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## Abstract

Perseverance is a human quality associated with exceptional leaders in a variety of domains. It is also linked to personal well-being. Within this chapter we examine the meaning of perseverance, its benefits, how to have it, and when to use it. Included are short cases on Thomas Edison and Abraham Lincoln, exemplars of perseverance. Also highlighted are more commonplace examples of perseverance in the achievement of challenging goals. For instance, pursuing a degree requires perseverance. The chapter begins with a definition of perseverance and a review of findings that substantiate its significance. Then ways to bolster perseverance in yourself and others are discussed—importantly, even though perseverance has trait-like aspects, it is also developable. Finally, we consider when to persevere or, more specifically, the value of adapting a goal or the means to achieve it to an evolving context. Embedded throughout the reading are many opportunities for reflection and application.

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### Case Study 19.1: Edison “Failed” His Way to Success

*More than 80 years since his death in 1931, inventor and businessman Thomas Alva Edison remains well known throughout the world for his numerous inventions. Though he is largely remembered for his impressive successes, he also experienced a number of setbacks along the way to garnering over 1000 patents. His first patented invention, an electrographic vote recorder, flopped because politicians had little interest in the automatic tallying of legislative votes. His invention of a talking doll resulted in so many customer complaints and returns it was taken off the market after only a month. His prolonged attempt to establish an innovative ore-milling plant was a financial disappointment.<sup>1</sup>*



*Even Edison’s successes were cases in persistence. Though he debuted the innovation of the phonograph in 1888, despite having lost most of his ability to hear well before adulthood, it took him about ten more years to make it a marketable success. Thousands of different filament materials were tried before Edison’s best known invention was achieved, the commercially viable incandescent electric light bulb. An associate visiting Edison in his laboratory gives a further account of his tenacity:*

*I found him at a bench about three feet wide and twelve to fifteen feet long, on which there were hundreds of little test cells that had been made up by his corps of chemists and experimenters. He was seated at this bench testing, figuring, and planning. I then learned that he had thus made over nine thousand experiments in trying to devise this new type of storage battery, but had not produced a single thing that promised to solve the question. In view of this immense amount of thought and labor,*

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<sup>1</sup>DeGraaf, L. (2013). *Edison and the rise of innovation*. New York, NY: Sterling Signature.

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*my sympathy got the better of my judgment, and I said: "Isn't it a shame that with the tremendous amount of work you have done you haven't been able to get any results?" Edison turned on me like a flash, and with a smile replied: "Results! Why, man, I have gotten a lot of results! I know several thousand things that won't work."<sup>2</sup>*

*Clearly Edison's "iron endurance" played a large role in his achievement. When called a genius, Edison responded, "I tell you genius is hard work, stick-to-it-iveness, and common sense." He also famously said, "Genius is one percent inspiration and ninety-nine percent perspiration." And that failed ore-milling effort, by the way, resulted in production innovations that ultimately transformed the cement industry. You might just say Edison failed his way to success.*

*Consider the following:*

- 1. Thomas Edison is attributed with saying, "Many of life's failures are people who did not realize how close they were to success when they gave up." Do you agree with this statement?*
- 2. In Edison's view, failed attempts provide valuable information regarding what does not work. Explain how feedback gained from failed attempts can help achieve future success. Discuss your own examples.*
- 3. As a boy, Edison did poorly in school and was referred to as "addled" by his teacher. Give an example of someone you know that has exceeded their perceived potential and speculate as to why.*

Related to the previous chapter's quality of resilience, perseverance emphasizes the need for human endurance in order to succeed. Through the lens of perseverance, achievement is viewed as a marathon rather than a sprint. It entails a long-term focus. To persevere is to stay the course in the face of deterrents or tempting distractions. Therefore resilience, or the ability to bounce back when things have not gone as expected, is an important part of the condition of perseverance, but there is more.

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## What Is Perseverance?

There is general agreement among scholars that individuals differ in their natural tendency towards perseverance and, importantly, that it is also influenced by the context. In other words, perseverance is thought to have trait and state aspects. This is a critical point because it means perseverance is not fixed. Further, research suggests ways in which it can be intentionally cultivated in oneself or others, as we will review later in the chapter. First though, we need to examine the definition of perseverance in more detail and identify some of the other labels it is known by.

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<sup>2</sup>Dyer, F. L., & Martin, T. C. (1910). *Edison: His life and inventions* (p. 194). New York, NY: Harper.

## Defining Perseverance as Grit

Distinct labels and definitions for perseverance have developed across different research streams. A combined consideration of the following two definitions provides a richer understanding of this important human quality. Perseverance is defined within the field of positive psychology as the voluntary continuation of a goal-directed action in spite of obstacles, difficulties, discouragement, boredom, tedium, or frustration.<sup>3</sup> The term is used interchangeably with persistence and industriousness. For example, a job seeker that continues to apply for positions after numerous rejections demonstrates perseverance. From the perspective of positive psychology, perseverance is a character strength associated with psychological health. Its connection with well-being is explained as follows, “When sustained activity results from an internal strength, as opposed to threats or deadlines, it is highly engaging. When the activity is complete, it produces satisfaction.”<sup>4</sup>

In the broader field of social psychology, an analogous construct labeled grit has received attention. Grit is defined as perseverance and passion for long-term goals.<sup>5</sup> Similar to the definition from positive psychology, grit emphasizes continued pursuit of a challenging goal in spite of initial failures, adversity, and plateaus in progress. In addition, grit explicitly emphasizes a point that is left implicit in the above definition of perseverance, that is the importance of a *long-term* focus in which effort and interest for the same goal is maintained over years. For instance, graduation from a highly challenging degree program demonstrates grit. Research pertaining to grit suggests this human quality is essential in high achievement contexts and is what distinguishes the star performers.

## Perseverance by Example

To flesh out the meaning of perseverance or grit in a more illustrative way, simply review the biographies of exceptional performers within any domain and you will find a recurring theme of focused, long-term determination for a challenging goal in spite of setbacks. Similar to Thomas Edison in the opening case, entrepreneurs provide some of the most illustrious examples of perseverance because of the daunting odds associated with the success of new ventures, on top of the personal hurdles many notable businesspersons have faced. For instance, Larry Ellison has said he “had all the disadvantages required for success,” including no family connections or

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<sup>3</sup>Peterson, C., & Seligman, M.E.P. (2004). *Character strengths and virtues: A handbook and classification*. New York, NY: Oxford University Press and Washington, DC: American Psychological Association.

<sup>4</sup>*Ibid.*, p. 202.

<sup>5</sup>Duckworth, A.L., Peterson, C., Mathews, M.D., & Kelly, D.R. (2007). Grit: Perseverance for long-term goals. *Journal of Personality and Social Psychology*, 92, 1087–1101.

inherited wealth when he started Oracle.<sup>6</sup> Yet he co-founded what eventually became a multibillion dollar technology business under his leadership as CEO for 37 years from 1977 to 2014. Top corporate leaders that work their way up from the mail-room, so to speak, are also prime examples of perseverance. For instance, Ursula Burns became CEO of Xerox Corporation in 2009 and Chairperson in 2010, many years after her modest start with the company as an intern in 1980. She has said that “Many people told me I had three strikes against me: I was black. I was a girl. And I was poor.”<sup>7</sup> Yet she became the first African-American woman to lead a Fortune 500 company.

#### ***Reflection Exercise: Contrast and Compare Perseverance***

Brainstorm a short list of high and low achievers that you know of personally. Then reflect on what you know of each person on the list in order to evaluate their persistence and passion for their endeavor. Did they persevere towards a single challenging, long-term goal in spite of obstacles or distractions? Or did they switch goals frequently, favor less challenging pursuits, or give up when faced with setbacks? Do you see a distinction in the level of grittiness between the high and low achievers on your list?

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## **Perseverance as a Means to Achievement**

A generalized tendency for perseverance or grit has been shown to predict individual achievement in a variety of situations even after accounting for cognitive ability and certain other personality traits associated with performance, such as conscientiousness. Further, though both grit and cognitive abilities such as general intelligence each play a role in achievement, the two qualities were not found to be correlated.<sup>8</sup>

Motivation has long been touted as a distinct and necessary element for performance, so it is perhaps not surprising that perseverance explains unique variance in achievement. In fact, motivation is often associated with the direction, intensity, and persistence of effort. Whereas the direction of effort has received the most attention in motivation research, grit speaks directly to the intensity and persistence of effort.

## **Findings Related to Grit**

The research by Angela Duckworth and colleagues referenced above, a compilation of six studies, provides the most direct empirical support for grit in relation to achievement. They found that individuals who scored higher on an assessment of

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<sup>6</sup>Wilson, M. (1997). *The difference between god and Larry Ellison: God doesn't think he's Larry Ellison*. New York, NY: HarperCollins.

<sup>7</sup>Burns, U.M. (n.d.). *Ursula M. Burns, Chairman & CEO*. Lean In partner stories. Retrieved from <http://leanin.org/stories/ursula-burns/>

<sup>8</sup>Duckworth, A.L., Peterson, C., Mathews, M.D., & Kelly, D.R. op. cit.

grit also had attained higher levels of education relative to less gritty individuals of the same age. Within an Ivy League university setting, grittier undergraduates earned higher GPAs than their peers, despite having lower SAT scores. Grittier competitors in the Scripps National Spelling Bee outranked less gritty competitors of the same age.

Across samples of new cadets in the United States Military Academy at West Point, grit scores assessed upon arrival in June were a better predictor of which cadets made it through the first summer than the Academy's composite admissions evaluation, which included indicators of cognitive and physical aptitude. West Point describes the 6½ weeks of basic military training that occurs that first summer as "the most physically and emotionally demanding part of the 4 years at West Point," known as the "Beast Barracks" to all who have gone through it.<sup>9</sup>

## The Role of Deliberate Practice

A related stream of research paid specific attention to persistence in "deliberate practice" and its relationship with exceptional performance. Within cognitively demanding fields, findings show that star performers typically accumulate about 10 years of intense practice before reaching expert status. Popularized by writer Malcolm Gladwell as the 10,000 hour rule,<sup>10</sup> the principle was notably observed by Simon and Chase in 1973 regarding chess players that had reached top ranking within their field.<sup>11</sup> Similar findings were attained in evaluation of top achievers within other domains such as musical composition, musicians, mathematics, writers and scientists, diagnosis of X-rays, and medical diagnosis.<sup>12</sup> It is important to clarify, however, that not all hours spent are equal in impact. For instance, in a study of musicians it was the number of hours engaged in solitary practice over time, rather than total hours devoted to music activities in general, that distinguished the best performers from simply good performers and from nonexperts.<sup>13</sup>

Said another way, it is persistence in *focused* practice that reliably predicts high achievement.<sup>14</sup> Just logging hours towards a goal or racking up experience within an occupation does not meet the condition of focused or deliberate practice. Deliberate practice entails deliberate efforts to improve. The above research on musicians by K. Anders Ericsson and colleagues defined deliberate practice as engagement in

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<sup>9</sup> West Point (n.d.). *Information for New Cadets and Parents: Class of 2104*. Retrieved from [http://www.usma.edu/classes/siteassets/sitepages/2014/new\\_cadets\\_parent\\_info.pdf](http://www.usma.edu/classes/siteassets/sitepages/2014/new_cadets_parent_info.pdf).

<sup>10</sup> Gladwell, M. (2008). *Outliers: The Story of Success*. New York, NY: Little, Brown.

<sup>11</sup> Simon, H. A., & W. G. Chase, (1973). Skill in chess. *American Scientist*, 61, 394–403.

<sup>12</sup> See review in Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*, 100, 363–406.

<sup>13</sup> Ibid.

<sup>14</sup> Goleman, D. (2013). *Focus: The hidden driver of excellence*. New York, NY: HarperCollins.

practice activities designed by teachers and coaches to maximize improvement. This also implies that clear practice goals are set and that feedback on progress is provided or discernable. Similar to Thomas Edison's point on the value of learning what does not work through repeated attempts, optimal practice results in some degree of progress, refinement, and modification as a step towards improvement or goal attainment.<sup>15</sup>

#### ***Reflection Exercise: Personalize Deliberate Practice***

Deliberate practice in the musician study described above entailed solo practice activities to address specific deficiencies. Deliberate practice in the spelling bee study described below consisted of studying and memorizing words while alone. Deliberate practice for inventors may consist of repeated experimental attempts in which feedback is culled each time for ongoing refinement of the approach. The legendary martial arts expert Bruce Lee is credited with saying "I fear not the man who has practiced 10,000 kicks once, but I fear the man who has practiced one kick 10,000 times." Clearly the specific steps for deliberate practice are relative. Think about what these steps would be in order to attain exceptional performance in your own achievement context. Make note of at least one specific way you can be more deliberate in your efforts toward your long-term goal.

## **An Integrated Model of Grit and Deliberate Practice**

Many individuals that persist in deliberate practice do so just long enough to reach an acceptable level of performance, a point where deliberate practice gives way to automatic actions, rather than persevere to an expert or elite level of performance. This is why years of experience alone are a poor predictor of top achievement.<sup>16</sup> So what type of person is likely to keep persisting in deliberate practice? Recent research studied the integrated effects of grit and deliberate practice and found, as logic would suggest, that grittier individuals engaged in more hours of deliberate practice. National Spelling Bee participants that scored higher in grit also logged more hours of solitary studying and memorizing of words over a 4 week period. These grittier participants, in turn, performed better in the spelling competition. In research terms, we would say that deliberate practice mediated the expected grit–achievement relationship. The authors concluded that grit—perseverance and passion for the long-term goals—is what enables individuals to persist with the arduous activity of deliberate practice.<sup>17</sup>

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<sup>15</sup>Ibid., also see pp. 164–178.

<sup>16</sup>Ericsson, K. A., & Lehmann, A. C. (1996). Expert and exceptional performance: Evidence of maximal adaptation to task constraints. *Annual Review of Psychology*, 47, 273–305. Ericsson, K. A., Krampe, R. T., & Tesch-Römer, C. (1993).

<sup>17</sup>Duckworth, A.L., T.A. Kirby, E. Tsukayama, H. Berstein and K. A. Ericsson. (2011). Deliberate practice spells success: Why grittier competitors triumph at the national spelling bee. *Social Psychology and Personality Science*, 2, 174–181.

### Case Study 19.2: Lincoln Sharpened the Axe

*Dig deeper into the background of those most admired for their accomplishments and you will undoubtedly uncover a story of obstacles and failures they overcame along the way. Abraham Lincoln, the acclaimed 16th president of the United States, is an excellent example. Lincoln is ranked by many as the top US president of all time. During his lifetime, however, he suffered bouts of “melancholy,” what today would likely be labeled clinical depression, and had very little opportunity for formal education.*



*Further, during Lincoln’s political career, he lost more elections than he won. His first campaign, at the age of 23, was for the Illinois General Assembly where he was soundly beat, finishing eighth out of 13 candidates. He bounced back with his next campaign and served four consecutive terms in the state legislature. During this time, he also became a self-educated lawyer and eagerly accepted any case that came his way, and by doing so gained repeated practice in the artful skill of persuasive oral argument.*

*Lincoln next pursued politics at the national level. At the age of 37, he was elected to the U.S. House of Representatives and served one term, ran for the U.S. Senate at age 45 and lost, vied for his political party’s nomination for vice president 2 years later and came close but lost, ran again for the U.S. Senate at age 49 and again lost. However, the high profile debates with his opponent during this second failed but hard fought Senate run earned Lincoln national repute. Shortly after, on February 27, 1860, Lincoln was invited to give a speech to political leaders in New York.*

*On the surface, there was no reason to expect Lincoln’s New York speech to be a success, let alone a resounding success. Contrasted with the polished east coast audience, Lincoln’s lack of formal education, 6’4” gangly appearance, and country bumpkin status in some eyes were all factors against his favor.*

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*Yet by journalist and historian accounts he greatly impressed and subsequently gained his party's presidential nomination. On November 6, 1860, at age 51 Lincoln was elected president of the United States and, as they say, the rest is history.<sup>18</sup>*

*Consider the following:*

1. *Abraham Lincoln is noted as saying: "Give me 6 hours to chop down a tree and I will spend the first four sharpening the axe." Relate this statement to the concept of deliberate practice.*
2. *Calculate the number of years between Lincoln's first political campaign and his eventual presidency. How does this speak to passion and perseverance for long-term, overarching achievement goals?*
3. *Consider Lincoln's various failed attempts at office. Explain ways in which these failures potentially helped him achieve successes.*

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## Development and Support of Perseverance

As stated at the start of this chapter, though individuals differ in their natural tendency towards perseverance, it is not a fixed characteristic. Research points to several ways to bolster this human quality, organized here for our learning purpose into four categories. A challenging goal identifies the need to persevere. Appropriate use of rewards reinforces and enhances the perceived value of perseverance. A growth mindset enhances one's belief that success can stem from perseverance. Smarter practice enhances results of perseverance for development and achievement.

### A Challenging Goal

Perseverance by definition entails a goal. The goal is the object of pursuit, which without there would be nothing to persevere towards. Goals engage effort because they refer to future valued outcomes and, as such, serve to highlight discrepancy between current conditions and desired conditions (Locke & Latham, 2006). Challenging goals, relative to unchallenging goals, increase the size, clarity, and duration of this discrepancy and thus the likelihood that the discrepancy will be detected and acted upon and that such effort will persist (Austin & Vancouver, 1996; cf., Latham & Locke, 1991; Litchfield, 2008). This rationale is supported by the generally consistent finding over hundreds of studies that performance is a linear function of goal level (Latham & Locke, 1991; Locke & Latham, 1990).

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<sup>18</sup>Canales, N.V. (2014). *Abraham Lincoln Complete Biography and Quotes*. Publisher: Author. Miller Center, University of Virginia. (n.d.). *American president: A reference source*. Retrieved from <http://millercenter.org/president/lincoln/essays/biography/2>

Goals also have a hierarchical aspect. Action-plan goals are nested under the higher order of achievement goals.<sup>19</sup> The latter represents the longer-term goal that is fundamental to perseverance. For example, the goal to become a stockbroker is an achievement goal whereas completion of a training program and the licensing exam are relevant action-plan goals that support the bigger achievement goal. Take notice of how the broad achievement goal guided long-term striving in the following example.

### Case Study 19.3: Small Steps Towards a Big Goal

*Chris Gardner today is the CEO of his own successful stockbrokerage firm. His path to that point is a compelling story in perseverance, sufficiently interesting in fact to result in a bestselling autobiography and award winning movie. Gardner set the goal to become a highly successful stockbroker in a moment of inspiration at the age of 27. His many steps towards this goal included competing to land a position within a training program, finding creative ways to survive financially as a homeless single dad during the unpaid training, aiming to be the top trainee by targeting 200 sales calls a day, passing the Series 7 exam to become a licensed broker, then attaining full employee status as a stockbroker, achieving various degrees of success as an employee, about 6 years later opening his own firm, and ultimately accomplishing elite financial and philanthropic success.*

*Consider the following:*

*It was the same overarching achievement goal—to be a highly successful stockbroker—that guided Chris Gardner’s 34 years and counting of perseverance. His mantra during the early and most difficult period was to: “Walk that walk and go forward all the time...Also, the walk didn’t have to be long strides, baby steps counted too. Go forward.”<sup>20</sup>*

*Reflect on your own career accomplishments so far or your planned career goals for the future. Is there an overarching achievement goal that describes your path?*

## Appropriate Rewards

The receipt of rewards is strongly linked to perseverance, but rewards represent a double-edged sword. On one hand, rewarding effort increases effortful persistence. Further, when individuals are rewarded (or reinforced in some other fashion) for exerting high effort in one domain, they are more likely to exert high effort in other domains. This finding is well supported in experimental studies and is explained by the theory of learned industriousness. The theory asserts that individuals learn to be

<sup>19</sup>DeShon, R.P., & Gillespie, J.Z. (2005). A motivated action theory account of goal orientation. *Journal of Applied Psychology, 90*, 1096–1127.

<sup>20</sup>Gardner, C. (2006). *The pursuit of happiness*. New York, NY: HarperCollins.

industrious by initially experiencing reinforcement of this behavior, to a point where high effort itself becomes gratifying because of its association with positive outcomes.<sup>21</sup>

However, when rewards (including nonmonetary rewards such as praise and positive feedback) are perceived as controlling, individuals are likely to reduce effortful persistence. Theories that provide rationale for this effect (self-determination theory, motivational crowding, and the overjustification effect) point to a potential decrease in intrinsic or autonomous motivation for the rewarded task. Self-determination theory further states that intrinsic motivation is fostered when tasks support feelings of autonomy, competence, and relatedness with others. Rewards must therefore be structured with these elements in mind.<sup>22</sup> In this regard, savoring each step of progress towards the overarching achievement goal may serve as a reinforcing yet autonomy supportive form of reward.

It is also important that rewards for achievement do not inadvertently penalize failure because failures represent potential learning opportunities on the path to achieving a challenging goal. A study of 10 years of data on surgeons using a new technology to complete cardiac procedures found that failure was significant to their learning, particularly observing the failure of others. However, it seemed the doctors were less receptive to learning from their own failures. The authors suggest that organizations need to help their members interpret their own failures in unthreatening ways.<sup>23</sup> Some organizations are already doing this by rewarding intelligent failure. One New York advertising company, for example, awards a Heroic Failure trophy quarterly; a payroll services company in Illinois pays \$400 to winners of the their annual Best New Mistake award.<sup>24</sup>

## A Growth Mindset

A distinguished body of work by social psychology researcher Carol Dweck points to the benefits of a growth mindset versus a fixed mindset for persistence towards challenging goals and in overcoming failures. A fixed mindset believes intelligence is innate and fixed, whereas a growth mindset believes intelligence is malleable and can be developed. Consequently, those with a growth mindset are more willing to

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<sup>21</sup>Eisenberger, R. (1992). Learned Industriousness. *Psychological Review*, 99, 248–267.

<sup>22</sup>Deci, E. L., & Ryan, R. M. (2000). The “what” and “why” of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227–268.; Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68–78. Also see Peterson, C., & Seligman, M.E.P. (2004).

<sup>23</sup>KC, D., Staats, B. R., & Gino, F. (2013). Learning from my success and from others' failure: Evidence from minimally invasive cardiac surgery. *Management Science*, 59, 2435–2449.

<sup>24</sup>Shellenbarger, S. (2011, September 27). Better ideas through failure: Companies reward employee mistakes to spur innovation, get back their edge. *Wall Street Journal*, p. D1.

embrace challenges, persist in the face of setbacks, and see effort as a necessary means to growth and skill mastery. They do not fear failure, but instead innately see it as a learning opportunity.<sup>25</sup>

Most relevant to developing perseverance is that a growth mindset can be taught. One counterintuitive way to do this is to emphasize to individuals that failure is due to their own insufficient effort. In reference to Dweck's work and related research, two prominent scholars of positive psychology have stated:

In particular, persistence can be increased by teaching people to regard their initial failures as reflecting their own lack of effort. Although some might be skeptical of such an approach insofar as it leads people to blame themselves for failure, its benefits have been established. Apparently, teaching people to blame failures on their own effort encourages them to believe that outcomes are under their control and that they should keep going, preferably with an increase in effort.<sup>26</sup>

## Smarter Practice

An underlying mechanism connecting perseverance to high achievement is practice. As detailed in a prior section of this chapter, it seems that grittier individuals accumulate more hours of "deliberate" practice that in turn supports higher achievement within the area of focus. But not all practice hours are equivalent in effectiveness. For instance, practicing the same bad form over and over will not improve performance. Effective practice requires continuous refinement of your form with each adjustment bringing you one step closer to your goal. Or as the scholar Daniel Goleman puts it, "Smart practice always includes a feedback loop that lets you recognize errors and correct them...If you practice without such feedback, you don't get to the top ranks."<sup>27</sup>

How can you seek out expert feedback for smarter practice? A teacher, coach, or mentor is most useful in this regard. It may require hiring an expert for one-on-one advice, just as you might hire a personal trainer at the gym, or taking a course or training workshop that emphasizes learning by doing. If you have ever watched episodes of the reality show *Shark Tank*, you will have noticed that some budding entrepreneurs seek to partner with a "shark" primarily for the expert advice, not strictly for the financial support.

Technology-enabled adaptive approaches to learning are another means of attaining personalized feedback for development. Used increasingly in education and corporate training, this usually entails software that mimics what a human coach, teacher, or mentor would do. That is, the software program interactively

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<sup>25</sup>Dweck, C. S. (2006). *Mindset: The new psychology of success*. New York, NY: Random House.

<sup>26</sup>Peterson, C., & Seligman, M.E.P. op. cit., p. 245.

<sup>27</sup>Goleman, D. op. cit.

customizes the lesson based on how the individual performs at each step. For example, “A student using a physics program answers quiz questions about angular momentum incorrectly, so the program offers supplemental materials and more practice problems on that topic.”<sup>28</sup> Notice that this is distinct from basic online learning in which the student adapts to a static set of learning materials. It is instead more analogous to an on-demand personal tutor.

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## Knowing When to Persevere

While perseverance has clear benefits, there is also value in knowing when not to persist.<sup>29</sup> A goal influences performance by directing attention and effort toward goal-relevant activities and away from goal-irrelevant activities.<sup>30</sup> “When we’re fixated on a goal, whatever is relevant to that point of focus gets priority. Focus is not just selecting the right thing, but also saying no to the wrong ones. But focus goes too far when it says no to the right things, too.”<sup>31</sup>

Hamdi Ulukaya, the founder of Chobani Inc., the company that fueled the popularity of Greek-style yogurt in the United States, grew his startup company from zero to a billion in annual sales between 2007 and 2012. But he remained so fully focused on growing and running the business that he failed to recognize the business had outgrown the limited management expertise in place. By 2013 he was experiencing increased competition, product recalls, distribution difficulties, customer complaints, a substantial drop in market share, and a financial loss. He used to believe no one could run his business better than he could, but has since adapted his means for goal achievement to include an experienced executive team.<sup>32</sup>

Research shows that letting go of an unattainable goal and reengaging in a new goal can enhance feelings of well-being.<sup>33</sup> But *adapting* a goal, or the means to its achievement, to fit a changed context is also associated with well-being and, unlike when a goal is abandoned altogether, can make an otherwise unattainable

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<sup>28</sup> Feldstein, M. (2013, December 17). What faculty should know about adaptive learning. *e-Literate*. Retrieved from <http://mfeldstein.com/faculty-know-adaptive-learning/>.

<sup>29</sup> Peterson, C., & Seligman, M.E.P. op. cit., p. 240

<sup>30</sup> Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*. Upper Saddle River: Prentice Hall. Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and work motivation: A 35 year odyssey. *American Psychologist*, 57, 705–717.

<sup>31</sup> Goleman, D. op. cit., p. 229

<sup>32</sup> Gasparro, A. (2015, May 18). For Greek yogurt king, path isn’t always smooth. *Wall Street Journal*, pp. A1, A10.

<sup>33</sup> Wrosch, C., Scheier, M. F., Miller, G. E., Schulz, R., & Carver, C. S. (2003). Adaptive self-regulation of unattainable goals: Goal disengagement, goal reengagement, and subjective well-being. *Personality and Social Psychology Bulletin*, 29, 1494–1508.

goal attainable.<sup>34</sup> Christopher Isaac “Biz” Stone, one of the co-founders of Twitter, left Google in 2005 to join a friend in a start-up business focused on audio podcasting. They eventually decided none of them had sufficient passion for podcasting, so they shifted their focus to other business ideas. The broad goal of collaborating on an internet start-up remained intact, while the operational aspects of the goal shifted and adapted. And Twitter ultimately emerged.<sup>35</sup> Stone has said, “timing, perseverance and 10 years of really hard work will eventually make you look like an overnight success.”<sup>36</sup>

### Discussion Questions

1. Assess your general tendency to persevere towards long-term goals with the grit assessment instrument developed by University of Pennsylvania professor Angela Duckworth and colleagues, found on her research lab’s website at <https://sites.sas.upenn.edu/duckworth>. Discuss factors that may enhance your future score on this assessment. Specifically consider the role of goal setting and deliberate practice.
2. Assess your growth mindset with the assessment instrument developed by Stanford University professor Carol Dweck, accessed via this link: <http://community.mindsetworks.com/my-mindset?force=1>. Individually compare your outcome from this assessment with your outcome from the grit assessment then determine among the class whether there is a pattern of correlation between the two assessments. There is no need to disclose your scores on the assessments, just whether they are similar in level.
3. Seth Godin, marketing expert and entrepreneur, put it bluntly with regard to innovation: “If you are saying to all your employees, ‘Innovate, innovate, innovate,’ but you give the Employee of the Month parking space to the person who never screwed up and you give the bonus and the vacation to the person who doesn’t make mistakes, you are not serious about innovation, and your team knows it.”<sup>37</sup> Discuss the meaning of this statement in relation to perseverance towards a challenging goal.

(continued)

<sup>34</sup>Freund, A. M., & Baltes, P. B. (1998). Selection, optimization, and compensation as strategies of life management: Correlations with subjective indicators of successful aging. *Psychology and Aging, 13*, 531–543.

<sup>35</sup>Stone, B. (2014). *Things a little bird told me*. New York, NY: Grand Central.

<sup>36</sup>Wolf, A. (2014, March 28). Biz Stone: Life after Twitter. *Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/SB10001424052702303725404579461623575366420>.

<sup>37</sup>Byrnes, B. (2003, March 5). *Why the best companies reward failure*. Retrieved from <http://www.fool.com/investing/general/2013/03/05/why-the-best-companies-reward-failure.aspx>.

(continued)

4. Weebles were a popular 1970s toy. They consisted of plastic figures with a rounded base that permitted the figure to wobble back and forth but not topple over. You can easily find images on the internet if you are curious. Their catchy marketing slogan was, “Weebles wobble but they won’t fall down.” Name real life individuals that would fit this slogan based on their persistence in the face of obstacles.
5. Leaders are concerned with development of their own perseverance and also that of their followers. Describe leaders that have encouraged you in this area and how they did so. Also consider how you would lead others in developing this quality.

### Chapter Summary

- ~ Case: *Edison “Failed” His Way to Success*
- ~ What Is Perseverance?
  - o Defining Perseverance as Grit
  - o Perseverance by Example
  - o Reflection Exercise: *Contrast and Compare Perseverance*
- ~ Perseverance as a Means to Achievement
  - o Findings Related to Grit
  - o The Role of Deliberate Practice
  - o Reflection Exercise: *Personalize Deliberate Practice*
  - o An Integrated Model of Grit and Deliberate Practice
- ~ Case: *Lincoln Sharpened the Axe*
- ~ Development and Support of Perseverance
  - o A Challenging Goal
  - o Case: *Small Steps Towards a Big Goal*
  - o Appropriate Rewards
  - o Growth Mindset
  - o Smarter Practice
- ~ Knowing When to Persevere
- ~ Discussion Questions
- ~ References

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