Resilient personality: Is grit a source of resilience?

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Abstract:

Resilience, the ability to function under adversity, is important in most aspects of life, but especially so in organizations (Britt et al., 2016; Caza and Milton, 2012). Workers face mounting stress from chronic issues such as employment uncertainty, growing work demands, 24/7 connectivity, and blurring work boundaries (Ashford et al., 2018; Kolb et al., 2012; Kossek and Perrigino, 2016). Moreover, acute workplace crises may be increasing in severity and frequency (Williams et al., 2017). As a result, it seems hard to overstate the importance of being able to recover from challenges at work. Indeed, resilient individuals have been found to enjoy many positive outcomes, including greater wellbeing, better mental health, higher life satisfaction, and more self-efficacy (Lee et al., 2013; Liu et al., 2017; Mayordomo et al., 2016). Resilience is also positively associated with important attitudes and behaviors such as job satisfaction, engagement, organizational commitment, and job performance (Elitharp, 2005; Kossek and Perrigino, 2016; Cooke et al., 2016; Wang et al., 2017).

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Article:

Resilience, the ability to function under adversity, is important in most aspects of life, but especially so in organizations (Britt et al., 2016; Caza and Milton, 2012). Workers face mounting stress from chronic issues such as employment uncertainty, growing work demands, 24/7 connectivity, and blurring work boundaries (Ashford et al., 2018; Kolb et al., 2012; Kossek and Perrigino, 2016). Moreover, acute workplace crises may be increasing in severity and frequency (Williams et al., 2017). As a result, it seems hard to overstate the importance of being able to recover from challenges at work. Indeed, resilient individuals have been found to enjoy many positive outcomes, including greater wellbeing, better mental health, higher life satisfaction, and more self-efficacy (Lee et al., 2013; Liu et al., 2017; Mayordomo et al., 2016). Resilience is also positively associated with important attitudes and behaviors such as job satisfaction,

engagement, organizational commitment, and job performance (Elitharp, 2005; Kossek and Perrigino, 2016; Cooke et al., 2016; Wang et al., 2017).

In this chapter, we consider resilience from an individual perspective, seeking to clarify the nature of the resilient personality. We focus specifically on the relationship of the relatively new trait construct of grit (i.e., perseverance and consistency of interest in pursuit of long-term goals; Duckworth et al., 2007) with individual resilience. Numerous authors have linked grit and resilience (Crawford-Garrett, 2018; Duckworth, 2017; Fazeli et al., 2018; Price, 2019; Stoffel and Cain, 2016), but the exact nature of the relationship between the two constructs remains unclear. To clarify the situation, we take two steps: (1) we examine the relationship between grit and hardiness (i.e., control, commitment and challenge; Maddi, 2004), since hardiness is a well-established indicator of trait-level resilience; and (2) we examine the relationship between grit and a variety of resilient outcomes. Using updated meta-analytic data, we find that grit is not associated with the resilient personality trait of hardiness, and while grit may contribute to individuals' resilient outcomes in some contexts, it may impede them in others. As a result, we argue that grit should not be considered a part of the resilient personality.

Background

In broad terms, resilience refers to an individual's ability to cope with adversity and to continue functioning in stressful circumstances (Bonanno, 2004; Masten, 2001). Within this broad definition, researchers have expressed disagreement about the exact nature of resilience (Britt et al., 2016; Caza and Milton, 2012). Resilience is a multifaceted concept that has been discussed in many different ways, even just within the organizational literature (Linnenluecke, 2017; Sutcliffe and Vogus, 2003). As a result, explanations of resilience vary greatly, focusing on a range of individual, interpersonal and systemic factors (Southwick et al., 2014). Parts of this book address all of these factors, but our concern here is with individual qualities that contribute to resilience. In particular, we are interested in relatively stable traits that foster resilient outcomes, focusing on grit since it has recently been proposed as a new indicator of trait resilience (Duckworth, 2017; Price, 2019). Below, we summarize the current understanding of trait resilience, and then consider grit relative to that understanding.

Hardiness as Trait Resilience

Studies highlight that some individuals possess characteristics which enable them to thrive in challenging circumstances (Connor and Davidson, 2003; Friborg et al., 2005). Research on personal qualities that predict resilient outcomes, or the so-called "resilient personality," has identified a variety of individual differences that might make a person more likely to thrive during adversity. However, in many of these studies, the term "resilience" is used in a generalized way that does more to obscure meaning than clarify it.

For example, there has been a great deal of research on ego resiliency, but that construct involves successful modulation and change in response to environmental dynamism (Block and Kremen, 1996). Ego resiliency may well contribute to resilient outcomes (i.e., positive adaptation in difficult situations), but it is also relevant in many other situations where no significant adversity is present (Klohnen, 1996). Similarly, the Resilience Scale (Wagnild and Young, 1993) suffers

from validity concerns and confounds aspects of trait resilience with resilient outcomes. It was originally developed from statements made by "older women" who had successfully adapted to "major life events" (i.e., who displayed resilience), and is described as comprising five characteristics (Wagnild, 2009). However, factor analysis finds only two components (Wagnild and Young, 1993), and the construct is typically operationalized as a single factor (Wagnild, 2009). Some of its components reflect traits that might contribute to resilience (e.g., perseverance), but others are more reflective of states and resilient outcomes (e.g., meaningful life). Indeed, consistent with the claim that the scale measures an outcome state more than a stable trait, its lead author has explicitly called for study of how Resilience Scale scores change with time (Wagnild, 2009). As a result, neither ego resiliency nor the state-like characteristics measured in the Resilience Scale are likely to assess resilient personality accurately.

In contrast, the dispositions that comprise hardiness are both conceptually and empirically consistent with the idea of a resilient personality. The construct emerged from Maddi and colleagues' 12-year study of managers at the Illinois Bell Telephone company, where some managers maintained their wellbeing and performance despite extreme downsizing and organizational turbulence (Maddi and Kobasa, 1984; Maddi, 1987). In the 35 years since that time, hardiness has proved to be a powerful factor underlying the resilient behavior of individuals facing a wide variety of personal and professional adversities (Eschleman et al., 2010; Maddi, 2005).

Hardiness is an individual's tendency to display three attitudes – control, commitment and challenge – which work together to shape responses in stressful circumstances (Kobasa et al., 1982; Maddi, 2004, 2006, 2013). *Control*, which is contrasted with powerlessness, is defined as the tendency to believe one can influence one's surroundings in useful ways. Feelings of control encourage individuals to exert effort, because they believe they have the potential to realize important outcomes. *Commitment*, in contrast to alienation, refers to the tendency to be actively involved in events, rather than remaining isolated and passive. Commitment helps individuals to find purpose that can buffer them against turbulent situations. *Challenge*, in contrast to security, is defined as the belief that change is a normal aspect of life, not a threat to stability and safety. An attitude of challenge helps individuals to see change as an opportunity for growth (Kobasa et al., 1982; Maddi, 2004).

Together, these three attitudes promote better outcomes under stress because they help people to accept difficulty, persist despite it, and direct effort toward useful activity (Maddi, 2006). Rather than exaggerating or denying challenges and utilizing ineffective strategies, hardy individuals are more likely to employ problem-solving approaches, seek assistance, and practice self-care (Maddi, 2006). As a result, hardiness helps individuals maintain a positive perspective and respond effectively (Patton et al., 2016; Maddi, 2004; January, 2016). Hardiness has been linked to many resilient outcomes, including quality of life (Senneseth et al., 2017), psychological empowerment (Calvo and Garcia, 2018), and wellbeing (Alfred et al., 2014). Hardiness is likewise associated with lower levels of non-resilient outcomes such as psychological distress (Senneseth et al., 2017) and burnout (Calvo and Garcia, 2018).

In sum, hardiness seems to be the most important individual characteristic of the resilient personality. Of course, other traits have been linked to resilient outcomes; for example,

neuroticism appears to decrease the likelihood of resilient outcomes, while optimism increases the likelihood (Friborg et al., 2005; Smith, 2006). But neither of these traits are defined or measured as the tendency to exhibit resilience. Moreover, the mechanisms by which they might influence resilience remain to be confirmed, and are likely to include the three dispositions of hardiness. As such, we adopt hardiness as the cornerstone of a resilient personality.

Grit

While hardiness has received decades of attention, grit is a relatively new topic in personality research. Since being defined a little more than a decade ago (Duckworth et al., 2007), it has attracted widespread attention (Crede et al., 2017; Jachimowicz et al., 2018). It has also been frequently described as associated with resilience (Crawford-Garrett, 2018; Fazeli et al., 2018; Stoffel and Cain, 2016) and even called resilience (Duckworth, 2017; Price, 2019). It is thus important to clarify the relationship between grit and resilience.

Grit refers to one's tendency to work "toward challenges [and] maintain effort and interest over the years despite failure, adversity, and plateaus in progress" (Duckworth et al., 2007, p. 1088). Grit has two facets: perseverance and consistency of effort (Duckworth et al., 2007; Duckworth and Quinn, 2009). Perseverance refers to the tendency to work hard and continue working despite setbacks or challenging contexts. Consistency of interest is the tendency to have long-term stability in one's goals. Although some work has raised the possibility of studying these two facets separately (e.g., Disabato et al., 2018), most empirical work has treated grit as unidimensional, and so we do likewise here.

An important factor in grit's popularity is the range of positive outcomes it has been linked to, and the variety of contexts in which those positive effects have been observed (Crede et al., 2017). Most relevant to our concerns, grit is associated with a variety of outcomes reflecting resilience. For example, grit has been linked to greater wellbeing (Kannangara et al., 2018; Sharkey et al., 2018) and life satisfaction (Datu et al., 2018; Disabato et al., 2018). Grit also is associated with increased job satisfaction and organizational citizenship behavior (Jordan et al., 2018; Ion et al., 2017; Dugan et al., 2018). Moreover, grit is negatively associated with anxiety (Sharkey et al., 2018), burnout (Halliday et al., 2017), and turnover intentions (Jordan et al., 2018). As a result, grit appears potentially to be related to resilience.

Nonetheless, the study of grit also faces some controversies, which threaten its utility as an individual factor that explains resilient outcomes. The first issue concerns debate about the factor structure of grit. As noted above, some have questioned whether grit should be treated as a single construct with two facets or as two distinct factors (Disabato et al., 2018). Although the uni-dimensional approach has dominated the literature, a recent meta-analysis suggests that perseverance, used alone, is a better predictor of some outcomes, and should therefore be studied independently (Crede et al., 2017). Relatedly, others have proposed including additional factors in the construct of grit, particularly a measure of adaptability in response to one's environment (Datu et al., 2018). We return to the issue of grit's dimensionality later, in the context of our findings.

The second controversy concerns grit's uniqueness or discriminant validity. Specifically, there has been considerable debate, and seemingly contradictory evidence, about the relationship between grit and the Big Five personality trait of conscientiousness. Duckworth and colleagues (2007) have suggested that grit is distinct and explains incremental variance after controlling for conscientiousness (also see Reed et al., 2013; Tedesqui and Young, 2018). Other work suggests a middle ground, wherein some parts of grit may be considered conscientiousness while others are distinct (Abuhassan and Bates, 2015; Fite et al., 2017). And at the other extreme, Schmidt and colleagues (2018) present evidence that grit is not at all distinct from conscientiousness, but rather reflects two of its constituent facets (also see Ivcevic and Bracket, 2014; Rimfeld et al., 2016). This chapter does not resolve the issue of grit's relationship with conscientiousness. However, if grit is shown to be distinct from conscientiousness, our findings contribute to the understanding of that construct. In contrast, if grit is shown to be an aspect of conscientiousness, then this work helps us to understand that trait's relationship to resilience.

While grit has been associated with resilience-related outcomes, there has been little direct examination of the relationship between grit and resilience. Instead, a range of confusing, and seemingly incommensurate, claims have been made about grit's relationship with resilience. Some have treated grit and resilience as overlapping or even homologous constructs (Crawford-Garrett, 2018; Fazeli et al., 2018; January, 2016; Price, 2019; Stoffel and Cain, 2016). Others have proposed that grit is an antecedent of resilience (Shaw et al., 2016; Patton et al., 2016; Sanderson and Brewer, 2017; Brown, 2015). Further confusing the issue, empirical findings have been equally contradictory, indicating both negative (Hardeman, 2016) and positive (Kannangara et al., 2018) relationships. Accordingly, we turned to the techniques of meta-analysis to resolve the issue.

Approach

Meta-analysis is a statistical procedure for aggregating the results of prior studies (Hunter and Schmidt, 2004). It combines the findings from previous work to provide an integrative summary of what is known (Cooper et al., 2009). A complete meta-analytic report is beyond the scope of this chapter, but we updated a previous meta-analysis of grit in an effort to make sense of the relationship between grit and resilience.

Concerning hardiness, we used Eschleman and colleagues' (2010) meta-analysis. Although it was several years old, its results were derived from 180 samples collected during 30 years of research, and should thus provide reliable findings. In contrast, since the formal study of grit is still relatively new, the available meta-analysis – by Crede and colleagues (2017) – used only 88 samples reflecting less than 10 years of study. We therefore chose to update that work. We used Google Scholar in December 2018 to conduct a forward citation search on both of the grit measures: the Grit Scale (Duckworth et al., 2007) and the Grit-S Scale (Duckworth and Quinn, 2009). This search was limited to the years 2014 to 2018, as previous years would be incorporated in the existing meta-analysis (Crede et al., 2017).

We reviewed the first 1000 items identified in the search, using the title, abstract and keywords to identify peer-reviewed articles, working papers, conference papers, dissertations, chapters and unpublished reports which appeared to provide original research that included a measurement of

grit. This initial screening retained a pool of 187 articles, which we investigated in greater detail. Because trait assessments are unreliable among young children (Allik et al., 2004), we excluded samples of middle school age and younger. We also excluded reports that were not in English, did not report a relationship between grit and a variable of interest, and any items that were included in the meta-analysis by Crede and colleagues (2017). The final result was a pool of 56 research reports, comprising 75 samples and 53 155 individuals. One of the authors extracted all of the relevant data, and then a second author independently extracted data from a subset of the items. All authors reviewed the data; areas of discrepancy were resolved by discussion. Using simple weighted correlations (Hunter and Schmidt, 2004), we combined these data with the findings of Crede and colleagues (2017) to generate updated estimates of grit's correlations with numerous other constructs.

Our goal was not to create a complete report of all of the correlates of grit, but rather to better understand the relationships of grit with hardiness and resilience. Therefore, in addition to directly assessing the correlation between grit and hardiness, we combined previously studied correlates into two broad categories: (1) stable correlates including demographic attributes and personality traits, which allowed us to assess the similarity of grit and hardiness' relationships with other individual qualities; and (2) states, attitudes and behaviors that might serve as indicators of resilient outcomes, allowing us to assess the potential contribution of grit to resilience. Table 1 provides a summary of the correlates we examined in each of the two categories. (Complete details about the coding and data used are available from the authors.)

Table 1. Summary of correlate groups used in meta-analysis

Demographic Attributes
Age
Marital status
Work experience
Personality Traits
Agreeableness
Conscientiousness
Openness to experience
Optimism
Potential Indicators of Resilience
Authenticity & meaning (e.g., meaning in life, felt authenticity, sense of coherence)
Engagement (e.g., cognitive, physical, affective, burnout (reverse coded), involvement)
Growth & learning orientation (e.g., learning intention, growth mindset, learning goal orientation, and lifelong learning strategies)
Motivation & self-direction (e.g., self control, self discipline, ambition, intrinsic motivation)
Resilience (as a self-reported outcome state)
Success: Externally-rated (e.g., other-rated performance, IQ, wealth index, GPA)
Success: Self-rated (e.g., perceived ability, expectancies for success, predicted outcomes)
Wellbeing: Mental (e.g., life satisfaction, happiness, depression (reverse coded), anxiety (reverse coded), and mental health composite)
Wellbeing: Physical (e.g., physical health composite, health situation, and fitness)
Wellbeing: Stress (e.g., direct reports of stress levels as well as emotional demands, negative events, and role conflict)
Work satisfaction (e.g., job satisfaction, team satisfaction, turnover intentions)

Findings

Table 2 provides grit's estimated correlations with the constructs of interest, as well as the equivalent correlations for hardiness (from Eschleman et al., 2010). Our goal here was two-fold: to determine the relationship between grit and hardiness, and to judge whether grit may be a trait-level indicator of an individual's tendency toward resilient outcomes. Taken together, the pattern of correlations in Table 2 suggests that grit is distinct from hardiness, and that grit is not a trait-level predictor of resilient outcomes.

Table 2. Summary of meta-analytic correlations with grit and hardiness

Correlate	Hardiness[a]			Grit[b]		
	Correlation (r)	95 % Confidence Interval	Number of samples (k)	Total number of size (N)	Estimated correlation (r)	95% Confidence Interval
Hardiness	—	—	1	37	–.05	—
Demographic Attributes						
Age	.05	.00, .10	36	19 939	.11	.02, .20
Marital status	.02	–.07, .11	1	672	.20	—
Work experience	–.06	–.10, –.02	1	208	.12	—
Personality						
Agreeableness	–.09	–.17, –.01	19	17 855	.25	.14, .36
Conscientiousness	–.05	–.14, .04	32	25 356	.63	.45, .81
Openness to experience	.35	.35, .35	19	17 490	.15	–.06. .36
Optimism	.43	.37, .49	6	2 722	.05	–.26, .37
Resilience Indicators						
Authenticity & meaning	.45	.40, .50	7	8 580	.41	.32, .50
Engagement	.33	.20, .47	22	7 671	.25	.02, .48
Growth & learning orientation	—	—	8	4 913	.07	–.35, .50
Motivation & self-direction	—	—	25	16 383	.44	.02, .87
Resilience	—	—	5	653	.17	–.14, .48
Success: External-rating	.17	.09, .25	74	47 832	.13	–.10, .35
Success: Self-rated	—	—	9	2 400	–.05	–.58, .48
Wellbeing: Mental	.39	.31, .48	58	28 846	.31	.04, .59
Wellbeing: Physical	.25	.20, .30	5	1 515	.10	–.16. .37
Wellbeing: Stress	–.26	–.43, –.08	9	1 693	–.17	–.43, .10
Work satisfaction	.35	.30, .40	13	10 742	.23	.03, .43

[a] Values taken from Eschleman et al. (2010). Samples may not be independent because some correlates were aggregated into larger groups.
[b] Combines new data collection with results in Crede et al. (2017). Samples may not be independent; some correlates in Crede et al. (2017) were aggregated into larger groups.

Grit versus Hardiness

The most direct way to assess the relationship between grit and hardiness would be to examine the correlation between the two constructs. Unfortunately, we are aware of only two studies that report such a correlation, both of which are dissertations and were thus not subject to peer review (i.e., Cunningham, 2018; Price, 2019). Moreover, the Cunningham (2018) study had a small sample size (N=37) and did not use the standard measure of hardiness (Cunningham, 2018). As a result, any conclusion drawn from this study must be considered extremely tentative. That said,

Cunningham (2018) reported a small negative relationship that was not statistically significant, while Price (2019) reported a positive correlation of .48. As a result, we have little direct evidence about the relationship between grit and hardiness.

Given the lack of direct evidence, we turned to the meta-analytic data to examine relationships in the two constructs' respective nomological networks for similarities or differences. In terms of demographic attributes, the evidence is not strong. Grit appears to have slightly larger correlation than hardiness with age, but this difference is not statistically significant. Grit also has larger correlations with marital status ($r(g) = .20$ vs $r(h) = .02$) and work experience ($r(g) = .12$ vs $r(h) = −.06$). However, these latter values are based on very limited data, and must be considered tentative.

In contrast to the relatively weak demographic data, there is more reliable data on the relationships of grit and hardiness with several personality traits. Grit has a smaller, but not significantly different, relationship than hardiness does with openness to experience. Grit has a significantly smaller relationship than hardiness with optimism ($r(g) = .05$ vs $r(h) = .43$), and has opposite relationships with agreeableness ($r(g) = .25$ vs $r(h) = −.09$) and conscientiousness ($r(g) = .63$ vs $r(h) = −.05$). As such, the personality evidence suggests that grit and hardiness are distinct constructs, since they have dissimilar relationships with other traits.

The final comparison between grit and hardiness concerned their relationships with a variety of state outcomes, such as attitudes and performance results. Among the outcomes we examined, there was more similarity than not in the relationships observed. Table 2 suggests there are only small, relatively unimportant differences in the correlations of grit and hardiness with feelings of authenticity, task engagement, performance, mental wellbeing, and stress. Similarly, grit has smaller, though not significantly different, relationships than hardiness does with physical wellbeing and work satisfaction.

In sum, based on their relationships with each other and other constructs, it seems that grit and hardiness are distinct phenomena. Grit is thus not measuring trait resilience, as it is reflected in the hardiness. Hardiness is known to contribute to resilient outcomes (Alfred et al., 2014; Calvo and Garcia, 2018; Senneseth et al., 2017), and thus is an important part of a resilient personality. While grit is not hardiness, it might nonetheless make its own, independent contribution to resilient outcomes, and thus be a second element of resilient personality. We examine this possibility next.

Grit is Not Trait Resilience

Our second goal was to assess whether the available evidence suggests that grit reliably contributes to resilient outcomes. Others have suggested that grit is related to resilience (Brown, 2015; Patton et al., 2016; Sanderson and Brewer, 2017; Shaw et al., 2016). However, the balance of evidence seems to suggest the contrary: grit does not consistently contribute to resilient outcomes.

One way to examine the question of grit's relationship with resilience is direct measurement. As shown in Table 2, five studies have correlated grit with a self-report measure of resilience, and

the results suggest a small positive relationship. However, the variability in those studies means that a population value of zero cannot be ruled out. Thus, in terms of direct measurement, the best available evidence indicates that grit has only a small, or even zero, relationship with resilience.

Similarly, grit's relationships with personality traits provide no evidence that grit will make any consistent contribution to resilient outcomes. Specifically, the fact that grit has small or zero relationships with openness to experience and optimism does little to imply that grit is a source of resilience. Openness to experience is a personality trait that predisposes an individual to being imaginative, behaviorally flexible, curious and perceptive (McCrae and Sutin, 2009). Flexible and creative responding is important to psychological health in general, but especially so in times of adversity (Kashdan and Rottenberg, 2010), and as a result, both cognitive and emotional flexibility have been linked to resilience (Bonanno and Burton, 2013; Bonanno et al., 2015). Similarly, optimism, which is a tendency to expect favorable experiences in the future, predisposes individuals to proactive action and is considered to be an important source of resilience (Chang, 1998; Segovia et al., 2012). In fact, flexibility and optimism are seen as so tightly linked to resilience that they have been included in scales to measure resilience (Hobfoll et al., 2015). Consistent with the importance of openness and optimism in resilient outcomes, hardiness has strong positive relationships with both traits. In contrast, grit has little or no relationship with them. As a result, grit's relationship with other personality traits casts doubt on its likelihood of consistently leading to resilient outcomes.

Table 2 also presents correlations between grit and a variety of outcomes that might indicate resilient responses. Admittedly, none of these measures are direct assessments of resilience, since we have no information about the role of adversity in these data. Nonetheless, they can give us some indication of whether or not grit is linked to indicators of "doing well" in the context of everyday challenges. Since common workplace stressors such as job demands, economic insecurity and long work hours are responsible for significant variance in physical health, mental health, morbidity and mortality (Goh et al., 2015), one could argue that those who resist succumbing to such negative symptomology are displaying resilience (Kossek and Perrigino, 2016). To the extent that one assumes hardship is a universal aspect of life, then outcomes such as mental wellbeing, physical health, career success, and engagement may serve as proxy indicators of resilient outcomes. Indeed, it may have been this sort of thinking that led others to suggest that grit promotes resilience, since grit and hardiness have similar correlations with many of these outcomes.

However, even in this instance, there is some evidence suggesting that grit will not consistently contribute to resilient outcomes. In particular, grit has a very small or zero correlation with a growth and learning orientation. In other words, gritty individuals are no more likely to learn from adversity than anyone else, nor does their grit predispose them to see setbacks as learning opportunities. Likewise, grit has a near zero correlation with self-rated success; gritty individuals do not feel any more successful than others. In other words, grit does not incline a person to feel they are "doing well" despite adversity. These zero correlations suggest that there is little reason to think grit makes a person more likely to be resilient. On the whole, grit does not seem to be a component of the resilient personality.

Discussion

Our aim in this chapter was to consider grit's role in promoting individuals' resilient outcomes, and the meta-analytic results reviewed highlight important observations about the nature of grit and individual resilience. Grit is defined, in part, by the dogged pursuit of goals despite hardship and setbacks (Duckworth et al., 2007). Combining that definition with the fact that grit is associated with several outcomes that often reflect resilience probably explains why some researchers have suggested grit is either a source of resilience or a measure of trait resilience. However, in light of the data reviewed here, we do not agree. Rather, the data suggest two conclusions: grit and hardiness are distinct constructs; and grit will not be a consistent source of resilient individual behavior. As such, grit should not be considered part of a resilient personality. Below, we explain these conclusions and their implications for further research.

Our first claim is the most straightforward. Grit and hardiness are not similar constructs being called by different names. Rather, they appear to be quite distinct. Empirically, although they have similar relationships with some attitudinal and behavioral outcomes, they have different (sometimes even opposite) relationships with important demographic and personality traits. This empirical distinction between grit and hardiness is consistent with the differences in their conceptual definitions. Hardiness consists of three dispositions that incline people to accept difficulty, persist despite that difficulty, and to direct their efforts in the most productive direction available. In contrast, grit's conceptual definition overlaps with just one of those three dispositions. A gritty person, like a hardy one, will carry on despite setbacks, but being gritty does not make one more likely to accept setback gracefully or to use one's energy in the best way.

It may be that measurements of grit are capturing phenomena reflective of the commitment aspect of hardiness (but not control or challenge). Although all three components of hardiness are considered important in producing resilient outcomes (Maddi, 2013), perhaps in some situations, or for some specific outcomes, one component is more important than another. If so, it could explain why grit sometimes has outcome relationships similar to those of hardiness, while at other times it does not (i.e., grit looks like hardiness in contexts where commitment is the most salient aspect of hardiness). This possibility is worth exploring, and could contribute to a clearer understanding of both constructs, as well as the situations in which different traits are more beneficial in overcoming adversity.

This matter also connects back to the current controversy about the factor structure of grit. Duckworth and colleagues have made two claims about grit: that current measures capture two dimensions – perseverance and consistency – and that those two dimensions are best understood as halves of one larger whole (Duckworth et al., 2007; Duckworth and Quinn, 2009). However, others disagree. Among the strongest critiques is a seemingly growing consensus that the most important element of grit, at least as currently operationalized, is perseverance (Crede et al., 2017; Disabato et al., 2018; Jachimowicz et al., 2018). There is less agreement about whether consistency is unimportant or just poorly measured, but the idea that current grit scales are only measuring perseverance seems to be gaining empirical support, and suggests that the construct of grit would benefit from further conceptual development.

Our second claim is that grit will not reliably lead to resilient outcomes. The weight of evidence suggests, on the whole, that there is no consistent relationship between grit and resilience. This "non-relationship" could arise in two ways: grit could be entirely unrelated to resilience, or it could have different implications for resilience in different contexts (i.e., moderators). We are inclined to believe that the latter is the best explanation.

For example, grit is highly correlated with conscientiousness (i.e., careful vigilance) and motivation (i.e., goal-directed arousal and energy), so we should expect a gritty person to work hard in achieving their goals. Indeed, unflagging perseverance will lead individuals to exert effort, and high consistency of interest will keep that effort focused on particular outcomes. As a result, in contexts where consistent effort is rewarded, grit should lead to positive results. When resilience depends on carrying on undaunted, we should expect grit to lead to resilient outcomes. Consistent with this expectation, grit has been linked to success despite challenge in a variety of contexts that reward hard work (Duckworth et al., 2007; Crede et al., 2017).

However, resilience involves more than perseverance. Another key component of resilient responding is adaptability (Caza and Milton, 2012; Chen and Miller, 2012; Sutcliffe and Vogus, 2003). To thrive in the face of challenge at work may require a different approach – or even a different goal entirely. The ability to disengage from a potentially unattainable goal is a protective factor that helps prevent physical and psychological distress (Dunne et al., 2011). The fact that there is little relationship between grit and openness to experience, and between grit and a learning orientation, indicates that grit does not predispose one to learn from experience, to be willing to adapt, or to be likely to think of creative alternatives. As a result, grit is unlikely to offer any advantage when resilience depends on flexible responding.

Moreover, there may be situations in which grit actually reduces flexibility. Grit has the potential to prevent individuals from pursuing useful alternatives, if its strong consistency of interests leads to rigidity (Chen and Caza, 2018). Evidence of this potential downside of grit has been observed in standardized testing results. While grit is typically associated with higher grade point averages (Crede et al., 2017), it has no significant relationship with Law School Admission Test scores (Zimmerman and Brogan, 2015), and a negative relationship with Scholastic Assessment Test scores (Duckworth et al., 2007). These standardized tests are time-constrained and reward only correct answers (not effort). Grit may lead individuals to keep working on one particularly difficult question and thus not have time to answer other questions. Probably in recognition of this potential disadvantage of grit, some researchers have suggested that grit needs to be expanded to include a facet reflecting situational adaptability (Datu et al., 2018).

In sum, the apparent null relationship between grit and resilient outcomes is not surprising, since there are contexts in which grit could increase resilience, have no effect on resilience, or reduce resilience. And this variable relationship between grit and resilience highlights important directions for future research. The most important of these is the need for theory and research to specify the sort of adversity under consideration. Most studies of resilience have considered large-scale, one-time life adversities, such as the loss of a spouse (e.g., Bonanno et al., 2005). However, the factors that allow individuals to adjust to the loss of a spouse may be quite different from those required to thrive amidst chronic adversity such as abusive leadership.

Among other issues, adversity will vary in terms of intensity, duration, and life domain. Each of these factors may have important – and different – implications for resilience.

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