

Grit at Work

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Abstract

Grit—the tendency to pursue especially long-term goals with both passion and perseverance—has been shown to predict high achievement in a range of individual performance domains. We make a case for introducing the concept of grit to the organizational behavior literature. To begin, we elaborate the conceptual foundations of grit, highlighting ways in which grit differs from related traits and situating grit in the broader literature on goal pursuit. We then discuss three organizational antecedents—leadership, culture, and job design—that can encourage grit at work. Next, we discuss how and under what circumstances encouraging grit can improve workplace outcomes such as employee retention, work engagement, and job performance. We conclude with suggestions for future research at the intersection of psychology and organizational behavior.

Keywords: grit, performance, motivation, individual differences

Grit at Work

You can't give up your passion if things don't work right away.... It's those folks who stay at it, those who do the long, hard, committed work of change that gradually push this country in the right direction, and make the most lasting difference.

—Barack Obama

The ardent pursuit of especially long-term goals—over months, years, or even a lifetime—differs in important ways from goal pursuit over the course of minutes, days, or even weeks (Bateman & Barry, 2012; Carey, Dumaine, Useem, & Zimmel, 2018; Duckworth & Gross, 2014). Grit was introduced to the psychological literature as the disposition to pursue long-term goals with both passion and perseverance (Duckworth, Peterson, Matthews, & Kelly, 2007). Although research on grit has gained traction in the education and personality literatures, less research has examined grit in the workplace. How might the construct of grit relate to, and potentially augment, existing theories of how people behave at work? In this chapter, we elaborate the conceptual foundations of grit, including its definition, measurement, and relationship to goal structures and processes. We then turn our attention to organizational factors that contribute to the expression of grit in the workplace. Next, we consider what happens when employees bring sustained passion and perseverance to their work, particularly focusing on the organizational affordances required for grit to improve retention, engagement, and performance. To conclude, we sketch promising directions for future research.

Conceptual Foundations

We are not the first scientists to observe that, regardless of their domain of expertise, outliers in achievement demonstrate unusual stamina in both commitment to and effort toward long-term goals. For example, Cox (1926) used the diaries, notes, and letters of 301 eminent

achievers in domains ranging from music to science to leadership. Reconstructing their developmental trajectories, Cox concluded that “youths who achieve eminence are characterized not only by high intellectual traits, but also by persistence of motive and effort” (p. 218). By persistence of motive, Cox specified the “degree to which he works with distant objects in view...working toward a definite goal” and the “tendency not to abandon tasks from mere changeability. Not seeking something fresh because of novelty. Not ‘looking for a change’” (p. 174). By persistence of effort, Cox referred to the “quiet determination to stick to a course once decided upon” and the “tendency not to abandon tasks in the face of obstacles. Perseverance, tenacity, doggedness” (pp. 174-75). Likewise, Terman and Oden (1959), who followed a large group of intellectually gifted children into adulthood, concluded that “notable achievement calls for more than a high order of intelligence,” noting in particular both “integration toward goals” and “persistence in the accomplishment of ends” (pp. 148-149).

In the same tradition, we have been interested in what the career trajectories of outliers reveal about general principles of human achievement. In this section, we review the development and operationalization of the construct of grit. We then distinguish grit from related motivational traits in its nomological network. Finally, we situate grit in the larger literature on goal pursuit, providing a theoretical explanation for *why* some individuals sustain both passion and perseverance for long-term goals, while many others fail to maintain consistency and effort over time.

Defining and Measuring Grit

Duckworth and her colleagues (2007) began to conceptualize grit by interviewing high achievers in investment banking, painting, journalism, academia, medicine, and law. While some aspects of motivation varied by discipline (e.g., artists described their desire to “make things,”

while athletes said they were “driven to compete”), the same tendencies that Cox observed emerged as common themes. Specifically, high achievers talked about the importance of coming back to the same goals rather than switching course and starting all over again; they also discussed the imperative of working diligently despite setbacks and delays, doing “whatever it takes” to keep going. Based on these conversations, Duckworth et al. (2007) developed a 12-item questionnaire for use in prospective, longitudinal research on achievement. Consistent with Cox (1926), questionnaire items clustered into two correlated factors indicating the tendency to remain loyal to the same goals over months and years (i.e., passion for long-term goals) and the tendency to diligently devote effort toward goals even in the face of setbacks (i.e., perseverance for long-term goals), respectively (Table 1). We later discuss evidence in the goal literature for why sustained passion and perseverance may be an especially synergistic compound.

Table 1
The Original Grit Scale (Duckworth et al., 2007)

Grit Scale item	Promax loading
Passion subscale	
New ideas and new projects sometimes distract me from previous ones. ^{ab}	.77
I become interested in new pursuits every few months. ^a	.73
My interests change from year to year. ^a	.69
I have been obsessed with a certain idea or project for a short time but later lost interest. ^{ab}	.66
I often set a goal but later choose to pursue a different one. ^{ab}	.61
I have difficulty maintaining my focus on projects that take more than a few months to complete. ^{ab}	.47
Perseverance subscale	
I have overcome setbacks to conquer an important challenge.	.68
I have achieved a goal that took years of work.	.65
I am diligent. ^b	.64

Setbacks don't discourage me. ^b	.58
I finish whatever I begin. ^b	.54
I am a hard worker. ^b	.44

Note. ^a Indicates reverse-scored item. ^b Indicates inclusion in the 8-item Short Grit Scale intended as a “more efficient measure of trait-level perseverance and passion for long-term goals” (Duckworth & Quinn, 2009, p. 172) In retrospect, streamlining the scale and, in particular, omitting two items that explicitly noted a time frame of multiple years, may have been unwise because, as originally conceived, what distinguishes grit from other goal-relevant traits is duration—not just how hard you work, but how long (Duckworth et al., 2007). Moreover, the passion and perseverance subscales are more distinct in the original 12-item scale ($r = .47$) than in the 8-item version ($r = .57$; Duckworth, Quinn, & Tsukayama, 2020), and in some studies demonstrate stronger criterion validity (e.g., Hou et al., under review).

Grit has been observed to be approximately orthogonal (Credé, Tynan, & Harms, 2017; Zissman & Ganzach, 2020) or weakly inversely related to cognitive ability (Duckworth et al., 2007; Duckworth et al., 2019). Accordingly, grit is sometimes referred to as a “noncognitive” attribute—a term coined by Messick (1979) and used widely in economics (e.g., Jencks et al., 1979; Kautz, Heckman, Diris, Ter Weel, & Borghan, 2014) to refer to aspects of human capital that are distinct from general cognitive ability. Likewise, grit is only weakly related to measures of physical ability ($r = .07$, Duckworth et al., 2019). Independence from ability helps explain why, across a range of mental and physical performance domains, grit has demonstrated incremental predictive validity for objective measures of achievement (Duckworth et al., 2007; Duckworth & Quinn, 2009; Duckworth et al., 2019; Eskreis-Winkler, Shulman, Beal & Duckworth, 2014).

Why might consistency over long periods matter as much or more to high achievement than intensity over short periods? It is the very nature of audacious goals that requires returning to unfinished work again and again to make progress (Moshontz & Hoyle, in press). Along the usually-decade-or-more path to eminence, individuals repeatedly face the decision to keep going

or stop (see Bloom, 1985; Hayes, 1981; Kaufman & Kaufman, 2007; Simon & Chase, 1973). Logic suggests that those who maintain steadfast commitment have a distinct advantage over those who do not. As Amazon.com founder and CEO Jeff Bezos wrote in his 1997 annual letter to shareholders: “It’s all about the long term,” adding that “we are working to build something important...something that we can all tell our grandchildren about.” Later, Bezos (2010) argued that what matters more than being smart and gifted are the choices made over a lifetime: “When it’s tough, will you give up, or will you be relentless?” And when naming the domain for his retail website, Bezos originally purchased *relentless.com* (type it into your browser and see where it takes you).

The Nomological Network of Grit

Construct proliferation has long been a concern in management research (Morrow, 1983; Shaffer, DeGeest, & Li, 2016). Introducing new constructs that are identical to existing ones impedes scientific progress (Kelley, 1927), and the novelty of grit has been questioned (e.g., Credé et al., 2017). In this section, we explain how grit differs from near neighbors in its nomological network, including activity-specific conceptions of passion, Big Five conscientiousness, and traits related to resilience. As summarized in Table 2, our view is that only grit (a) specifies the compound of both passion and perseverance, (b) sustained over an extended time frame of months and years, and (c) is conceptualized as a dispositional (albeit malleable) trait, as opposed to an activity-specific state.

In the context of grit, passion refers to preferring to remain committed to the same goals over months and years. As shown in Table 2, other researchers have used the term differently—typically emphasizing intensity of motivation rather than duration, and also conceiving of passion as activity-specific rather than dispositional. For example, Chen, Lee, and Lim (2020)

define work passion as intensely enjoying, feeling motivation for, and identifying with a particular vocation. Vallerand et al. (2003) define passion as “a strong inclination toward a personally meaningful and highly valued activity” (p. 756), which, unlike grit, “resides contextually between trait and state level of personality” (Curran, Hill, Appleton, Vallerand, & Standage, 2015, p. 634). As we elaborate later, the distinction Vallerand makes between harmonious and obsessive forms of passion is nevertheless relevant, for it is more likely that gritty individuals choose pursuits that are congruent, rather than conflicting, with their other goals. Likewise, Jachimowicz and colleagues use the term “passion attainment” as an activity-specific motivational state, indicating “the extent to which employees feel they attained their desired level of passion for their work” (Jachimowicz, Wihler, Bailey, & Galinsky, 2018, p. 9984). Again, while distinct from grit, passion attainment is relevant: greater passion attainment has been shown to amplify the influence of grit on achievement (Jachimowicz et al., 2018). Finally, callings (e.g., for singing, painting, etc.) are also activity-specific, referring to “a consuming, meaningful passion people experience toward a domain” (Dobrow & Tosti-Kharas, 2011, p. 1001).

Table 2
Nomological Neighbors of Grit

Construct	Definition (with citation)	Example questionnaire items	Passion	Perseverance	Extended timeframe	Dispositional (vs. activity-specific)
Grit	“perseverance and passion for long-term goals” (Duckworth et al., 2007, p. 1087)	See Table 1	yes	yes	yes	yes
Work passion	“to strongly identify with a line of work that one feels motivated to engage in and derives positive affect from doing” (Chen, Lee, & Lim, 2020, p. 140)	“How much would you say you love doing your work?” “How often do you feel positively about your work?” “How important would you say your work is to you?”	yes	no	no	no
Harmonious passion	“autonomous internalization that leads individuals to choose to engage in the activity that they like” (Vallerand et al., 2003, p. 2003)	“This activity allows me to live a variety of experiences” “The new things that I discover with this activity allow me to appreciate it even more” “This activity allows me to live memorable experiences”	yes	no	no	no
Obsessive passion	“a controlled internalization of an activity in one’s identity that creates an internal pressure to engage in the activity that the person likes” (Vallerand et al., 2003, p. 2003)	“I cannot live without it” “The urge is so strong. I can’t help myself from doing this activity” “I have difficulty imagining my life without this activity”	yes	no	no	no
Passion attainment	“a strong feeling toward a personally important value/preference that motivates intentions and behaviors to express that value/preference” (Jachimowicz et al., 2018, p. 9981)	“I am less passionate for my work than I should be” (reversed) “I often feel as if I have to be more passionate for my work” (reversed) “I frequently feel obliged to be more passionate for my work than I currently am” (reversed)	yes	no	no	no
Calling	“a consuming, meaningful passion people experience toward a domain” (Dobrow & Tosti-Kharas, 2011, p. 1001)	“I am passionate about playing my instrument/singing/engaging in my artistic specialty/business/being a manager” “The first thing I often think about when I describe myself to others is that I’m a musician/an artist/in business/a manager” “Playing music/engaging in my artistic specialty/being in business/being a manager is a deeply moving and gratifying experience for me”	yes	no	no	no
Big Five conscientiousness	“a spectrum of constructs that describe individual differences in the propensity to be self-controlled, responsible to others,	See conscientious facet items for orderliness, productiveness, and responsibility below	no	yes	no	yes

	hardworking, orderly, and rule abiding” (Roberts, Lejuez, Krueger, Richards, & Hill, 2014, p. 1315)					
Orderliness	“preference for order and structure” (Soto & John, 2017, p. 121)	“Tends to be disorganized” (reversed) “Is systematic, likes to keep things in order” “Keeps things neat and tidy”	no	no	no	yes
Productiveness	“work ethic and persistence while pursuing goals” (Soto & John, 2017, p. 121)	“Is efficient, gets things done” “Is persistent, works until the task is finished” “Tends to be lazy” (reversed)	no	yes	no	yes
Responsibility	“commitment to meeting duties and obligations” (Soto & John, 2017, p. 121)	“Can be somewhat careless” (reversed) “Sometimes behaves irresponsibly” (reversed) “Is reliable, can always be counted on”	no	yes	no	yes
Self-control	“capacity to change and adapt the self so as to produce a better, more optimal fit between self and world” (Tangney, Baumeister, & Boone, 2004, p. 275)	“I am good at resisting temptation” “I have a hard time breaking bad habits” (reverse) “I am lazy”	no	yes	no	yes
Resilience	“the personal qualities that enable one to thrive in the face of adversity” (Connor & Davidson, 2003, p. 76)	“You work to attain your goals” “Have to act on a hunch” “Able to adapt to change” “In control of your life” “Sometimes fate or God can help”	no	yes	no	yes
Optimism	“favorability of a person’s generalized outcome expectancy” (Scheier & Carver, 1985, p. 232)	“I’m always optimistic about my future” “In uncertain times, I usually expect the best” “I hardly ever expect things to go my way” (reverse)	no	yes	no	yes
Growth mindset	“entity versus incremental theory refers...to the assumption individuals make about the fixedness or malleability of the human attributes in question” (Dweck, Chiu, & Hong, 1995, p. 281)	“You have a certain amount of intelligence and you really can’t do much to change it” “Your intelligence is something about you that you can’t change very much” “You can learn new things, but you can’t really change your basic intelligence”	no	yes	no	no
Core self-evaluations	“a broad, latent, higher-order trait indicated by four well established traits in the personality literature: (a) self-esteem [...], (b) generalized self-efficacy [...], (c) Neuroticism [...], (d) locus of control” (Judge, Erez, Bono, & Thoresen, 2003, p. 303)	“Overall, I am satisfied with myself” “I am filled with doubts about my competence” (reversed) “Sometimes I feel depressed” “I determine what will happen in my life”	no	yes	no	yes

Note. Wherever possible, we chose example questionnaire items that were the highest-loading (for the scale or its respective subscales) in published validation studies.

We conceive grit as a facet of conscientiousness, which in the context of the Big Five taxonomy of personality is defined broadly as “a spectrum of constructs that describe individual differences in the propensity to be self-controlled, responsible to others, hardworking, orderly, and rule abiding” (Roberts et al., 2014, p. 1315). Like other conscientiousness facets, grit refers to the voluntary expenditure of effort in order to meet standards. However, as noted when introducing the Grit Scale to the scientific literature, grit “differs in its emphasis on long-term stamina rather than short-term intensity” (Duckworth et al., 2007, p. 1089). In addition, other conscientiousness facets do not specify passion, the tendency to remain committed to the same goals over months and years. Not surprisingly, the passion subscale of grit shares less variance with conscientiousness than does the perseverance subscale (Schmidt, Nagy, Fleckenstein, Möller, & Retelsdord, 2018). As a family, conscientiousness is positively correlated with a wide range of occupational outcomes, but interestingly, these relationships are weaker in high-complexity (e.g., managerial or professional positions) occupations (Wilmot & Ones, 2019). In contrast, our prediction is that grit matters more, not less, in high-complexity occupations that have less structure and are more likely to entail unexpected challenges.

Grit also differs from self-control—the capacity to regulate conflicts between impulses that are immediately gratifying and those that serve more important goals (Duckworth & Gross, 2014). Like grit, self-control loads on Big Five conscientiousness (Roberts, Bogg, Walton, Chernyshenko, & Stark, 2004) but is also related to Big Five emotional stability and agreeableness (Tangney et al., 2004). Passion is elemental to grit but not to self-control, and it is no surprise therefore that grit outpredicts self-control for challenges of deep personal significance (e.g., making it through West Point training, excelling in extracurricular activities like the National Spelling Bee) (Duckworth et al., 2007), whereas self-control reigns supreme for

everyday “should” versus “want” conflicts like doing homework or eating healthfully (Milkman, Rogers & Bazerman, 2008). Another important difference between grit and self-control lies in time frame. Over the course of months and years, grit inclines an individual to battle setbacks, disappointment, exhaustion, plateaus in progress, and the ever-present lure of alternative life paths (Obodaru, 2012). What interferes with self-control, in contrast, are momentary indulgences we may regret even within the span of minutes or hours (Mischel, Shoda & Rodriguez, 1989; Tangney, et al., 2004). Commonality analyses confirm that while there is substantial overlap among grit, self-control, and Big Five conscientiousness, these constructs are not identical (Werner, Milyavskaya, Klimo, & Levine, 2019).

The requirements of passion and extended time frame also distinguish grit from resilience and related constructs. Resilience is often studied outside of the Big Five personality framework but has been related to conscientiousness as well as emotional stability and extraversion (Oshio, Taku, Hirano, & Saeed, 2018). Though definitions of resilience vary (see Fletcher & Sarkar, 2013, for a review), most refer in some way to “positive adaptation despite experiences of significant adversity or trauma” (Luthar & Cicchetti, 2000, p. 858). Perseverance and resilience are related: both entail overcoming setbacks. However, the requirement of passion and the emphasis on long-term effort distinguish grit from resilience as well as the closely related constructs of optimism and growth mindset. Both an optimistic outlook and a belief in the malleability of ability are theorized to encourage perseverance: both incline individuals to appraise setbacks as temporary and challenges as opportunities to learn (Duckworth, Quinn, & Seligman, 2009; Park, Tsukayama, & Duckworth, 2020). We suspect that perseverance is also encouraged by positive core self-evaluations, the “fundamental, bottom-line evaluations that

people make of themselves” (Judge, 2009, p. 58), including self-esteem, locus of control, and generalized self-efficacy (Judge, 2009).

Grounding Grit in the Literature on Goal Pursuit

Scholars have often argued that personality traits describe, but do not explain, behavior (e.g. Dweck, 2000; Jayawickreme, Zachry, & Fleeson, 2019; Mischel, 1990). We agree. The description of grit we have offered thus far begs for a more theoretically satisfying explanation of *why* gritty individuals pursue long-term goals with passion and perseverance. Other than optimism and growth mindset, what gives rise to individual differences in grit? How are passion and perseverance for long-term goals complementary tendencies? And what do the answers to these questions suggest about the development and expression of grit, particularly in the workplace? In this section, we address these questions by situating the relatively nascent research on grit in the much larger literature on goal pursuit (Austin & Vancouver, 1996).

It may seem obvious that dispositional differences in how people act, think, and feel derive from differences in what people want and how they pursue these desires (cf. Allport, 1927). However, research on personality has historically been concerned with stable traits that differ among individuals, whereas research on motivation has largely focused on the within-individual dynamics of goal pursuit (Cropanzano, James, & Citera, 1993). We propose that it is possible to trace differences in grit—whether *between* individuals in the same situation or *within* individuals and across situations—to differences in how goals are structured and pursued.

Goals are mental representations of future states that—with or without our conscious awareness—guide behavior (Austin & Vancouver, 1996; Klein, Cooper, & Monahan, 2013). Most goals demonstrate a hierarchical structure, whereby the lower-order goal is a means to the end of its higher-order goal (Carver & Scheier, 1982; Kruglanski et al., 2002). In other words, a

higher-order goal is the “why” for its lower-order goal; a lower-order goal is the “how” for its higher-order goal. As a rule, higher-order goals are more abstract, long-term, and identity-relevant (e.g., build a thriving research lab), whereas lower-order goals (e.g., recruit a graduate student this coming fall) tend to be more short-term, concrete, and tactical. In addition, higher-order goals are typically more challenging, as they depend on the accomplishment of multiple lower-order goals. At any level, goal commitment—how attached we are to a goal—is a function of both its desirability and feasibility (Klein et al., 2013).

If some degree of hierarchy characterizes most goals, what accounts for individual differences in sustained passion (i.e., remaining committed to the same goals over years)? As illustrated by the multi-level, pyramidal goal structure in Figure 1, we posit that the lower-order “to-do list” goals of a grit paragon collectively advance a smaller set of “personal projects” (i.e., middle-level goals that connect lower-order acts and higher-order aspirations; Little & Coulombe, 2015), which in turn advance an “ultimate concern” (i.e., the highest-level goal of greater and more enduring importance than any other goal; Emmons, 2003). It is the superordinate goal that is the individual’s compass, providing direction and imbuing meaning to all lower-order goals in the hierarchy (Barrick, Mount, & Li, 2013; Höchli, Brügger, & Messner, 2018; Sheldon & Elliot, 1999).

Our ongoing interviews with high achievers suggest that goal hierarchies exhibit both stability and change over the life course (Duckworth, 2016; Duckworth et al., 2007). In particular, consistent with Benjamin Bloom’s interviews with 120 world-class performers in music, art, mathematics, and science (1985), a young adult commonly will set a discreet superordinate goal (e.g., “win gold at the Olympics”) but later to realize that such a goal in fact serves a higher-level goal—typically one that is more abstract, long-term, and identity-relevant,

(e.g., “compete at my best”) as well as more prosocial (e.g., “show what’s possible”). There is also iteration at lower levels of a well-developed goal hierarchy as goals are completed and, in some cases, abandoned in favor of alternative means to the same higher-order ends (Duckworth & Gross, 2014). Moreover, the process by which individuals develop focused interests typically requires years of sampling before committing to any one direction (Renninger & Su, 2012).

There is evidence that elite athletes, for example, are generally more successful and satisfied if earlier in life they sampled many different sports (DiFiori et al., 2017).

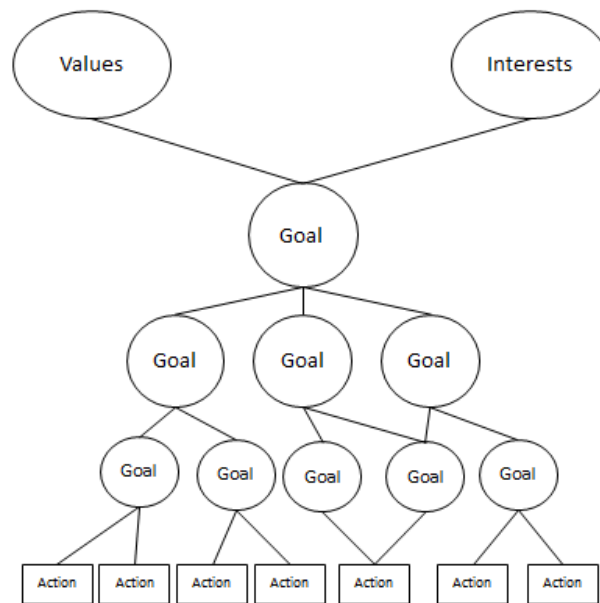


Figure 1. Grit reflects the harmonic alignment of specific actions—including thoughts, feelings, and behaviors—with lower-order goals, which in turn serve higher-order goals that are progressively more abstract, extended in time, and identity-relevant. Paragons of grit hold a single superordinate goal that is aligned with personal values and interests and that directs, energizes, and imbues meaning to nearly everything they do.

A multi-level, internally aligned, pyramidal hierarchy of goals is not the only way to allocate energy (see Kung & Scholer, 2020). Consider, for example, individuals who flit from one superordinate goal to another, enthusiastically committing to each changing direction every few months or years. It is also possible to hold low-level or mid-level goals that fail to align with each other or any superordinate goal—to busily pursue all manner of projects without any overall cohesive direction. Indeed, it is all too common to hold goals that frustrate, rather than facilitate, one another (Little & Coulombe, 2015). And, finally, it is possible to commit to a superordinate goal yet fail to develop corresponding mid-level and low-level goals—to dream of being a successful tech entrepreneur but lack strategies and tactics for realizing that dream.

We conjecture that the superordinate goals for which gritty individuals sustain passion for years tap into their deepest interests and values (Barrick et al., 2013; Bateman & Barry, 2012; Cropanzano et al., 1993; Duckworth, 2016). As many paragons of grit have told us in interviews, their work is a “calling” (Dobrow, 2013; Dobrow & Heller, 2015; Dobrow & Tosti-Kharas, 2011; Wrześniewski, 2012)—not only what they do for a living, but a core element of their identity. While it may seem self-evident that superordinate goals are intrinsically motivating, it is possible to be motivated by external factors, including other people’s demands (Sheldon, 2014). Unfortunately, if they are not fully internalized and adopted as “one’s own,” external directives tend not to be as rewarding, or enduring, as motives that are self-concordant (Schwartz & Wrześniewski, 2018; Sheldon, 2014; Wrześniewski et al., 2014). Consistent with our perspective, Vallerand’s dualistic model of passion (2003) distinguishes between goals that are fully integrated into one’s identity and thus, as noted above, motivated by what Vallerand calls “harmonious passion,” and goals that are only partially integrated into one’s identity, motivated by what he calls “obsessive passion.” Both harmonious passion and self-concordant goals have

been associated with task persistence, performance, goal attainment, and satisfaction (Curran et al., 2015; Koestner, Lekes, Powers, & Chicoine, 2002; Sheldon, 2014). In our very recent work, we have found that grit correlates positively with self-concordant goals and with harmonious, rather than obsessive, passion (Duckworth et al., in prep). Relatedly, gritty individuals tend to seek happiness in life via meaningful, prosocial purpose as well as engagement in attention-absorbing activities rather than via momentarily satisfying hedonic pleasures (Von Culin, Tsukayama, & Duckworth, 2014).

What about perseverance? Although committing to a goal is typically accompanied by a feeling of determination, the so-called *intention-behavior gap* is large (Sheeran, 2002). Success requires that goal setting and commitment lead to making plans, taking action, and, finally, evaluating progress before deciding how to proceed further (Keller, Bieleke, & Gollwitzer, 2019). Whereas passion seems to derive from having a self-concordant superordinate goal (a “why”), perseverance, in our view, is the result of having clear lower-level, short-term goals and plans (a “how”) (see Keller, Bieleke, & Gollwitzer, 2019). Several studies have shown that augmenting distal goals with proximal goals improves effort and performance (e.g. Bandura & Schunk, 1981; Latham & Seijts, 1999). And planning when and how a person will act on their goals has large, positive effects on goal attainment (Gollwitzer, 1999). Many world-class athletes, for example, publicly announce elaborate “backward plans” (Park, Lu, & Hedgecock, 2017) from their superordinate goal to their current, day-to-day tasks. Consider NFL legend Tom Brady, whose goal is to play quarterback at a “really high level for a long period of time” (Silva, 2014)—perhaps until his late 40s or early 50s (Watts & Broudy, 2013). As early as 2014, while still in his mid-30s, he had a detailed training plan that extended into well into his 40s (Bishop, 2014). Famously, each year, Brady sets a countdown timer in his home gym to the day of the

Super Bowl and creates his workout schedule accordingly (Allen, 2017). If his team doesn't make the Super Bowl, he still goes through his training regimen as if they did (Bishop, 2014). Crafting these types of detailed plans is essential to closing the intention-behavior gap (Sheeran, 2002) and may be a distinguishing feature of someone who fervently pursues their goals over the long term versus someone merely has passion but not perseverance.

In addition, we suggest that perseverance for long-term goals reflects a preference for actively striving toward goals rather than deliberating on whether the goals are worthwhile. After crossing the metaphorical Rubicon of goal commitment, individuals in the action stage of goal pursuit do not perceive obstacles as reasons not to move forward. On the contrary, they feel energized and are optimistic about overcoming such obstacles (Keller et al., 2019). Put another way, the sustained perseverance of gritty individuals suggests they are "high locomotors," meaning that they "want to initiate movement and then maintain that motion in a constant, uninterrupted fashion" (Pierro, Chernikova, Destro, Higgins, & Kruglanski, 2018, p. 245). Accordingly, gritty individuals are more likely to interpret obstacles as problems to solve rather than reasons to give up (see Gollwitzer, 1990). Though fully testing this intuition requires more data, one recent study of entrepreneurs found that grit was positively correlated with trait measures of locomotion and inversely correlated with trait measures of assessment (Mueller, Wolfe, & Syed, 2017). Relatedly, perseverance for long-term goals seems to reveal a preference for meeting high standards of excellence and seeking new challenges (Locke & Schattke, 2018; Porter et al., 2020; Rege et al., 2020).

In the recursive sequence of goal setting, goal commitment, planning, action, and evaluation at least three factors seem to support *both* passion and perseverance. First, self-knowledge supports passion by enabling the individual to identify a self-concordant

superordinate goal and lower-order goals that facilitate, rather than frustrate, one another. In addition, self-knowledge encourages perseverance because setbacks in progress are less likely to vault the individual prematurely into the evaluation stage (“Do I really want this?” “Are the sacrifices worth it?”). In one longitudinal study, daily diary measures of passion (“Today I set a goal but later chose to pursue a different one;” reverse-coded) and perseverance (“Today I was diligent”) and self-knowledge (“Today I had a clear picture of who and what I am”) were reciprocally correlated over a 40-day period (Wong & Vallacher, 2018).

Similarly, self-efficacy is necessary for sustained passion because individuals must believe progress is possible when they commit to goals that will take many years to complete (see Bandura & Locke, 2003). And self-efficacy supports perseverance by keeping an individual striving for goals in the face of setbacks, delays, and missteps (Bandura & Locke, 2003). Consistent with evidence that individuals who are actively pursuing goals (as opposed to deliberating whether or not to do so) show an optimistic bias toward obstacles (Keller et al., 2019), gritty individuals in our experience exhibit what we like to call the *I’ll show you* response, stubbornly affirming that they will achieve what others say they cannot. For example, told she didn’t stand a chance of admission to a school like Princeton, future First Lady Michelle Obama recalls that “My only thought, in the moment, was *I’ll show you*” (Obama, 2018, p. 67). Recent work has also demonstrated that the desire to prove others wrong can enable those who are seen as underdogs to achieve success in the workplace (Nurmohamed, 2020).

Finally, an elaborated goal hierarchy topped by a superordinate goal should support long-term passion, as we have already discussed. But such a pyramidal goal structure—with multiple layers of aligned goals—should also encourage perseverance. After repeated failures, an elaborated goal hierarchy may in fact incline an individual to give up on one low-level goal in

order to pursue a *different* means to the same end (Duckworth & Gross, 2014; Jordan, Ferris, Hochwarter, & Wright, 2019; see also Kruglanski, Pierro, & Sheveland, 2011). In particular, lower levels of the goal hierarchy constitute *equifinality sets*—diverse means for reaching a given higher-order goal (see Kruglanski et al., 2002, 2011). Relatedly, recent research suggests that grittier individuals are more likely to adopt a strategic mindset toward problem solving, considering alternative approaches that may be more efficient and effective than their first attempts (Chen, Powers, Katragadda, Cohen, & Dweck, 2020).

Grit in the Workplace

Having established the conceptual foundations of grit, we now turn to grit in the workplace. A person's dispositional tendency to pursue long-term goals with passion and perseverance is one thing; the degree to which they express grit at work is another. In turn, the consequences of enacting grit—whether this leads to positive outcomes for the individual and the organization, for instance—depend on context. It follows that some organizations are better than others at cultivating and capitalizing on individual grit. As shown in Figure 2, we open this section with a discussion of organizational antecedents—including leadership, culture, and job design—that can encourage the expression of grit in the workplace. Next, we discuss organizational outcomes—including retention, work engagement, and job performance—that follow from gritty behavior. We also explore moderators that may amplify or attenuate these relationships. A through line in this review is that although the study of grit may have begun with relatively stable domain-general individual differences, contextual factors may have as much, if not more, influence on the expression and benefits of passion and perseverance for long-term

goals.

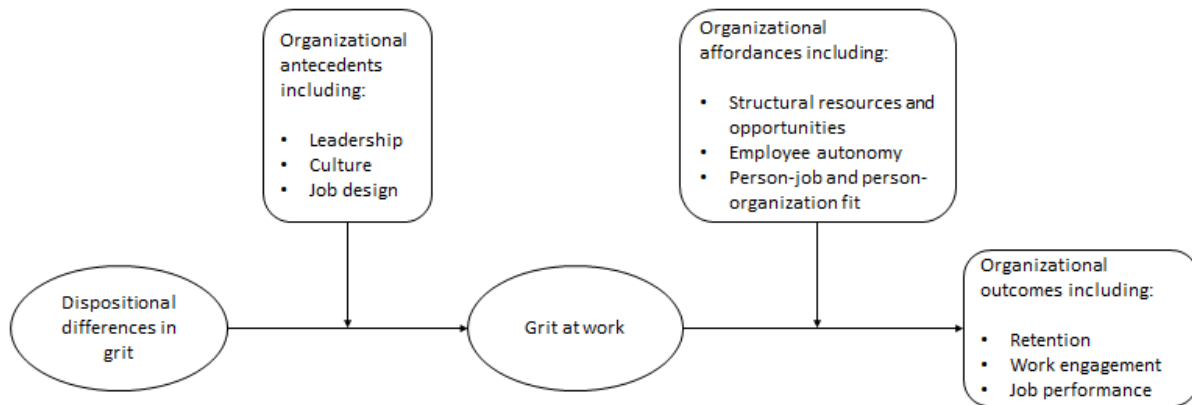


Figure 2. Both organizational antecedents and dispositional differences influence grit at work; in turn, pursuing long-term goals at work with passion and perseverance influences organizational outcomes. Both relationships are moderated by organizational factors. Note that this simplified model omits reciprocal influences and a multitude of other achievement-relevant factors, including ability and luck.

Organizational Antecedents of Grit

Consistent with Lewin's foundational (1946) insight that behavior is a function of both the person and the situation, contemporary personality theories conceptualize traits like grit as density distributions of states (Jayawickreme et al., 2019). As illustrated in Figure 3, an individual high in grit is very often in the state of pursuing a long-term goal with passion and perseverance; an individual low in grit is rarely so. However, all individuals exhibit variation in grit across the diverse situations they encounter in life, and in fact there are circumstances under which this rank-ordering can reverse: as the overlapping distributions in Figure 3 suggest, a low-trait grit individual may exhibit more passion and perseverance for a long-term goal in a salutary organization than a high-trait grit individual in a toxic work environment. Moreover,

dispositional differences exert less influence on behavior in so-called “strong situations” (Davis-Blake & Pfeffer, 1989; Judge & Zapata, 2015; Lewin, 1943). And personality change is not an oxymoron: an individual’s entire density distribution can shift over time depending on life experiences (Blackie, Roepke, Forgeard, Jayawickreme, & Fleeson, 2014), as suggested in cross-sectional data showing that older adults tend to score higher in grit than younger adults (Credé et al., 2017; Duckworth et al., 2007).

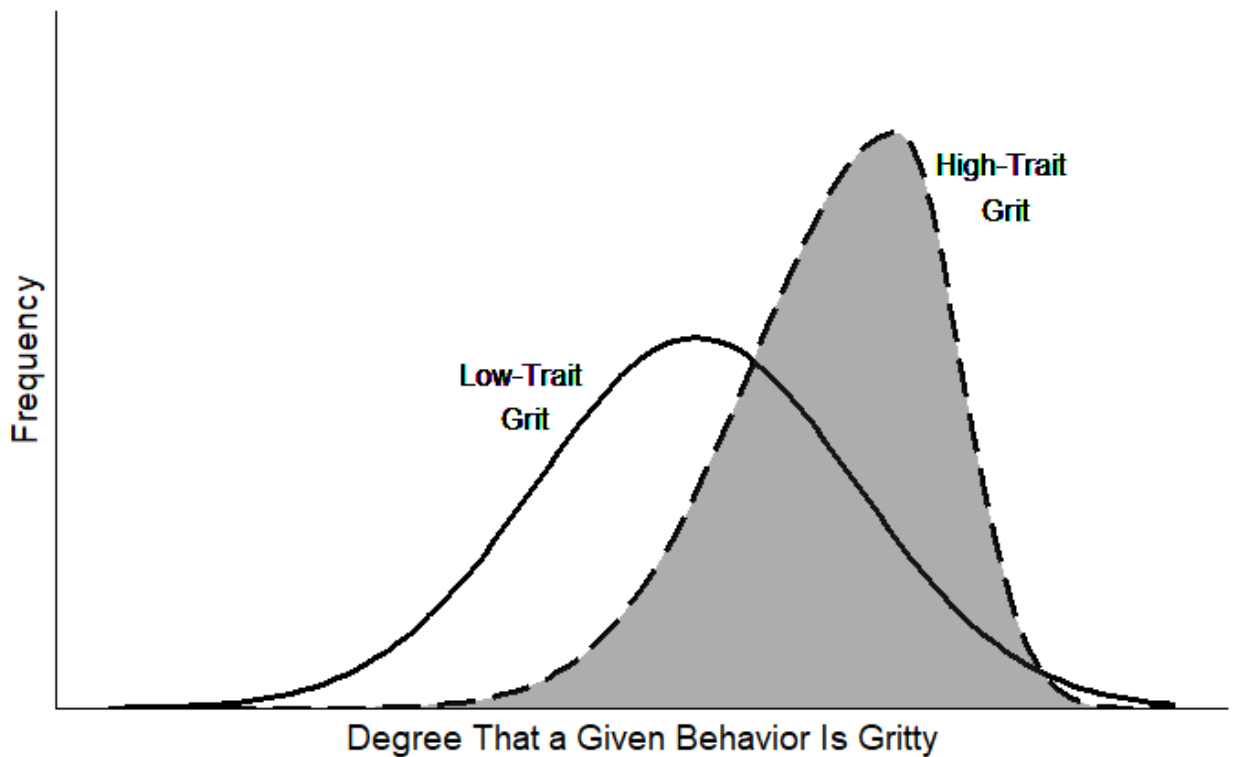


Figure 3. Individuals higher in trait-level grit usually—but not always—exhibit greater passion and perseverance for long-term goals.

In this section, we speculate on how leadership, culture, and job design can encourage sustained passion and perseverance in the workplace. Importantly, we do not mean to suggest that these are the only antecedents of grit, nor that they influence grit independently of each other. Instead, we believe these examples are illustrative and indeed may inspire further inquiry on a wide array of other organizational features.

Leadership. The responsibilities of leaders are far-ranging, but one of the most important is motivating those who follow them to bring their best effort to their work. In our experience, CEOs, team managers, and other leaders are eager to elicit, in all ranks and from all contributors,

passion and perseverance for the long-term goals of their organization. What is the most effective way to do so? We suggest that grit is encouraged by leaders who themselves serve as role models of sustained passion and perseverance and, further, embody an “authoritative” (i.e. supportive and demanding) style of management.

Ralph Waldo Emerson (1909) remarked that an organization is the extended shadow of its leader, and indeed, perhaps the most obvious and important way that a leader can *inspire* grit is to *demonstrate* grit. While we lack direct empirical tests of this proposition, much of human learning operates through the vicarious observation of other people (Bandura, 1965). Because we are most likely to emulate behavior and attitudes when role models are salient, successful, and high-status, it follows that leaders are especially well-positioned to teach grit by example (Bandura, 1971). We further recommend that leaders consciously embrace this responsibility—resolving to be intentional, rather than accidental, role models (Lee & Duckworth, 2018).

Microsoft CEO Satya Nadella is a sterling example. Nadella (2018) has been vocal about the importance of growth mindset in his own life: “When I learn about a shortcoming, it’s a thrilling moment. The person who points it out has given me the gift of insight” (p. 105). When Microsoft launched a Twitter bot that was hacked within hours, Nadella issued an unequivocal public apology but also sent an encouraging email to the team that created the bot, urging them to “take the criticism in the right spirit” and “to keep learning and improving” (della Cava, 2017).

Relatedly, by emphasizing that they are constantly developing as leaders—made, not born to be in charge—leaders help followers see a future in which they, too, can advance into positions of responsibility (Hoyt, Burnette, & Inella, 2012). Employees who are supervised by such humble leaders are more likely to be engaged, have a learning orientation to work, and are less likely to quit their jobs (Owens, Johnson, & Mitchell, 2013). Finally, because model-observer similarity

encourages emulation (Rosekrans, 1967; Han, Kim, Jeong, & Cohen, 2017), diversity, equity, and inclusion should be a priority in the promotion of leaders at all levels of an organization.

In addition, we suggest that an “authoritative” leadership style encourages passion and perseverance. The term “authoritative” comes from classic research in developmental psychology to describe parents who are at once both supportive and demanding (see Baumrind, 1967; Darling & Steinberg, 1993). Analogously, we posit that transformational leadership (Bass, 1985; Burns, 1978) inspires passion, while setting challenging goals (Locke & Latham, 1990a) encourages perseverance. Though originally inspired by Lewinian theory about leadership and group dynamics (Ferguson Hagaman, Grice, & Peng, 2006; Maccoby, 1992), authoritative parenting is seldom mentioned in contemporary management scholarship. Nonetheless, the parallels are striking. Authoritative parents grant their children autonomy to set goals aligned with their emerging values and interests (Joussemet, Landry, & Koestner, 2008). And authoritative parents communicate clear and challenging standards for behavior (Baumrind, 1967; Darling & Steinberg, 1993). Interestingly, adolescents with supportive and demanding parents are more likely to exhibit grit (Guerrero, Dudovitz, Chung, Dosanjh, & Wong, 2016). It seems logical that the same dynamics exist between leaders and followers in the workplace.

Transformational leadership, which we believe is akin to “support” in the supportive and demanding framework, promotes passion by increasing the value that employees expect to derive from their work. The hallmark of transformational leadership is providing followers with “a purpose that transcends short-term goals and focuses on higher order intrinsic needs” (Judge & Piccolo, 2004, p. 755). Early scholarship on transformational leaders suggested that they motivate by “directly increasing the follower’s confidence as well as by elevating the value of outcomes through expanding his or her transcendental interests and level or breadth of needs in

Maslow's hierarchy" (Bass, 1985, p. 31). More recently, research has shown that transformational leadership increases confidence (Pillai & Williams, 2004), creates a sense of organizational support (Kurtessis et al., 2017), and taps into followers' higher-order values (Bono & Judge, 2003). In contrast, transactional leadership focuses on the exchange of rewards for meeting specific performance targets (Bass, 1985). Although these approaches to leadership are not mutually exclusive (Bass, 1999; Judge & Piccolo, 2004), only transformational leadership, in our view, activates self-concordant goal hierarchies (see Cropanzano et al., 1993).

To encourage perseverance for long-term goals, leaders must also be demanding. In particular, leaders can help their teams set challenging goals (see Locke & Latham, 1990a). In a study of 209 leader-follower dyads across a variety of industries (including manufacturing, health care, and government), setting difficult goals amplified the benefits of transformational leadership for followers' organizational commitment and work performance (Whittington, Goodwin, & Murray, 2004). Goal setting is especially complementary to transformational leadership because, as Carton (2018) has pointed out, "the very features that make ultimate aspirations meaningful—their breadth and timelessness—undermine the ability of employees to see how their daily responsibilities are associated with them" (p. 323). Thus, authoritative leaders must furnish inspiring visions with actionable and specific means to achieve them (Lee & Duckworth, 2018). For example, when leading NASA in the 1960s, President John F. Kennedy not only gave inspiring speeches about putting a man on the moon, he also connected this superordinate goal to the lower-level, short-term goals that comprised employees' day-to-day work (Carton, 2018).

Culture. Organizational culture encompasses the values and norms that characterize a workplace (Canning et al., 2020; Chatman & O'Reilly, 2016; Schein, 2010). The strength of a

given culture is determined by the consensus and intensity with which values and norms are upheld (O'Reilly, 1989). Any culture that powerfully influences grit should be high consensus (widely held values and norms) and high intensity (deeply held values and norms). A more interesting question concerns the content of cultures that incline employees toward long-term passion and perseverance. Our view is that grit is encouraged in strong cultures that promote norms of adaptability and that endorse a growth mindset.

Whatever other values they embrace, organizational cultures oriented to the pursuit of long-term goals must prioritize adaptability. Rather than being bound by tradition, gritty individuals—and, in our view, gritty cultures—are flexible about how they will achieve their ambitions (see Chen, Powers, et al., 2020), because not all obstacles and opportunities are foreseeable. Moreover, even good ideas benefit from iterative prototyping. In other words, we suggest that gritty cultures develop larger *equifinality sets*, flexibly choosing optimal means for achieving higher-order goals (see Kruglanski et al., 2002, 2011). In rapidly evolving industries, this approach also helps organizations remain economically viable (Chatman, Caldwell, O'Reilly, & Doerr, 2014), which should enhance confidence that goals are feasible and therefore more worthy of perseverance.

Relatedly, we suggest that organizational cultures that value a growth mindset, the belief that abilities can be developed (Dweck, 2006), encourage grit, particularly during periods of difficulty or struggle. Growth mindset cultures engender trust, collaboration, risk-taking, and innovation (Canning et al., 2020; Emerson & Murphy, 2015), which in turn lead to better overall performance. For example, in a study of Fortune 1000 technology firms, companies that strongly adopted these norms showed better financial performance relative to those that did not (Chatman, et al., 2014). One reason that growth mindset cultures promote trust may be because employees

choose to learn from, rather than feel threatened by, high performers. Research has shown that people who hold a growth mindset are more able to learn from positive role models (Hoyt et al., 2012). Whereas people with fixed mindsets become discouraged and perform worse after exposure to a successful role model, those with growth mindsets become inspired, internalize salient lessons, and perform better (Hoyt et al., 2012).

Although empirical evidence is limited, some research suggests a link between a growth mindset and gritty cultures. For example, middle-school students who perceive their school cultures as valuing learning for learning's sake show rank-order increases in grit that, in turn, predict rank-order improvements in report card grades (Park, Yu, Baelen, Tsukayama, & Duckworth, 2018). Additionally, a two-year cross-lagged analysis of the relationship between grit and growth mindset in adolescent students found that these characteristics are mutually reinforcing (Park et al., 2020). In the organizational literature, gritty entrepreneurs are more likely to adopt learning goals and have a greater tendency to take action on their ideas (Mueller, et al., 2017; Syed & Mueller, 2014). Relatedly, gritty entrepreneurs score higher in self-reported innovation (Mooradian, Matzler, Uzelac, & Bauer, 2016)—a trait that has also been linked to growth mindset cultures (Canning et al., 2020).

In contrast, fixed mindset cultures—or “cultures of genius” (Canning et al., 2020)—likely discourage grit in the workplace. Prizing “innate talent” over development may have several negative effects, including fruitless cycles of hiring and firing, as well as negative self-fulfilling prophecies for those deemed less gifted (Byington & Felps, 2010; Pfeffer, 2001; see also Groysberg, Lee, & Nanda, 2008). In a randomized study with human resources professionals, managers who were asked to increase “talent” in their organization indicated that they would allocate more resources to hiring and fewer resources to development, relative to those who were

asked to increase “skill” (Southwick, Quirk, Ungar, Tsay, & Duckworth, 2020). Organizations that fail to develop from within may unwittingly signal that “people either have it or they don’t.” In one study, managers with a fixed mindset about ability were less likely to recognize performance increases among their employees (Heslin, Latham, & VandeWalle, 2005). Perhaps most damaging, cultures of genius may increase the likelihood of bias. For example, one study found that women and African-American scholars were underrepresented in fields that were perceived as requiring higher levels of “raw, innate talent” (Leslie, Cimpian, Meyer, & Freeland, 2015, p. 262). Interestingly, “naturals” are rated as more competent and more hireable than others who are objectively equivalent in skill but not considered as innately gifted (Tsay, 2016; Tsay & Banaji, 2011).

One promising approach to cultivating growth mindset cultures is to craft organizational language that implies that human abilities can be developed. Subtle changes in how abilities are described, or in how success is attributed, can make large differences in people's mindsets and performance (Mueller & Dweck, 1998). For example, exposure to conversations in which ability is described as malleable encourages people to exhibit growth-mindset-related behaviors, such as emphasizing motivation over “smarts” in a job application and preferring to hire others who do the same (Murphy & Dweck, 2010). Describing ability as a “skill” (versus a “talent”), for example, is associated with a greater belief in the possibility of improvement and a stronger endorsement of the value of persistence (Southwick et al., 2020). Additionally, mission statement language that describes ability as malleable is more likely to promote attitudes that are consistent with a growth mindset (Canning et al., 2020). Of course, missions are not the same thing as culture, nor is there anything “distinctively cultural” about them (O’Reilly & Chatman 1986, p. 207). Nevertheless, mission statements, which articulate the superordinate goal of the

organization, are a powerful mechanism through which values are expressed and eventually acted upon. And organizations that have a strong sense of mission are typically more successful than those that do not (Denison & Mishra, 1995).

Job design. Modern conceptualizations of job design encompass all the processes and outcomes by which work is structured, organized, experienced, and enacted (Grant, Fried, & Juillerat, 2011; Morgeson & Humphrey, 2008). Accordingly, job characteristics include not only the diverse tasks that employees endeavor to complete when fulfilling their responsibilities but, in addition, required knowledge and skills, and social characteristics including support and feedback. In our view, jobs encourage passion when they are self-concordant with employees' personal values and interests, and they encourage perseverance when they enable continuous development of expertise.

An emerging body of research suggests that aligning values and interests can be a “particularly potent” form of motivation in the workplace (Grant & Shin, 2012, p. 511). For example, in studies of university fundraisers and swimming pool lifeguards, interest and prosocial purpose interacted synergistically to predict higher levels of persistence, performance, and productivity (Grant, 2008). The combination of interest and purpose was also shown to lead to higher levels of creativity in military personnel and water treatment employees (Grant & Berry, 2011). In particular, person-job fit is a better predictor of job satisfaction and intent to quit than fit with the organization, supervisor, or work group (Kristof-Brown, Zimmerman, & Johnson, 2005). There are several ways organizations can design jobs to align with employees' interests and values. One approach is to match employees to tasks by self-expressed interest. Another approach is to give employees autonomy in how they allocate their time and energy (Deci, Olafsen, & Ryan, 2017; Gagné & Deci, 2005). For example, both 3M (Goetz, 2011) and

Google (Robinson, 2018) provide employees with opportunities to work on passion projects of their choosing for a certain portion of the work schedule. An alternative to job matching is job crafting, which entails redefining and reimagining one's job (see Berg, Dutton, & Wrzesniewski, 2013) and can increase work engagement, meaningfulness, and performance (Tims, Derks, & Bakker, 2016; van Wingerden, Bakker, & Derks, 2017). Finally, since benevolence is the most commonly endorsed personal value (Schwartz, 2012), putting employees in closer contact with the beneficiaries of their work can increase motivation, job satisfaction, and performance (e.g. Bellé, 2012, 2013; Buell, Kim, & Tsay 2017; Grant, 2007, 2012).

In contrast to early job design theories that emphasized skill variety to promote work motivation (e.g. Hackman & Oldham, 1975, 1980; Turner & Lawrence, 1965), we advocate for the opportunity for specialization. Early work design models were devised, in part, as a reaction to job standardization—the creation of highly routinized, efficiency-driven job models designed to maximize industrial output, often at the expense of employee well-being. It is true that job rotation can counteract monotony and boredom in repetitive jobs (Campion, Cheraskin, & Stevens, 1994; Viteles, 1950). And, it is also true that it can, in some cases, increase skills that are relevant for certain long-term goals (e.g., rotating between sales and production divisions as preparation for managing these divisions later on). However, rotation can also make it difficult to become better and better at a particular skill. If becoming world-class at what you do takes years of effort, there is little chance of doing so when your job limits the amount of time you can dedicate to any one aspect of your performance (Duckworth, Eichstaedt, & Ungar, 2015). Moreover, because complexity and learning can substitute for sheer novelty (Csikszentmihalyi, 1990), employees can maintain motivation by developing a deeper, rather than broader, skill set (e.g. Hsieh & Chao, 2004; Humphrey, Nahrgang, & Morgeson, 2007; Morgeson & Campion,

2002). As employees become more expert at their jobs, not only do they become more efficient, but they also may begin to identify, and therefore act, as “high performers” (Locke & Latham, 1990b).

When designing jobs for continuous learning, organizations might take inspiration from the deliberate practice framework (Ericsson & Harwell, 2019). Traditional models of skill development (e.g. Fitts & Posner, 1967) emphasize the value of automaticity (i.e., doing things on autopilot), but world-class performers engage in a never-ending cycle of conscious, continuous improvement (Ericsson, Roring, & Nandagopal, 2007). The “deliberate practice” of experts includes setting specific goals for skill development, engaging full attention and effort when practicing, seeking and receiving immediate feedback, and consistently repeating this cycle with the support of a coach (Ericsson & Harwell, 2019). Even if organizations cannot fully instantiate all of the principles of deliberate practice, this paradigm offers an aspirational ideal for on-the-job skill development. Notably, former Google executive Kim Scott has made the case for “radical candor”—giving direct feedback, in a way that also conveys caring, to employees. And the investment management firm Bridgewater encourages “radical transparency” and “constant feedback” in meetings (Dalio, 2017).

One of the hallmarks of deliberate practice is complete concentration, and it is often the case that experts practice alone rather than in groups (Ericsson & Harwell, 2019). Unexpected interruptions during the workday diminish energy (Lin, Kain, & Fritz, 2013) and worsen performance in complex tasks (Speier, Vessy, & Valacich, 2003). Some studies have shown that creating “architectural privacy” in work spaces by adding distance between desks (Sundstrom et al., 1980), providing daily “quiet hours” (König, Kleinmann, & Höhmann, 2013), or creating opportunities for intermittent (rather than constant) collaboration (Bernstein, Shore, & Lazer,

2018) may increase performance. Job designs that support extended concentration on priority tasks should support effortful striving for long-term goals.

Organizational Outcomes of Grit

What are the downstream consequences of employees' exhibiting grit at work? We propose that pursuing long-term goals with passion and perseverance can lead to superior retention, work engagement, and job performance. However, as suggested in Figure 2, we also foresee important moderators: grit in the workplace is only beneficial under certain salutary conditions.

Retention. Reducing voluntary turnover is a central concern for any organization. In 2019, roughly three million Americans quit their jobs each month (United States Bureau of Labor Statistics, 2020). Although changing jobs can be good for both employees and employers, particularly when a better fit is available elsewhere (Kalleberg, 2008), and although switching organizations is often necessary for career advancement (Cherame, Sturman, & Walsh, 2007; Zhao & Zhou, 2008), turnover can be costly. We expect individual differences in grit to predict retention in challenging, autonomously chosen domains. On the other hand, we expect that grit may *increase* turnover in jobs that are not aligned with, or do not allow individuals to grow into, long-term professional goals. Finally, although grit is likely to increase retention in challenging settings, there may be circumstances in which grit leads to costly perseverance that can negatively impact employees and their organizations.

There are two primary reasons that grit should predict retention in challenging settings. First, any predictor's influence depends on lack of restriction on range in the outcome. If no one is quitting, grit *can't* predict retention. Second, it is precisely when challenges are greatest that sustained passion and perseverance toward long-term goals matters most. For example, in the

high-attrition domain of sales, grit is a better predictor than conscientiousness of retention six months later, controlling for both tenure and prior sales experience (Eskreis-Winkler et al., 2014). Similarly, controlling for standardized achievement test scores, grit predicts high school graduation in a large urban school system better than academic conscientiousness (Eskreis-Winkler et al., 2014). Among residents in general surgery, grit predicts intentions to complete the residency and is inversely correlated with thoughts of leaving (Salles et al., 2017).

In addition, grit should matter more for retention when individuals have the autonomy to make a free (as opposed to forced) decision to join in the first place. Consider, for example, the extensive application process required for admission to the United States Military Academy at West Point. In addition to all the elements of a typical college application, West Point requires a standardized physical fitness test and a formal nomination by a U.S. senator or congressman. Data collected over a full decade show that cadets who score higher on the Grit Scale upon entry are more likely to persist through the highest-attrition stage—initial training—even when controlling for cognitive and physical ability (Duckworth et al., 2007; Duckworth et al., 2019). By comparison, self-control and conscientiousness are less reliable predictors (Duckworth et al., 2007). Four years after entering West Point, grittier cadets are more likely to graduate (Duckworth et al., 2007; Duckworth et al., 2019). Likewise, grittier soldiers are more likely to complete the arduous “Green Beret” training for the United States Army Special Forces (Farina et al., 2019), even when controlling for both cognitive and physical ability (Eskreis-Winkler et al., 2014). Relatedly, a recent study of adults in 19 OECD countries found that perseverance was more strongly associated with job satisfaction in countries with lower levels of unemployment (Danner, Lechner, & Rammstedt, 2019)—suggesting that, in healthy economic conditions,

grittier individuals are less likely to want to quit their jobs, whereas poor economic conditions limit autonomy in job choice, diminishing the influence of grit on job retention.

As a counterpoint, grit may in some cases increase the likelihood of turnover. In particular, gritty employees may “outgrow” an organization, leaving to pursue a more attractive position—with greater opportunities for growth and advancement—at a competing organization in the same industry. Grit should also accelerate exiting a company or nonprofit whose core mission does not align with an individual’s intrinsic interests and values. Indeed, a clear superordinate goal should hasten such a departure insofar as it makes such misfit more obvious (see Lee & Duckworth, 2018). In addition, the desire to pursue a superordinate professional goal may, paradoxically, motivate more rapid transitions from organization to organization at the early stages of an employee’s career. This is because sampling a variety of options—in pursuit of a tight fit with one’s values and interests—is prerequisite for later deciding where to specialize (Bloom, 1985; DiFiori et al., 2017).

Finally, we must consider instances in which grit discourages turnover in cases when leaving an organization is, in fact, better than staying for the individual and/or the organization. Employees ought not “stick it out” in a toxic work environment (e.g., abusive leadership, discrimination, bullying), and when they do, they suffer physically and emotionally (Allen, Peltokorpi, & Rubenstein, 2016). More generally, we expect retention to be a worse outcome than departure when there is misfit between the individual’s interests, values, and goal hierarchy and those of the organization—or when structural opportunities and obstacles are, on balance, worse than other options. To our knowledge, field studies have yet to test whether grit leads to escalation of commitment (Staw, 1976). However, in laboratory tasks (e.g., difficult and unsolvable anagrams) designed to provide negative feedback on performance, grittier individuals

have been shown to invest more effort and to persist longer—even when doing so comes at a monetary cost (Lucas, Gratch, Cheng, & Marsella, 2015). Consistent with evidence that gritty individuals are usually in “locomotion” rather than “assessment” mode (Mueller et al., 2017), the persistence of grittier participants in these lab studies was explained in part by positive expectations and positive emotions toward difficult tasks. Relatedly, the optimism that characterizes gritty individuals (Duckworth, et al., 2009) can lead to escalation of commitment (Sleesman, Conlon, McNamara, & Miles, 2012; Sleesman, Lennard, McNamara, & Conlon, 2018). It is also possible that gritty individuals associate “pain” with “gain” (cf., Eisenberger, 1992), which can get them into trouble, as can the rule of “persist at all costs” (Crust, Swann, & Allen-Collinson, 2016). For all of these scenarios, we suggest that an antidote to stubborn and unproductive goal pursuit is to reflect on higher-level goals in their hierarchy before blindly proceeding, asking “Why am I doing this?” (see Oettingen, 2014) as well as lower-level goals, asking, “How else might I accomplish this?” (Chen, Powers, et al., 2020; cf. Höchli et al., 2018).

Work engagement. Not everyone who chooses to stay in an organization is fully engaged while there. In international surveys, only 15% of employees reported feeling “engaged” at work, whereas 67% said they are “not engaged” and 18% said they are “actively disengaged” (Gallup, 2017). Work engagement refers to bringing one’s full energy, attention, and motivation to the role (Kahn, 1990; Rich, Lepine, & Crawford, 2010; Schaufeli, Salanova, González-Romá, & Bakker, 2002). Cross-sectional studies have shown that grit and work engagement correlate positively among detectives and mental health professionals in the United States (Eskreis-Winkler, Shulman, & Duckworth, 2014) as well as government and private-sector professionals in India (Singh & Chopra, 2018). In a large community sample of working adults in Japan, grit was associated with work engagement independent of conscientiousness and

other Big Five factors (Suzuki, Tamesue, Asahi, & Ishikawa, 2015). The relationship between grit and engagement is also evident outside the workplace. For instance, among finalists in the Scripps National Spelling Bee, grit predicts cumulative hours of preparation (Duckworth et al., 2007), particularly the effortful, not-so-enjoyable-in-the-moment “deliberate practice” that accounts for the superior skill of grittier spellers (Duckworth, Kirby, Tsukayama, Berstein, & Ericsson, 2011), as well as experts in many other performance domains (Ericsson, 2004). Among soccer players, grit is associated with more time in soccer-related activities of all kinds (e.g., competing in games, watching games, playing soccer with peers) but especially with solo and coach-supervised practice (Larkin, O’Connor, & Williams, 2016). This increased level of engagement in turn explains performance on soccer-specific tasks of perception and decision making. In a more diverse sample of athletes, grit—more so than self-control and conscientiousness—has been associated with cumulative deliberate practice and self-reported skill (from amateur to internationally competitive) (Tedesqui & Young, 2018). Among doctoral students, grit predicts weekly hours devoted to programs of study as well as GPA (Cross, 2014).

One aspect of work engagement that may be particularly related to grit is the “flow” experience (Csikszentmihalyi, 1975). Consistent with the idea that passion and perseverance belie well-developed and harmonious goal hierarchies, Csikszentmihalyi (1990) conjectured that life becomes “a unified flow experience [when individuals pursue] a difficult enough goal, from which all other goals logically follow” (p. 430). Furthermore, people tend to experience flow more often when both skills and challenges are high (Csikszentmihalyi, 1990). Gritty people tend to invest more time in the development of their skills (Duckworth et al., 2011), which increases their chances of experiencing flow (Von Culin et al., 2014). At least some empirical evidence supports this connection. Grit is inversely related to mind wandering and positively related to

experiencing the flow state—and these relationships hold when controlling for conscientiousness (Ralph, Wammes, Barr, & Smilek, 2017; Smith, Marty-Dugas, Brandon, & Smilek, 2020).

Burnout is arguably the conceptual antithesis of work engagement (Maslach, Schaufeli, & Leiter, 2001; Schaufeli & Salanova, 2014). Whereas engagement is an energetic, positive state, burnout is low-energy and negative in valence. More specifically, burnout comprises exhaustion, cynicism, and inefficacy, whereas engagement denotes vigor, dedication, and absorption. Whereas burnout is particularly related to excessive work demands, engagement is particularly related to the abundance of resources and support (Maslach et al., 2001). Another difference is that burnout mainly has negative consequences for employee health and well-being, whereas work engagement has positive consequences for job performance (Schaufeli & Salanova, 2014). Given positive associations between grit and work engagement, it is unsurprising that grit and burnout have been shown to be inversely correlated among healthcare workers and educators (who suffer higher rates of burnout than employees in most other industries). For example, grit is associated with lower burnout in school counselors (Kim & Lambie, 2018), nurses (Seguin, 2019), and doctors (Halliday et al., 2017) and residents in general surgery (Salles et al., 2014), neurosurgery (Shakir et al., 2020), and emergency medicine (Dam, Perera, Jones, Haughey, & Gaeta, 2018). Grit may also buffer against the deleterious effects of burnout on personal health: in one study, the coupling between burnout and physical health was weaker among private service-sector employees who scored higher in grit (Ceschi, Sartori, Dickert, & Constantini 2016). Consistent with this idea, recent research suggests that employee health may not suffer from putting in long hours at work per se but, rather, from a compulsive and joyless work mentality (Brummelhuis, Rothbard, & Uhrich, 2017).

In the long run, the benefits of grit on work engagement likely depend on fit and opportunity. Since grittier individuals tend to seek happiness from activities that provide a sense of meaning, as opposed to activities geared toward hedonic pleasure (Suzuki et al., 2015; Von Culin et al., 2014), work—rather than hobbies or other leisure pursuits—is in some ways a natural locus for the expression of sustained passion and perseverance. On the other hand, it is absolutely possible to direct grit toward an avocation or civic role. In addition, an especially gritty individual, with a clearly elaborated goal hierarchy, may be less engaged if their long-term interests and values are not in alignment with their organization or work role. Indeed, the extent to which Grit Scale scores predict performance depends on the degree to which individuals feel they can attain passion in their particular situation (Jachimowicz et al., 2018). To our knowledge, such interactions have not been tested empirically. Cross-sectional associations between grit and work engagement make sense, but over time, we would expect such relations to diminish, or even reverse, in the case of poor fit between the individual and either their job or organization. Likewise, we can imagine especially gritty individuals to be more, not less, vulnerable to burnout when characteristically pursuing goals with steadfast passion and perseverance but without the resources or opportunities needed to succeed.

Job performance. Job performance is arguably organizational behavior's most critical dependent variable (Campbell & Wiernik, 2015). We follow Motowidlo and Kell (2013) in using the term to refer to “the expected organizational value” of an employee's behavior (p. 82). In general, we expect grittier employees to perform better at work for at least three reasons. First, retention should lead to more work experience, which has been shown to contribute, at least indirectly via knowledge and skill, to performance (Motowidlo & Kell, 2013). Second, work engagement relates to job performance (Demerouti & Cropanzano, 2010). Third, some evidence

has already accumulated that grit predicts job performance, and a larger body of research has established the predictive power of grit for performance outside the workplace. As for any organizational outcome, we expect the effects of grit on job performance to depend on both fit and resources and can foresee circumstances in which deficits in either might attenuate or even reverse the effect of grit on job performance.

As might be expected of individuals who keep showing up and working hard, gritty individuals tend to outperform peers of equal ability. Among novice teachers at Teach For America, grit scores before the start of the school year predict effectiveness indexed by the end-of-year academic gains of their students (Duckworth, et al., 2009). Among entrepreneurs, grit scores predict performance one year later, as judged by executive-level employee ratings of sales growth, profitability, and other relevant metrics—even when controlling for startup experience, education, and age of firm (Mueller et al., 2017). In a separate study of entrepreneurs, Mooradian and colleagues (2016) likewise concluded that both passion and perseverance positively impact managerial ratings of venture performance, even when controlling for a large battery of covariates, including experience and age of firm. Relatedly, in a longitudinal study that predates the introduction of grit to the scientific literature, questionnaire measures of passion and tenacity among entrepreneurs predicted venture growth six years later, even when controlling for the “ability to acquire and systematize the operating resources needed to grow an organization” (Baum & Locke, 2004, p. 587).

A more extensive literature has established the predictive validity of grit for performance outside the workplace. For example, in the West Point studies mentioned above, grit reliably predicts military, physical, and academic grades (Duckworth et al., 2019). Grit also predicts the final round reached in the National Spelling Bee (Duckworth et al., 2007) and buffers athletes

against the deleterious effects of critical feedback on subsequent performance (Moles, Auerbach, & Petrie, 2017). In a large international community sample followed longitudinally, grit emerged as the most reliable predictor of self-reported goal attainment when compared to other “personality strengths” (Sheldon, Jose, Kashdan, & Jarden, 2015).

Since grit can be directed toward goals other than work, it is when work is *more* than “just a job” that grit matters most. For example, in a study of employees at a technology firm, grit predicted performance only when employees expressed context-specific passion for their work (Jachimowicz et al., 2018). Given the low levels of engagement most adults report for their work (Gallup, 2017), it is not surprising that the predictive validity of grit for income is reliable but modest (Danner et al., 2019) and smaller than that for Big Five conscientiousness (Zissman & Ganzach, 2020). In general, the bandwidth-fidelity tradeoff anticipates that the broad family of conscientiousness, to which grit belongs, is more ubiquitously predictive of multi-faceted outcomes than of narrowly defined outcomes (cf., Duckworth, Weir, Tsukayama, & Kwok, 2012). Since job performance is multi-dimensional (Campbell & Wiernik, 2015), it is no surprise that it is reliably predicted by Big Five conscientiousness (Barrick & Mount, 2000), as well as the aggregate of conscientiousness facets (Judge Rodell, Klinger, Simon, & Crawford, 2013).

Discussion

Theoretical Contributions

This chapter represents the first serious elaboration of the conceptual foundations of grit since the construct’s debut in the psychological literature in 2007. We began by distinguishing grit from related constructs, emphasizing that what makes grit unique is (a) its emphasis on especially long-term goals, (b) the inclusion of both passion and perseverance, and (c) its dispositional nature. Next, we situated grit in the much older and larger literature on goal pursuit.

The marriage of grit to research on goal structures and processes is logical, if belated: understanding the tendency to pursue goals that takes years to complete with passion and perseverance begins with understanding how, in general, goals are organized, prioritized, and pursued. We argued that sustained passion derives from self-concordant and internally aligned goal hierarchies as opposed to extrinsically motivated or internally conflicting goal hierarchies. Sustained perseverance, in turn, derives from having clarity at the bottom of one's goal hierarchy—clear proximal goals and plans that inform “how” a person will move toward their top-level goal—and a preference for the action stage of goal pursuit over the deliberative stages of goal setting and evaluation. Finally, we suggested that self-knowledge, self-efficacy, and having multiple pathways to achieve higher-order goals can increase *both* passion and perseverance.

We also debuted in this chapter our model for how organizations can cultivate and capitalize on grit in the workplace. In our prior work, we studied how individual differences in grit play out within a single context (e.g., differences in grit among cadets at West Point). This focus inadvertently neglected how passion and perseverance are influenced by contextual factors, including culture, leadership, and job design. Since behavior is a function of both the person and the situation (Lewin, 1946), a legitimate critique of extant research on grit is that it neglects half of the behavioral equation. In this chapter, we have taken one step toward redressing this gap. In particular, we identified organizational features that can encourage passion (e.g., supportive leaders and self-concordant jobs), perseverance (e.g., demanding leaders and jobs that allow for specialization), or both (e.g., leaders who model grit and cultures of growth and adaptability). We also emphasized that gritty behavior should be beneficial, both to the organization and the

employee, only when there are structural opportunities for advancement, a good fit between the individual and their job and organization, and employee autonomy.

Limitations and Future Directions

By necessity, this introductory chapter is incomplete. The organizational antecedents and outcomes of grit we highlighted here are merely illustrative. We did not discuss hiring, training, or creating reward structures for grit, for example, nor did we expound on the impact of grit on job satisfaction or organizational citizenship. The theoretical model presented in Figure 3 is also incomplete, omitting myriad mediators and reverse causal relationships (cf., Alhadabi & Karpinski, 2020; Gielnik, Spitzmuller, Schmitt, Klemann, & Frese, 2015; Usher, Li, Butz, Rojas, 2019). Nor did we discuss the undoubtedly complex interplay among the elements that were part of our discussion: Can supportive and demanding leadership “make up” for deficits in job design? Or are the benefits of organizational antecedents complementary? We were also silent on one of the most urgent areas of future scholarship: contextual factors outside the organization (e.g., structural inequalities and stereotypes in society at large that may discourage grit).

More empirical work is needed on the potential downsides of grit. We are unaware of research on how grit in the workplace might diminish the happiness of family and friends who feel like they take “second place” to professional passions. Relatedly, we know very little about how grit might precipitate work-life dysfunction (e.g., conflicts between one’s professional and personal goal hierarchies, cf., Vallerand et al., 2003; Kruglanski, Szumowska, Kopetz, Vallerand, & Pierro, 2020). Relatedly, some have argued that too much of anything, even a virtue, can be bad (Aristotle, 2000; Grant & Schwartz, 2011). Because most of the empirical studies we reviewed used linear models, the possibility of curvilinear associations with grit remains largely unexplored. Moreover, even if passion and perseverance in extremis is

beneficial, or at least neutral, relative to abundant grit, it is clear that grit is not “all you need to succeed” at work or in life. Grit is not the same thing as creativity, charisma, or myriad other aspects of character, nor is it ethically neutral—grit in the absence of compassion and humility seems the profile of a despot. Another question for future research concerns the lasting effects of the workplace on grit. How long might such change last, and how likely is it to transfer across domains? Across adulthood, grit and age are positively correlated (Duckworth et al., 2007), but in such cross-sectional data, it is impossible to disentangle cohort effects from age-related maturation. Regardless, positive age trends are consistent with the idea that domain-general grit can grow as a function of experience and also fits with more compelling longitudinal evidence for rank-order and mean-level change in personality throughout adulthood (Roberts & Delvecchio, 2000; Roberts, Walton, & Viechtbauer, 2006). In addition, there is evidence that traits can change after specific life events (Specht, Egloff, & Schmukle, 2011) and that work experiences, in particular, can influence personality development (Woods, Edmonds, Hampson, & Lievens, 2020). It therefore seems entirely plausible that over time, organizations may be able to influence trait-level behavior change (Blackie et al., 2014).

The emerging research on goal fusion offers another promising direction for future research. Over time, linkages between lower-level goals and higher-level goals in the goal hierarchy of a grit paragon can fuse, blurring the distinction between means and ends (Kruglanski et al., 2018, see also Eisenberger, 1992). Goal fusion is theorized to take place when a lower-level goal is paired repeatedly, uniquely, and immediately with its higher-order goal. For instance, one athlete may construe practicing drills as drudgery, reluctantly logging hours in order to enjoy superior performance on game day. In contrast, a paragon of grit might conceptualize practice as “part and parcel of achieving my dream.” For instance, Olympic gold

medal volleyball player Kerri Walsh Jennings told us: “Beginners rarely appreciate that it’s the fundamentals you drill every day that make a champion” (personal communication, November 16, 2020). Once fused with higher-order goals, the striving toward lower-order goals may be experienced as more freely chosen (“I want to do this!”) than coerced (“I have to do this!”) and less aversive. The definition of fused goals, however, hinges on structure rather than phenomenology (cf., Schwartz & Wrześniewski, 2018).

Finally, we look forward to refinements or alternative measures to the Grit Scale (Duckworth et al., 2007). In recent years, the underlying factor structure and appropriate use of this self-report questionnaire have been debated. Some have argued that the subscales for passion and perseverance should not be combined (e.g., Credé, 2019; Disabato, Goodman, & Kashdan, 2019; Guo, Tang, & Xu, 2019); others have argued that they should (Gonzalez, Canning, Smyth, & MacKinnon, 2019; Jachimowicz, Wihler, Bailey, & Galinsky, 2019). Because the construct of grit was explicitly conceived as the compound of sustained passion and perseverance, we respect researchers’ decisions to study its components independently but generally prefer using the full 12-item scale in totum. In our experience, the full grit scale tends to account for more variance in objectively measured, long-term achievement outcomes than does either subscale alone (Duckworth et al., 2007; Duckworth et al., 2019). Most important, we heartily agree with Clark and Watson (2019) that constructs and their operationalizations are rarely, if ever, perfect at conception. We are excited that a growing community of scholars continues to make refinements on both fronts (e.g., Jordan et al., 2019).¹

¹ There is plenty of room for improvement. One limitation of the Grit Scale is a method factor in which all of the passion items are reverse-scored, but all of the perseverance items are positively scored. This confound hinders interpretation of factor analytic models. Another limitation, common to many self-report questionnaires of facets of conscientiousness, is reference bias (i.e., ratings influenced by frame of reference that may vary across individuals, see West et al., 2015).

Coda

The world events that unfolded around us as we wrote and revised this essay throw into sharp relief the distinction between short-term and long-term motivation. This is not to lay blame for the current situation—a global pandemic, the deepest economic recession since the Second World War, or a racial reckoning four centuries in the making—on lack of grit. Yet rising to these unprecedented challenges, it seems, calls upon personal and collective passion and perseverance for especially long-term goals. In these dark days, some countries, companies, and nonprofit organizations have exemplified grit—articulating or reaffirming superordinate goals clearly aligned with core values, then identifying a harmonious set of strategies and tactics toward those ends and striving indefatigably, flexibly, forward. Others have not. The quote that opens this essay comes from a commencement speech Barack Obama delivered seven years ago to the graduating class of Ohio State University. And yet the wisdom seems timely:

The point is, if you are living your life to the fullest, you will fail, you will stumble, you will screw up, you will fall down. But it will make you stronger, and you'll get it right the next time, or the time after that, or the time after that. And that is not only true for your personal pursuits, but it's also true for the broader causes that you believe in as well.

In our view, it is not the intensity of our motivation over the short term that will make the difference in a fight like this. It is our stamina. It is failing and trying again, stumbling and regaining our balance, screwing up and figuring out what we did wrong, and falling down, only to get up again. Will we prevail? Time will tell.

In addition, several Grit Scale items, particularly those indicating goal pursuit over years, are inappropriate for younger samples. Accordingly, Park and colleagues worked with middle school teachers and students to develop age-appropriate items of passion and perseverance for early adolescence (Park, Tsukayama, Goodwin, Patrick, & Duckworth, 2017; Park et al., 2018).

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