

The Attribution Theory of Learning and Advising Students on Academic Probation

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Academic advisors need to be knowledgeable of the ways students learn. To aid advisors in their exploration of learning theories, I provide an overview of the attribution theory of learning, including recent applications of the theory to research in college student learning. An understanding of this theory may help advisors understand student self-perceptions and academic motivation. This theory may be especially useful to advisors working with students on academic probation, and potential applications of the theory to advising students on academic probation are discussed. Suggestions for future research on student attributions and students' attempts to return to good standing are provided.

KEYWORDS: academic difficulty, advising theory, learning outcomes, learning theory, retention, student outcomes

Academic advising as a form of teaching has been advanced for decades (e.g., Appleby, 2008; Creamer, 2000; Crookston, 1972/1994/2009; Ender, Winston, & Miller, 1984; Frost, Habley, King, Vowell, & White, 1995; Grites, 1994; Hagen, 1994; Miller & Alberts, 1994; Robbins, 2009; Ryan, 1992). Therefore, academic advisors benefit by becoming familiar with learning theories that define the means and mechanisms through which students learn (Hemwall & Trachte, 1999, 2003, 2005). Advisors can consider numerous learning theories to apply in their work with students; however, busy, professional academic advisors and faculty members find little time to research different learning theories and, subsequently, often fail to consider the utility of individual theories to their advising responsibilities and philosophy. To help academic advisors traverse the vast sea of learning theories, I provide an overview of one learning theory with practicable applications in working with students.

Attribution theory elucidates the causes students perceive of academic outcomes for themselves and for others (Schunk & Zimmerman, 2006). Clarifying a student's attributions for learning, failure, and success can be especially helpful to advisors working with students on academic probation. An understanding of attribution theory may help

advisors unearth student perceptions concerning their probationary status. It may also help advisors dispel students' misperceptions about academic performance.

In this article, I provide an overview of the attribution theory of learning, including recent research on college-student academic performance. I also discuss potential applications of the theory to working with students on academic probation. Finally, I conclude with a call for research to empirically study the potential applications discussed as well as probationary students' attributions and their attempts to return to good academic standing.

Overview of Attribution Theory

A theory of attribution was first proposed by psychologist Fritz Heider (1958). It focused on the events ordinary people encounter in their lives and whether people attribute the outcomes of these events to internal or external factors. Julian Rotter's (1966) theory of locus of control examined individual perceptions of control over events. Influenced by both Heider's and Rotter's work, Bernard Weiner completed a series of studies in the 1970s and 1980s that became the foundation of the attribution theory of achievement (Schunk & Zimmerman, 2006). Weiner's theory describes how individuals interpret events and how that interpretation influences motivation for learning as well as future learning behaviors. The perceived causes of event outcomes are called *attributions*; individuals create attributions for the causes of their own actions as well as the actions of others (Schunk & Zimmerman, 2006).

Numerous attributions for success and failure range from mood to instructional bias to illness (Weiner, 1979). Most often, individual successes and failures in academic achievement are attributed to four factors: ability, effort, task difficulty, and luck (Schunk & Zimmerman, 2006). Since Weiner's original theory, these factors have been accepted as culturally determined. In mainstream American culture, ability and effort appear to be the most frequently perceived causes of outcomes (Graham, 1991). Individuals from different cultures may place more emphasis on luck, difficulty of task, or other factors. This can be important for advisors to consider when working with diverse student populations.

Each of the four general factors identified by Weiner is characterized by the causal dimensions of locus, stability, and controllability (Schunk & Zimmerman, 2006). The locus is either internal or external to the individual. The stability dimension refers to the perceived ability of the factor to change over time; it is a relative attribute (stable vs. unstable). Controllability refers to whether or not the individual can control the factor (controllable or uncontrollable) (Weiner, 2000). For example, ability can be perceived to be internal, relatively stable, and controllable. Luck may be perceived as external, unstable, and uncontrollable.

A student's causal ascriptions for prior outcomes or performances in achievement tasks influence goal expectancies (Weiner, 1979). For example, during an advising session, a student ascribes bad luck to poor academic performance. For the student, the dimensions of luck are external, unstable, and uncontrollable. The student may predict that these dimensions are likely to change and so is confident about having better performances in future tasks. In another scenario, during a conversation with an academic advisor, a student on academic probation ascribes poor performance to low ability. If the causal dimensions for low ability are internal, stable, and uncontrollable, the student will likely have low expectations for success in the future. Changes in expectations for future success or failure are influenced by the perceived stability of the cause of a prior performance (Weiner, 1979). If the student believes the cause of a prior performance can change (it is unstable), he or she may not expect a prior outcome to be repeated in the future. If the perception of a cause of prior performance is stable, the student will likely expect future performance to be the same as the previous performance.

Understanding motivational consequences of attributions is important to understanding learning behaviors. For example, students are likely to persist in their efforts at learning when they feel they are in control. Students are likely to feel in control when the factors attributed to their outcomes are seen as internal, stable, and controllable (Schunk & Zimmerman, 2006). Emotions are an important part of understanding attribution because they may serve as motivations for future behaviors. The attributions individuals make about events affect their emotional responses to learning situations. In particular, the dimensions of locus and controllability can produce strong emotional reactions. A student who feels she or he cannot control a factor may convey great frustration to the academic advisor. Locus influences feelings of pride and

self-esteem (Weiner, 2000). A student ascribing effort with an internal locus as a factor of a positive performance may experience pride in his or her accomplishment. However, if a student attributes failure to low ability and low ability is perceived to be internal, stable, and uncontrollable, the student may experience shame and feel hopeless (Anderman & Wolters, 2006). This student's self-esteem may be negatively affected and she or he may no longer attend to or put forth effort in achievement-related situations. Emotions experienced in prior learning experiences influence choice of future activities; for example, a student who experienced shame or feelings of hopelessness in a math course is likely to avoid future math courses (Anderman & Wolters, 2006). Understanding this may help an academic advisor work with a student to make informed curriculum choices.

Weiner (1990) found that to understand motivation for learning, the social context must be examined. According to attribution theory, individuals use situational cues from their social context to form attributions. For example, the ease and speed with which an individual completes a task can influence the individual's attribution. Others' performances in the environment can also influence individual attributions (Schunk & Zimmerman, 2006).

Weiner (2000) developed a theory of motivation based on the attributions of individuals within a social context. This theory, called *interpersonal theory of motivation*, focuses on the reactions that individuals such as peers, advisors, professors, and parents express toward the performance of others in a social context. After a performance, a student and observer (peer, advisor, professor, or parent) look for causal factors; however, an observer's causal factor may not match the student's causal factor. The participants and observers then ascribe causal dimensions (locus, stability, and controllability) to the factor. Finally, the peer, teacher, or parent makes an inference about the student. This inference often leads to an emotional response and a behavior. For example, a parent who identified effort as a causal factor with a controllable dimension may ultimately be angry and reprimand a child who has demonstrated poor performance.

Interrelated to the interpersonal theory of motivation is Weiner's (2000) intrapersonal theory of motivation. This theory assumes that individuals "are scientists, trying to understand themselves and their environment and then acting on the basis of this knowledge" (Weiner, 2000, p. 2). After a learning performance or outcome, the student experi-

ences an affective reaction, such as disappointment after failing an exam. The student begins to search for a causal factor for the performance on the exam. This search may involve considering prior experiences of success or failure, the performance of peers, and classroom social norms. During this process, information from others may influence the student's search for a factor. For example, peers' expression of disappointment or frustration about the exam can influence the student's ascription of a factor for his or her own performance. Once the factor is elected, the student determines locus, stability, and controllability of the factor, which leads to psychological consequences. The student makes judgments about expectancy and value. These judgments along with emotional reactions will motivate future behavior (Weiner, 2000).

Recent Research Applying Attribution Theory to College Student Performance

Studies applying the attribution theory of learning to the study of the academic performance of college students first appeared in the 1970s. For example, one of the earliest studies (Arkin & Maruyama, 1979) found students who were successful on college exams perceived internal factors as causes of their academic success while unsuccessful students perceived external factors as the causes of their poor academic performance.

Recently researchers on attributions and college-student academic performance have examined casual attributions for success and failure in a variety of academic contexts with discrete populations. Poelzer and Zeng (2008) studied attributions of Hispanic nonscience majors in physical science courses and found that students who reflect on controllable reasons for academic performance and develop academic strategies can improve their academic performance. Hawi (2010) examined the causal attributions for academic performance in an introductory level computer-programming course. Hawi reported that the majority of study participants attributed academic performance to task difficulty and effort, and all high achieving students reported learning strategy as a critical factor for success. Cortes-Suarez and Sandiford (2008) looked at students in a community-college algebra course and found a significant difference between attributions of succeeding and failing students. Perry, Stupnisky, Daniels, and Haynes (2008) examined attributional thinking during a transition from a familiar learning environment (high school) to a novel learning environment (college) and described the complex attributional

patterns of students in a new achievement setting.

Other investigators have recently examined the influence of attributional retraining interventions through which one attempts to restructure a student's explanations for academic performance such that the individual discontinues applying unhelpful attributions and use those that can sustain motivation (Kallenbach & Zafft, 2004). Attribution theory researchers have been trying to determine the principles governing attributions and how attributions can be changed. They have found that changing attributions can change learning behaviors (Schunk & Zimmerman, 2006) as well as help break cycles of self-blame associated with poor academic performance (Wilson, Damiani, & Shelton, 2002). Hall et al. (2007) studied the effectiveness of writing-based attributional-retraining interventions for improving academic development in college students. Haynes Stewart et al. (2011) researched students in an introductory psychology course who received direct instruction on adopting controllable attributions such as effort and strategy. Students who received the attributional retraining were less likely to fail the course than those who did not receive such training.

The studies cited do not amount to an exhaustive list of the literature from the last decade of attributional research in college achievement settings; however, they exemplify a current line of inquiry in attributional research relevant to higher education professionals interested in prompting undergraduate student success. In particular, this research may be informative to academic advisors considering students' self-perceptions. A literature search of student attributions and academic advising did not result in any literature or studies applying attribution theory to advising students. Therefore, I propose that attribution theory could be beneficial to academic advising theory and practice. To this end, I offer potential applications of attribution theory to advising students on academic probation.

Potential Applications of Attribution Theory to Advising Students on Academic Probation

Academic advisors are often the first point of contact for students who have recently found out they are on academic probation. Therefore, academic advisors play a critical role in helping students deal with and process this upsetting news as well as set a path to return to good academic standing. Students on academic probation often feel they have lost control over their academic situation, and some of them fail to take responsibility for their academic performance by attributing it to external,

uncontrollable factors such as biased instruction, academic advising, or university policies. If academic advisors utilize an attributional approach to advising, these students may develop a sense of responsibility for their academic performance and a sense of control over their current situation. College students who feel in control of their academics are more likely to bounce back from setbacks such as academic probation (Kallenback & Zafft, 2004). The following suggested practices provide opportunities for academic advisors to guide students in reflecting on their attributions and self-perceptions as well as set a course for returning to good academic standing.

Encouraging Reflection on Prior Academic Performance

In one potential application of attribution theory to practice, advisors engage students in a reflective advising session to discuss their attributions for academic probation. Advisors may use questions to encourage students to reflect on prior academic experiences that led to their probationary status. Encouraging students to think about their past academic performances may help the student and the academic advisor collaboratively make informed academic decisions for the future.

Based on the attributions students provide, academic advisors could refer students to campus resources, create a probation contract, design advising sessions, or make a plan with the student to return to good academic standing. An advisor could also talk to the student about attributions that are beyond the student's control and potentially help the student identify controllable attributions that could be changed to improve performance. During this session, the advisor should guide the student to identify at least one academic activity in which the student was successful as well as the student's attributions for success during this activity.

Responding to Students

Researchers have studied the way in which responses to students in a classroom setting influence student attributions for success and failure. The way a teacher responds to a student's failure or success can convey to the student the teacher's belief about the controllability of a factor (Hunter & Barker, 1987). For example, if a teacher praises students for success on a task involving little effort, the student may think hard work is unnecessary.

Response-induced attribution applies to advising students. For example, if an advisor conveys that the student's ability is uncontrollable, the stu-

dent may feel defeated and be unlikely to be put forth effort in future academic tasks. Therefore, when facing a student who remarks that "I'm not smart enough," advisors should encourage the student to reflect on her or his self-perceptions. The advisor might ask the student to redirect her or his focus on perceived intelligence and ask the student to identify strategies that can be used to succeed.

Sustaining Motivation

Motivation to complete learning tasks is influenced by a student's belief that he or she has control over outcomes and the ability to apply strategies for learning (Schunk & Zimmerman, 2006). Academic advisors may influence the development or decline of motivation by helping students identify strategies they can employ for academic success. Students who believe they are able to successfully apply strategies may feel more control over outcomes and become more likely to put forth the necessary effort.

Advisors should focus on strategies for success as per the results of Kallenbach and Zafft (2004), who found that this approach is more effective than one in which abilities are emphasized. Weiner (2000) explored the ways in which an attributional approach can be especially beneficial for students experiencing shame and low self-esteem in academic situations. Hunter and Barker (1987) found that students who feel in control develop a healthy self-concept. Therefore, when students understand the causes for their failure as well as their causes for success, they will develop a better understanding of themselves as learners, which will help students who have felt shame or low self-esteem in prior learning tasks.

Attributional Retraining

A learning practice based on attribution theory is attributional retraining. Kallenbach and Zafft (2004) have identified four suggestions for attributional retraining with college students. The first component involves modeling. First, an advisor shares with students how his or her thinking and ability level has changed over time. This could be accomplished by providing an appropriate, personal anecdote from the advisor's own educational career. Second, the advisor uses modeling to emphasize the positive change. For example, the advisor may enlist student leaders, such as peer advisors, to share how their thinking and attributions have changed over time. Third, the advisor leads the student in an analysis of successes. Often advisors and students focus on areas of disappoint-

ment or failure with regard to an academic task. By directing attention instead on the strategies and causes of success, advisors show students how to leverage their strengths against their weaknesses. The final component of attributional retraining involves employing techniques that promote self-control. Advisors may encourage students to take some control of the content and method of learning this by empowering them to make informed academic choices and decisions.

Conclusion

Academic advisors must be knowledgeable of how students learn (Hemwall & Trachte, 1999, 2003, 2005). Academic advisors face a daunting challenge in plotting a course through the numerous learning theories and synthesizing relevant ones into their practice. To aid academic advisors in their exploration of learning theories, I have provided an overview of attribution theory, including recent research applying it to college student performance. This information may be especially pertinent to advisors working with students who are struggling to succeed academically. As discussed, attribution theory elucidates student perceptions as the causes of learning outcomes for themselves and for others (Schunk & Zimmerman, 2006). An understanding of this learning theory may help advisors reveal student attributions for both success and failure in learning.

I presented potential applications of attribution theory to academic advising practice with students on academic probation. I hope this preliminary list of applications engenders generative thought on ways the advising community may use attribution theory in work with students. Academic advisors are encouraged to further refine and enhance these suggested applications. In time, empirical study should be conducted to validate these proposed applications of theory to practice. Additionally, research on probationary students' attributions and their attempts to return to good academic standing would significantly contribute to this line of inquiry.

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