Siegel & Shaughnessy 1996).

**Instructing Instructors**

As Reyna (2008) stated in her article, making attributions about the causes of students’ outcomes is an intrinsic part of the educational system. This is generally done in circumstances where instructors are responsible for a large number of students and must make these attributions in a relatively short amount of time on top of the other myriad of responsibilities instructors must undertake. An outcome of these factors is that instructors quite often rely on stereotypes to supply their attributions. Reyna (2008) discusses a few other conditions that may lead an instructor to rely on stereotypes for the causes of students’ academic outcomes. One condition is if some event occurs that is in line with an existing stereotype, such as an Asian student consistently doing well in a math class. A second condition is when there is outside pressure to figure out why some event or outcome happened. A third condition Reyna (2008) discusses is
when the stereotype stands out as an obvious cause above other, perhaps more accurate, underlying factors.

Unfortunately, there are negative consequences to instructors attributing causes of students’ outcomes to stereotypes. One such consequence is when the stereotype provides an attribution of low ability as a cause for failure. When this happens, teachers will hold the student to low expectations and will not provide the student with opportunities to succeed, since the instructor essentially believes that it will not matter either way (Reyna 2008). This creates a catch-22 of sorts. The student is not given opportunities to succeed, so he does not have an opportunity to practice the tasks, which results in failure when confronted with performing the task. This leads both the student and the instructor to expect failure, which supports the stereotype that was the initial source of the attribution.

In order to stop these attributes based on stereotypes, Reyna (2008) suggests that part of a pre-service teacher’s training should include learning to be aware of the stereotypes that exist. The more aware instructors are of the existing stereotypes, the greater the likelihood attributions of students’ outcomes to these stereotypes will be prevented, or at the very least, reduced. This is most essential when the attributed factors hinder the student’s chances of achieving academic success in the future.

Tollefson (2000) discusses in his article that over time, teachers are prone to develop beliefs about what they are capable of doing or not doing to assist students in achieving success. Teachers who have high expectations of themselves will equally have high expectations for their students, which results in the students performing better than those students who have teachers with lower expectations. As the students achieve success, this promotes the teachers expectancy to be able to help future students succeed. Tollefson (2000) goes on to suggest that teachers will
change their teaching styles (including adjusting expectations of students) when they expect to be able to implement new strategies well, they will be rewarded for changing, and they value the reward for changing. To address teachers’ expectations for using new strategies, Tollefson (2000) believes that teachers should be given opportunities to observe other teachers who use strategies effectively, and teachers should be given opportunities to practice the strategies with an expert or knowledgeable person observing them and offering feedback or coaching on how to improve using the strategy.

A Study in Attribution Theory

Method

Hall, Hladkyj, Perry, and Ruthig (2004) conducted a study that sought to determine if individualized Attributional Retraining (AR) would benefit college students by improving their end-of-year grades, motivation, and general feelings about school. The goal of AR is to help students learn to attribute failure to factors that the students can control and factors that are unstable, which will result in increased or, at the least, maintained levels of motivation to succeed. The typical sequence that Attributional Retraining follows is showing students a videotape featuring students attributing causes of success and failure to factors that are controllable and unstable. Following this, the students do activities that assist them in making meaning of the information covered in the video, exercises referred to as consolidation exercises. Generally, the students do the consolidation exercises in groups. Hall et al. (2004) propose that the issues with general group consolidation exercises is that they are not specific to the problems that individuals students may face, specifically those students described as at-risk (i.e. a history of academic failure, external locus of control, etc.).
A specific factor that places students at risk of failing that Hall et al. (2004) address involves elaborative learning. Elaborative learning strategies are those that students use in order to form a deeper understanding of information by connecting the new information to existing knowledge. Students who do not use elaborative learning strategies frequently are more likely to fail in school. Hall et al. (2004) felt that this at-risk characteristic would be an appropriate one to focus on in their study. They hypothesized that using hands-on, individualized consolidation exercises following an AR intervention would aid the students in internalizing the principles of AR, since the consolidation exercises that follow the videos in AR aim to achieve the same goals as elaborative learning strategies (Hall et al. 2004).

To conduct the study Hall et al. 2004 used 203 volunteers enrolled in a Midwestern university introductory psychology class. They separated the participants into three groups: those who would receive a writing assignment as a consolidation exercise following an AR video, those who would receive a timed aptitude test as a consolidation exercise following an AR video, and those who would not receive any treatment (control group). Within those groups, Hall et al. (2004) also classified the students into two subgroups: high elaborators and low elaborators, in reference to the frequency the students reported using elaborative learning strategies. The two groups that would be receiving the Attributional Retraining intervention first viewed a short video that featured two graduate students in psychology discussing how attributing the outcome of taking an exam to factors that were controllable contributed to improved grades and motivation later. Following the video, a professor summarized the points of the video, emphasizing that a student’s perception of events influences actual future performance. Later in the academic year, Hall et al. 2004 conducted surveys using questionnaires to measure students’ perception of their level of motivation and control over events, feelings about school, along with
academic records and compared them to earlier results of similar questionnaires administered to the participants at the start of the study.

Results

Hall et al. (2004) found that Attributional Retraining interventions that use individualized consolidation exercises improve students’ motivation, performance, and feelings about school for both those labeled as high elaborators and low elaborators. Students reported feeling “more hopeful, less ashamed, more successful, and more in control” of their academic performance following the AR interventions (Hall et. al, 2004, p. 607). Most astonishing, both high and low elaborators from the groups receiving AR intervention had final psychology course grades that were 5% higher than the control group, which equates to an entire letter grade higher. While course grades were higher for both high and low elaborators, this same improvement did not generalize to the low elaborators’ cumulative GPA. In their interview with Bernard Weiner, Siegel, J., & Shaughnessy (1996) explain that attributions are situation specific and oftentimes do not generalize to broad categories. Therefore, a learner who fails in math may attribute the cause to a factor that is uncontrollable, such as the test questions being too hard, but this same learner may attribute failing to make the basketball team to a factor that is controllable, such as not training hard enough. This helps to explain the results regarding cumulative GPA that Hall et al. (2004) reported.

Implications of Results

The results of Hall’s et al. (2004) study suggests that using elaborative learning strategies as part of the consolidation process for all students will facilitate comprehension of the premises of Attributional Retraining. More specifically, using individualized consolidation exercises allows the students to clarify the information presented during AR interventions in a personal
and meaningful way, which is better than group consolidation exercises where instructors may be unable to facilitate each group in making meaning of the information (Hall et al. 2004). This practice in elaborating on the material is especially beneficial to at-risk students because it gives them an opportunity to think about and work with the information in an ordered way (Hall et al. 2004).

The results of the study also indicate that it would be beneficial to directly teach elaborative learning strategies to at-risk students before using an Attributional Retraining intervention (Hall et al. 2004). The more a student has internalized the principles addressed in AR, the more they will begin to attribute outcomes to factors that they can control and are unstable. Students will then expect to be able to control future actions to achieve academic success, which, along with increased feelings of optimism, will encourage the students to stay motivated in striving for success.

While there may be a number of reasons why a person believes he has failed, the ones that research have indicated to be most influential in changing future behaviors are those reasons that the individual perceives to be unstable and controllable. Armed with this knowledge, instructors can design tasks and classroom environments that supply students with ample opportunities to succeed and help the students to understand that whether they fail or succeed, the control lies in their hands. The more that a student experiences success, the more he will come to expect to succeed and value the feelings of pride and self-esteem that are associated with success achieved through factors within the student’s control. Students will ultimately remain motivated and, consequently, consistently work towards success in the future.
References


