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Nathan A. Preuss

University of Tennessee College of Law

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Applying Motivation Theory to Improve 1Ls' Motivation, Self-Efficacy, and Skill Mastery*

Nathan A. Preuss**

This article discusses how understanding two motivation and learning theories— expectancy-value and attribution—can help instructors to improve first-year law students' motivation, self-efficacy, and mastery of the knowledge and skills needed for success in law school as well as in their future careers.

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Introduction

¶1 First-year law students (1Ls) typically face some of the biggest intellectual challenges of their academic careers. Law schools select applicants from an academically successful subset of undergraduate students, but not all of these students arrive on campus with the study skills, information literacy, emotional resiliency, or adaptive behaviors necessary to succeed in law school. The overall quantity and difficulty of the work, forced grading curves, and the many type-A personalities represent only some of the reasons that previously confident, successful students flounder as 1Ls. Faced with novel challenges for which their standard methods of preparation are inadequate, students may adopt maladaptive academic strategies that negatively affect their performance and even their longer-term professional success.

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¶2 In legal research classes specifically, 1Ls lack the contextual knowledge of doctrinal law, which must be further developed to adequately develop the research-writing-thinking-application knowledge and skill matrix that practicing attorneys need. First-year students also lack the practical experience to recognize the vital role of legal research in this profession's knowledge and skill matrix. Law schools themselves sometimes contribute to this diminished perceived value of legal research. Although some law schools grade basic research course students, many others evaluate students using a pass-fail system. To the extent that law students act rationally, overworked students can hardly be blamed for making an ungraded course a lower priority than their graded doctrinal law or legal writing courses.

¶3 This article addresses how legal research instructors can intervene to improve 1Ls' learning strategies, self-efficacy, and mastery goal orientation. It first discusses the two theoretical foundations—expectancy-value theory and attributional theory—that underlie its recommendations. After a review of the research literature, it then describes several intervention plans: first, a value-based intervention at the beginning of the first year of law school and, second, attributional retraining for students who have completed at least one semester and are at risk for developing maladaptive academic strategies after experiencing less than desirable academic outcomes.

Review of Theory

John Atkinson's Achievement Motivation Theory

¶4 The early cognitive motivation theorist John William Atkinson influenced both expectancy-value theory and attribution theory. Diverging from behaviorists, Atkinson emphasized cognition and beliefs over behaviors, drives, needs, and habits.¹ His model “combined needs, expectancies, and values.” In this context, behavior is “a multiplicative function of three major components: motives, probability of success, and incentive value.”²

¶5 *Motives* are learned, stable, and enduring dispositions or individual characteristics. Within one's motivation are two achievement motives: the motive to approach success and the motive to avoid failure. The motive to approach success is a person's hope or anticipation of success and the “capacity to experience pride in accomplishment.”³ On the other end of the spectrum, the motive to avoid failure relates to the fear of failure and an ability to feel shame and humiliation. The former leads people to participate in achievement tasks, while the latter encourages people to avoid them.⁴

1. DALE H. SCHUNK et al., *MOTIVATION IN EDUCATION: THEORY, RESEARCH, AND APPLICATIONS* (4th ed. 2014).

2. *Id.* at 49.

3. J.W. ATKINSON, *AN INTRODUCTION TO MOTIVATION* 214 (1964).

4. SCHUNK et al., *supra* note 1, at 49.

¶6 *Probability of success* lies in individual actors' perceptions or subjective beliefs about whether they can be successful. *Incentive value* means pride in one's accomplishment. Easy tasks tend to inspire less pride, so generally they produce little incentive. Challenging tasks increase the chance of failure, thereby lowering the probability of success and the motivation to pursue that task. Tasks of intermediate difficulty tend to become the most highly motivating, but only for those with high approach-to-success and low avoidance-of-failure characteristics. Students with high failure avoidance and low in the approach to success will be more likely to choose easy tasks (low chance of failure) or challenging tasks (little expectation of success).⁵

¶7 In Atkinson's model, incentive value and probability of success inversely relate to task difficulty. By defining "incentive value as 1.0 minus the probability of success,"⁶ Atkinson makes the determination of success probability all-important while making value secondary. Expectancy-value theory, discussed next, is an attribution theory built on Atkinson's theory, but it diverges on this point, highlighting the importance of subjective perceptions of value for individual motivation.⁷

Expectancy-Value Theory

¶8 Eccles, Wigfield, and their collaborators are the most important scholars in the development of expectancy-value theory.⁸ This theory focuses on and demonstrates the role of "students' expectancies for academic success and their perceived value for

5. *Id.*

6. *Id.* at 50.

7. *Id.* at 51.

8. See generally Jacquelynne S. Eccles et al., *School and Family Effects on the Ontogeny of Children's Interests, Self-Perceptions, and Activity Choices*, in DEVELOPMENTAL PERSPECTIVES ON MOTIVATION 145 (J.E. Jacobs ed. 1993); Jacquelynne S. Eccles, *Subjective Task Value and the Eccles et al. Model of Achievement-Related Choices*, in HANDBOOK OF COMPETENCE AND MOTIVATION 105 (A.J. Elliot & C.S. Dweck eds. 2005) (hereinafter Eccles, *Subjective Task Value*); Jacquelynne S. Eccles & Allan Wigfield, *Motivational Beliefs, Values, and Goals*, 53 ANN. REV. PSYCH. 109 (2002); A. Wigfield et al., *Development During Early and Middle Adolescence*, in HANDBOOK OF EDUCATIONAL PSYCHOLOGY 87 (Patricia A. Alexander & Philip H. Winne eds., 2d ed. 2006); Allan Wigfield & Jenna Cambria, *Students' Achievement Values, Goal Orientations, and Interest: Definitions, Development, and Relations to Achievement Outcomes*, 30 DEVELOPMENTAL REV. 1 (2010); Allan Wigfield & Jacquelynne S. Eccles, *The Development of Achievement Task Values: A Theoretical Analysis*, 12 DEVELOPMENTAL REV. 265 (1992) (hereinafter Wigfield & Eccles, *Achievement Task Values*); Allan Wigfield & Jacquelynne S. Eccles, *Expectancy-Value Theory of Achievement Motivation*, 25 CONTEMP. EDUC. PSYCH. 68 (2000); Allan Wigfield & Jacquelynne S. Eccles, *The Development of Competence Beliefs, Expectancies for Success, and Achievement Values from Childhood through Adolescence*, in DEVELOPMENT OF ACHIEVEMENT MOTIVATION 91 (Allan Wigfield & Jacquelynne S. Eccles eds. 2002) (hereinafter Wigfield & Eccles, *Competence Beliefs*); Allan Wigfield et al., *Expectancy Value Theory in Cross-Cultural Perspective*, in BIG THEORIES REVISITED 165 (Dennis M. McIlhenny & Shawn Van Etten eds. 2004); Allan Wigfield et al., *Expectancy-Value Theory*, in HANDBOOK OF MOTIVATION AT SCHOOL 55 (K. R. Wentzel & A. Wigfield eds., 2009); A. Wigfield & A. Laurel Wagner, *Competence, Motivation, and Identity Development During Adolescence*, in HANDBOOK OF COMPETENCE AND MOTIVATION 222 (A.J. Elliot & C.S. Dweck eds. 2005).

academic tasks.”⁹ Two elements—expectation of success and subjective task value—are the “most important predictors of achievement behavior” in this model.¹⁰

¶9 *Expectation of success* refers to how one judges one’s capability to complete a task successfully. *Subjective task value* describes why one would or would not link their beliefs and interests to participating in a task.¹¹ Imagine two students: the first, with a 4.0 GPA and a high LSAT score, applies to law school only because her lawyer-parents encourage her to go to law school. This student may have a high expectancy of her ability to complete law school successfully. However, if she hates her prelaw courses and dreams of stage acting instead of law practice, her subjective task values in the context of practicing law may not be well suited to that career choice. Should this student attend law school, she may have difficulty maintaining interest, engagement, and persistence in a demanding field in which she has no interest. The second potential law student, who has always dreamed of being a lawyer, barely passes his undergraduate classes and scores too low on the LSAT to attend even a fourth-tier law school. As a result, he may feel that he lacks the skills to succeed in law school, even though his subjective task value for attending law school is a strong match.

¶10 Expectations for success and subjective task values are developed over time by affective reactions and memories, goals, and self-schemas.¹² One can have an *affective reaction* to completing a particular task once or several times, such that the perceived expectation going forward will be similar. For example, if a law student does well on all of her doctrinal law courses (i.e., contracts, property, and torts) but feels that she badly embarrassed herself during the mock appellate argument at the end of her legal writing course, she may avoid appellate or trial advocacy opportunities in favor of transactional law. This affective reaction could influence her perceived expectation for similar activities in the future or lower her subjective task value for oral advocacy roles for attorneys. *Goals* are “cognitive representations” of desired future outcomes that can be short or long term. Reaffirming students’ goals for attending law school and joining the legal profession when they have not met their short-term goal of getting the desired grade are essential elements in assisting students who have previously measured success as being at the top of their class. *Self-schemas* are constructs that individuals have about their own beliefs and self-concepts.¹³ For example, a law student is likely to have had a great deal of academic success overall before law school but may have struggled in one or several particular subjects. Therefore, the student could have a self-schema for overall academic ability that is very high, but a subject-specific self-schema about chemistry courses that is very low.

9. SCHUNK et al., *supra* note 1, at 51.

10. *Id.*

11. *Id.* at 47.

12. *Id.* at 54.

13. *Id.*

¶11 Legal research instructors will benefit from the knowledge of how these concepts relate to and influence academic outcomes and whether students engage in adaptive or maladaptive scholarly/professional behavior on the road to professional mastery of subject matter knowledge and skills. Cognitive engagement, effort, persistence, and choice are a few of the outcomes associated with expectancies and self-perceptions of ability.¹⁴ *Cognitive engagement* refers to the mental involvement that students employ in the classroom or while studying. Not all strategies are equal. Eccles and Wigfield demonstrate that the strongest predictor of grades in mathematics and English among upper-elementary and middle-school students are their self-perceptions of ability and expectations for success.¹⁵

¶12 Additionally, students with strong self-competence beliefs are more likely to engage in deeper processing of academic subject matter by engaging cognitive strategies (methods of processing information), and metacognitive strategies (methods of controlling cognition) such as planning, reviewing, and putting learned information in the student's own words. These adaptive strategies are linked to self-perceptions of ability, and result in not just spending more time studying but using the time effectively.¹⁶

¶13 Four components comprise subjective task value: (1) interest value, (2) attainment value, (3) utility value, and (4) relative cost.¹⁷ *Interest value* is the enjoyment or intrinsic interest felt in completing a task.¹⁸ *Attainment value* indicates the importance of doing well on tasks, especially those tied to a particular self-schema.¹⁹ *Utility value* is perceived as having high relevance for future goals.²⁰ *Relative cost*, also called cost belief, is the perceived negative cost of engaging in a task.²¹

¶14 Expectancy beliefs and academic achievement are positively correlated. While values and achievement are positively correlated, they are much more strongly correlated to choice behaviors, such as the choice to take additional courses on a subject in the future.²² Both sides of this theory, expectancy beliefs and subjective task value, have clear implications for law students generally, and for their perception of, performance in, and tying professional goal setting to their basic legal research course.

14. *Id.* at 55.

15. See Jacquelynne S. Eccles, *Expectancies, Values and Academic Behaviors*, in ACHIEVEMENT AND ACHIEVEMENT MOTIVES 75 (J.T. Spence ed., 1983); Jacquelynne S. Eccles et al., *Self-Concepts, Domain Values, and Self-Esteem: Relations and Changes at Early Adolescence*, 57 J. PERSONALITY 283 (1989); Allan Wigfield, *Expectancy-Value Theory of Achievement Motivation: A Developmental Perspective*, 6 EDUC. PSYCH. REV. 49 (1994); Wigfield & Eccles, *Achievement Task Values*, *supra* note 8; Wigfield & Eccles, *Competence Beliefs*, *supra* note 8.

16. SCHUNK et al., *supra* note 1, at 55–56.

17. *Id.* at 52–53 (fig. 2.1 & tbl. 2.1).

18. Eccles, *Subjective Task Value*, *supra* note 8, at 105.

19. Wigfield & Eccles, *Achievement Task Values*, *supra* note 8, at 276–77.

20. SCHUNK et al., *supra* note 1, at 64.

21. Wigfield & Eccles, *Achievement Task Values*, *supra* note 8, at 290.

22. SCHUNK et al., *supra* note 1, at 65.

Attributional Theory

¶15 Bernard Weiner, along with a handful of colleagues, is the most influential attribution theorist with regard to educational settings.²³ Two assumptions underlie attribution theory. The first is that people are motivated to master themselves and their environment. “The second assumption is that people are naïve scientists, trying to understand their environments and, in particular, the causal determinants of their behaviors and the behaviors of others.”²⁴

¶16 Figure 1 from Weiner’s article on his professional life and development of attributional theory illustrates the entire *attribution process* for human motivation.²⁵ The seven headings in the top row label the stages of this process. These categories are:

- Outcome
- Outcome-dependent affect
- Causal antecedents
- Causal ascriptions
- Causal dimensions
- Psychological consequences
- Behavioral consequences

With these stages in mind, let us consider two hypothetical students who aspire to attend law school. Walter is a college junior who has just received a low score on the LSAT. His outcome-dependent affect will be unhappiness and frustration. He will search for a cause for this outcome. Walter has typically put in long hours reading and rereading material for classes, often getting grades that were lower than he hoped to earn. He spent much time studying for the LSAT. His friend, with whom he studied, got a high score. This information pattern leads Walter to believe that he may lack the aptitude to do better on the LSAT in the future or to succeed in law school. “Aptitude is an internal, stable, uncontrollable cause, so there is a lowering of self-esteem, low expectancy of future success, hopelessness, and helplessness, and shame and humiliation. Low expectancy (hopelessness) accompanied by these negative affects promotes the decision” for Walter to give up on getting into law school.²⁶

23. See *id.* at 81; see also Bernard Weiner, *A Theory of Motivation for Some Classroom Experiences*, 71 J. EDUC. PSYCH. 3 (1979); Bernard Weiner, *An Attributional Theory of Achievement Motivation and Emotion*, 92 PSYCH. REV. 548 (1985); BERNARD WEINER, *HUMAN MOTIVATION* (1985); BERNARD WEINER, *AN ATTRIBUTIONAL THEORY OF MOTIVATION AND EMOTION* (1986) (hereinafter WEINER, *ATTRIBUTIONAL THEORY*); Bernard Weiner, *Motivation from an Attributional Perspective and the Social Psychology of Perceived Competence*, in *HANDBOOK OF COMPETENCE AND MOTIVATION* 73 (A.J. Elliot & C.S. Dweck eds., 2005); Bernard Weiner, *The Development of an Attribution-Based Theory of Motivation: A History of Ideas*, 45 EDUC. PSYCH. 28 (2010) (hereinafter Weiner, *Development*).

24. SCHUNK et al., *supra* note 1, at 82.

25. Weiner, *Development*, *supra* note 23, at 34.

26. *Id.* at 33.

¶17 Now consider Angelica, who also received a disappointing result on the LSAT. She is unhappy with the result, but she knows that she has been successful at taking tests in the past and recalls that she decided to attend a party on the night before the exam. She feels her result was due to not trying hard enough. “This internal, unstable, and controllable cause lowers personal regard but also gives rise to the maintenance of expectancy, hope, guilt, and regret, all of which are positive motivators. Hence motivation increases and she tries harder in the future.”²⁷

¶18 The two outcomes described above lead the actors to ascribe an attribution; however, not every outcome triggers an attribution. The theory does not predict that students will make an attribution for every event that happens to them. There are many occasions when attributions are not necessary, and students’ motivations are more a function of their self-efficacy and value beliefs for the task. However, if the situation is a novel one for students, the probability increases that they will make attributions for their performance.²⁸

¶19 Attributions are the perceived causes of outcomes. “I have never worked so hard to prepare for a test. I earned that A.” “I worked really hard on that book report. I only got a C because the teacher doesn’t like me.” “I didn’t get a C because I procrastinated. I get mostly As, and I never crack a book until the night before the final. I got a C because I broke up with my girlfriend the week of the final.” “I normally get As in math. This C on the midterm just means I need to work that much harder to bring up my grade. I know I can do it.” All of these examples show the perceptions of the actor. They may or may not reveal some or all of the actual causality for the respective outcomes. The instructor in each course would also have a perception of why those students earned those outcomes. Teachers are no less fallible than their students when it comes to the potential for inaccurate perceptions. Whether the perceptions are accurate or not, the perceived causes of outcomes have a remarkable impact on how we chart a course to try to control our environment. These perceptions shape our expectancy beliefs.

¶20 A student’s causal attribution for an academic hardship consists of three dimensions: *locus* (whether the cause is internal to the student or an environmental cause), *stability* of the cause over time, and *controllability* of the cause. All three dimensions can independently and collectively influence expectancy beliefs, emotions, and motivated behaviors. An internal locus would include effort or ability. An external locus might be the difficulty of an exam (e.g., for the student, whereas the teacher has internal control over the difficulty of exams she creates). Internal attributions are more conducive to having a sense that one can do something to improve academic outcomes in the future. Other theorists combine locus and control, which they describe as the *locus of control*.²⁹ In social cognitive theory, Bandura calls this internal control “agency.” The more choice

27. *Id.*

28. SCHUNK et al., *supra* note 1, at 119.

29. RICHARD DECHARMS, PERSONAL CAUSATION: THE INTERNAL AFFECTIVE DETERMINANTS OF BEHAVIOR (1968).

that students have over what they study and the type and content of their assessments, the higher their motivation will be.³⁰

¶21 In Weiner's separation of locus and control, the control dimension is measured on a continuum from stable to unstable. Ability and effort are both internal, but ability is relatively stable over time, whereas effort is unstable. Students who attribute failures to unstable causes, like effort, are much more likely to have a sense of self-efficacy because they can make a change in behavior. Examples from external loci would include task difficulty (stable) and luck (unstable).³¹

¶22 The controllability dimension, as defined by Weiner, does not require that the actor making the attribution control the action leading to the outcome; the action needs merely to be controllable. For example, a stable, external, controllable achievement attribution could include instructor bias or favoritism. A controllable, unstable achievement attribution could include help studying for a test with friends.³² Even if someone can control external controllable attributes, the adaptive student is well served by learning to attribute outcomes to internal controllable achievement attributes.

¶23 In attribution theory, linking attributions to one's expectancy beliefs is the key to whether one develops adaptive strategies, strengthens self-efficacy, and tends to engage in in-depth cognitive study. Weiner has demonstrated that the stability dimension, in particular, closely relates to expectancies for success.³³ His expectancy principle³⁴ and its three corollaries can be summarized as follows: The perceived stability of causality of an event influences one's expectations for success thereafter. Corollary 1: Stable attributions lead to more certain expectations for future outcomes. Corollary 2: Unstable attributions lead to uncertain expectations for future outcomes. Corollary 3: Events related to stable causes yield greater certainty than those related to unstable ones.³⁵

Review of the Research Literature

¶24 Motivation scholars have created numerous applied techniques to assess behaviors and perceptions and, most importantly, simple interventions that can help at-risk students become better learners and more successful students. Law students, because they are preparing for a demanding profession, have much to gain by learning how to

30. ALBERT BANDURA, SELF-EFFICACY: THE EXERCISE OF CONTROL (1997). While not a theoretical focus of this article, social cognitive theory (along with other theories, like self-regulation) has a crossover that might interest the reader.

31. WEINER, ATTRIBUTIONAL THEORY, *supra* note 23, at 46.

32. SCHUNK et al., *supra* note 1, at 101 (fig. 3.3).

33. WEINER, ATTRIBUTIONAL THEORY, *supra* note 23, at 84.

34. *Id.* at 114–15.

35. *Id.* at 84.

learn for long-term professional mastery, as opposed to learning just to pass a test and then move on with life.

¶25 *Utility-value interventions* arise from expectancy-value theory. The contention by Eccles et al. is that expectations of success and the extent to which a task or topic is valued are the “most proximal predictors of achievement and achievement-related choices (e.g., which courses to take, how hard to study for an exam).”³⁶ The students who are most at risk academically have low expectations of success and see little value in what they are learning.³⁷ While first-semester, first-year law students probably expect to succeed academically based on their prior experience, they may struggle to see the importance of the subject matter and its vital connection to accomplishing their underlying professional goals. As the name implies, utility-value interventions target students’ perceived utility value for a course’s subject matter by either having an instructor tell the students about the importance or, more effectively, having students recognize the importance themselves.³⁸ In their article on using targeted interventions in higher education, Harackiewicz and Priniski write,

The course-specific task value interventions tested to date have been self-generated utility-value interventions. In a prototypical self-generated utility-value intervention, students complete a series of course writing assignments in which they choose a topic covered in the current unit of the course and either discuss the relevance and utility value of the topic (the intervention condition) or summarize the topic (the control condition). This intervention provides students opportunities to make real connections between what they are learning and things that they care about, fostering perceptions of value as well as engagement with the course content.³⁹

High school science students were the subject of the first field tests of utility-value interventions. The intervention helped students identified as having low success expectancy improve their grades and increase their interest in science generally.⁴⁰ Two late-semester interventions in an introductory college psychology course had similar results. Students who performed poorly on the first exam in the semester showed increased utility value, interest in psychology, and interest in majoring in psychology.⁴¹ In another psychology course, the utility-value intervention raised final exam scores across the board, but it had the most significant impact on the grades of those who had the worst scores initially and were in at-risk groups (e.g. poor-performing men).⁴² Utility-value

36. Judith M. Harackiewicz & Stacy J. Priniski, *Improving Student Outcomes in Higher Education: The Science of Targeted Intervention*, 69 ANN. REV. PSYCH. 409, 417 (2018).

37. *Id.*

38. *Id.*

39. *Id.* at 418.

40. Chris S. Hulleman & Judith M. Harackiewicz, *Promoting Interest and Performance in High School Science Classes*, 326 SCIENCE 1410 (2009).

41. Chris S. Hulleman et al., *Enhancing Interest and Performance with a Utility Value Intervention*, 102 J. EDUC. PSYCH. 880 (2010).

42. Chris S. Hulleman et al., *Making Connections: Replicating and Extending the Utility Value Intervention in the Classroom*, 109 J. EDUC. PSYCH. 387 (2017).

interventions integrate well into coursework for immediate results; these form part of the synthesized intervention plan discussed in the next section.

¶26 Interventions that derive from attribution theory are generally called *attribution retraining*. Their goal is to shift students who exhibit maladaptive attribution styles to adopt adaptive attribution styles.⁴³

[A]n adaptive attributional style involves attributing the causes of success to stable, controllable and internal factors (such as ability) and those of failure to unstable, controllable and external factors (such as effort). Research has shown that students who hold these attributional styles have more confidence in their academic progress and work harder towards reaching their goals In contrast, effective learning is hindered when individuals attribute success to external, unstable and uncontrollable factors (such as luck) and failure to internal, stable and uncontrollable factors (such as lack of ability). Such a maladaptive attributional style has been linked to students holding pessimistic views about their future success and withdrawal of effort on tasks they perceive to be difficult⁴⁴

While these interventions succeed in the classroom with breakout groups of at-risk students, studies show that all students can learn from these interventions so that class-wide interventions can be beneficial.⁴⁵

¶27 Another effective intervention is to give regular verbal feedback linking past achievements with effort, which increases

motivation, self-efficacy, and skill acquisition, better than linking [students'] future achievements with effort . . . or not providing effort feedback. For effort feedback to be effecting, students must believe that it is credible; that is, students realistically must work hard to succeed. This suggests that effort feedback may be especially influential during the early stages of skill learning when more effort typically is required to succeed.⁴⁶

Instructors must give accurate feedback to students, who are likely to perceive inaccurate feedback as noncredible, even if the instructor's intention is to encourage. Therefore it would be better to find out how much effort the student believes he put into the assignment for which he earned a lower than the desired grade. Then the teacher could honestly say, "This was not your best work, but given that you have done better on other assignments, and that you feel you did not give 100% effort on this project, you have every reason to be confident that you can master this material and do better on the next project." If, however, the student has worked very hard but was unsatisfied with the result, identifying knowledge and skill gaps, as opposed to lack-of-ability attributions, will encourage adaptive attributional associations. Further, if a teacher realizes from the

43. See, e.g., Bernard Weiner & Jack Sierad, *Misattribution for Failure and Enhancement of Achievement Strivings*, 31 J. PERSONALITY & SOC. PSYCH. 415 (1975); ALBERT BANDURA, *SOCIAL FOUNDATIONS OF THOUGHT AND ACTION: A SOCIAL COGNITIVE THEORY* (1986).

44. Alicia R. Chodkiewicz & Christopher Boyle, *Exploring the Contribution of Attribution Retraining to Student Perceptions and the Learning Process*, 30 EDUC. PSYCH. IN PRAC. 78, 79 (2014).

45. *Id.* at 83.

46. SCHUNK, *supra* note 1, at 116.

overall performance of the students on a particular assessment that the assignment was too easy for the students, the teacher should refrain from falsely associating the results with effort.

Synthesized Intervention Plan

¶28 Familiarity with data-based understanding of cognitive processes and the psychological theoretical constructs that inform the process and behavior of learning creates better teachers and students. There are straightforward interventions or teaching strategies that any legal research instructor can employ. Identifying the students who are most at risk can be problematic for several reasons, including lack of knowledge and skill on the part of the instructor and the possibility of stigma for identified law students in a highly competitive academic environment. In my class, I integrate several tests and assessments that inform students about adaptive assessment styles, and I structure the timing and style of formative assessments to encourage effective study methods and enhance self-efficacy.

Examples of Interventions

¶29 Some examples of interventions include:

- Week one written assignment asking students to share their professional aspirations in the practice of law.
 - What inspired you to attend law school?
 - Imagine yourself practicing the law in your dream job. Describe a rewarding day due to obtaining an excellent result for your client. Be as detailed as possible.
 - What role do you imagine legal research plays in the day-to-day life of a new attorney? On what do you base this perception?
 - Have you ever experienced failure in your personal life or in academics? You need not share the details, but answer the following questions about how you felt about that failure:
 - A series of attributional styles will be modeled, with a 1–5 scale, 1=not at all true and 5=true.
 - My midterm grade is less than I hoped for, so I won't bother working so hard for this class.
 - I got all As in high school, so I was surprised when I did so poorly in my first semester of college. I talked about it with my student adviser; she asked me about some of my study habits in high school, and recommended that tutoring at the math lab and the writing center could help me learn skills to be more effective with my study time.
 - My lowest grade during my 1L year was in contracts, so I guess I won't consider transactional law.

¶30 The responses to these questions help me better understand students' prior attribution styles, how they perceive the value of legal research, and their professional goals. To the extent possible, I create assessment options from which students can select (e.g., alternative assignments to choose from based on legal topic). In-class activities, homework, quizzes, project hypotheticals, etc. should reflect varied practice settings, gradually increased realism, having upper-level law students and new attorneys physically or virtually visit the class to discuss legal research in practice and, time permitting, to offer some instruction on study and test-taking methods that are specific to law school.

Expected Outcome

¶31 The goal in using research-based interventions like these is to improve the performance and engagement for the bottom performers in my class. Increased interest across the board would be incredible, but the self-efficacy and intrinsic motivation of students at or near the top of their class in law school means that those students will take care of themselves. Making sure that any student who graduates from our law school can become professionally competent and have a mastery-goal orientation is much more important than making incremental improvements with the top of the class.

Conclusion

¶32 Applying research-based motivation theories to the experiences of first-year law students can help correct students' maladaptive learning strategies, which may hinder their progress and success not only in law school but later during their professional careers. Expectancy-value theory and attribution theory are two such theories. Both suggest possible interventions that legal research instructors and others can develop to better support students.

¶33 More than ever, law schools owe it to the students who matriculate to set them up for success, which includes the competencies needed to obtain professional employment and to meet the standards of the profession. Legal research and writing are the first practical skill sets that law students acquire on their way to practicing law. These two subjects are vital parts of making that dream of helping a client obtain an excellent result a reality.