

## Resilience and Well-Being

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### Abstract:

In this chapter we provide an overview of how resilience has been defined and measured with a particular emphasis on the relationship between resilience and well-being. Specifically, we distinguish between resilience defined as a trait and resilience defined as a pattern of psychological well-being over time. We provide a review of the developmental origins of resilience and summarize recent research regarding interventions designed to increase resilience in adults. We also differentiate resilience from closely related constructs such as hardiness, grit, character strengths, and psychological capital. Finally, we provide guidance on potential future directions for the study of resilience.

### Keywords: Resilience, Well-being, Stress, Development

An observer taking a look through an airport bookstore or even the business leadership section of the local book shop could be forgiven for thinking that “resilience” is just another big fad being pushed by self-help gurus and consultants. And although there may be some truth in this assessment, the actual science of resilience, its antecedents, and its effects are fairly well-established. In fact, the question as to what makes an individual resilient in the face of trauma goes back many thousands of years.

That said, the boom in popular press books has largely reflected a similar explosion in research about resilience itself over the past two decades and there are many excellent reviews of the topic in the clinical, education, workplace, and social psychological literatures (e.g. Bonanno, Westphal, & Mancini, 2011; Britt, Shen, Sinclair, Grossman, & Klieger, 2016; Luthar, Cicchetti, & Becker, 2000; Windle, 2011; Vanhove, Herian, Harms, & Luthans, 2015). Estimates of how many people are resilient range from 25-84% (Vanderbilt-Adriance & Shaw, 2008). But what exactly does that mean? In the following sections, we will define resilience, describe how it is modeled and measured, explain its relationship with well-being, delineate how it is developed, and review closely related constructs. At the end, we will discuss some major remaining issues for research and practice in the study of resilience.

## Models of Resilience

### Defining Resilience

One persistent problem in the resilience literature is understanding its meaning. Specifically, resilience tends to have two somewhat distinct meanings. On one hand, resilience can mean the ability to resist being damaged or deformed by traumas or destructive forces. On the other hand, resilience can also mean readily “bouncing back” or recovering from those traumas or destructive forces. The first definition perceives resilience as a trait an individual needs to survive. The second definition instead emphasizes resilience as a means of thriving. This distinction is important, as an individual facing adversity can go further than merely coping by finding meaning in the trauma-inducing events and utilizing this meaning to enhance their well-being. Such an individual experiences post-traumatic growth, a process in which one cognitively associates benefits with the situations or events that have generated the experienced trauma (Elder, 1998; Feeny & Collins, 2014; Jayawickreme & Blackie, 2014).

These dueling definitions have resulted in the development of two somewhat independent streams of research, each of which claims to be studying resilience. One on side, there are researchers who look at

resilience as something that an individual possesses. On the other side are those who believe that resilience can only be demonstrated through one's reactions to adverse events.

**Resilience as a trait or capacity.** There are several models and measures of resilience that treat the construct as something that an individual has *and* can report on based on prior experience (Britt et al., 2016). These models approach resilience either as a single construct (e.g. Brief Resilience Scale, Smith et al., 2008) or a composite of several distinct traits or capacities. Across measures, a wide variety of candidate traits have been suggested for inclusion in resilience measures as either antecedents or components of resilience. For example, the Connor-Davidson Resilience Scale (CD-RISC, Connor & Davidson, 2003), widely considered the “gold standard” of resilience measures, is a 25-item measure of resilience assessing acceptance of change, control, personal competence, spiritual influences, and trust in one's instincts. The more recently developed Five-by-Five scale (DeSimone, Harms, Vanhove, & Herian, 2016) is also a 25-item measure with five dimensions, but it assesses adaptability, emotion regulation, optimism, self-efficacy, and social support. A more extreme version of this approach is the Global Assessment Tool or GAT (Peterson, Park & Castro, 2011; see also Lester, Harms, Herian, & Sowden, 2015), a 105-item, multidimensional instrument used by the U.S. military in order to provide developmental feedback for soldiers and reservists participating in resilience development programs. The GAT assesses resilience in terms of four “fitness” dimensions (Emotional, Social, Family, and Spiritual). Each higher-order dimension can in turn be broken down into subdimensions. For example, Emotional Fitness consists of adaptability, good and bad coping, catastrophizing, character, depression, positive and negative affect, and optimism. The GAT consists of a mixture of antecedents and outcomes of well-being, leading to some concerns surrounding whether scores for the higher-order dimensions themselves are interpretable (Harms, Wood, & Spain, 2016). That said, the instrument does not provide an overall “resilience” score since the intention is to encourage soldiers to think of resilience in a multi-faceted manner.

### **Protective Factors**

In general, it is accepted that resilience is inherently related to the resources that an individual can draw on to overcome adversity (e.g. Richardson, 2002; Werner, 1995). These protective factors come in a wide variety of forms that combine to *make* a person resilient. Various researchers tend to focus on the study of resilience at one level of analysis, often with the goal of developing resilience interventions targeted at that level.

**Individual factors.** It is with this level that psychologists are typically concerned. It involves the psychological and neurobiological factors that can play a role in maintaining and recovering well-being after traumatic events or setbacks. This level of resilience typically involves investigations of personality and coping styles described in the preceding section that mediate the relationship between adversity and well-being (Luthar et al., 2000; Masten, 2007), but it can extend to include investigations of physical and cognitive abilities as well as neurocognitive structures and neural responses to stressors (Feder, Nestler, & Charney, 2009; Reinelt et al., 2015).

**Social factors.** These factors concern the social relationships one has and whether an individual can call on and expect support in times of crisis. These can involve family, friends, coworkers, or really anyone in one's social network who could provide social, emotional, and even financial support to the individual. Research has demonstrated that having such relationships can be an important determinant of whether an individual can cope with major stressors such as the loss of a job, the dissolution of a marriage, or chronic physical illness. Social support is widely construed to contain both affective and instrumental components. Adams, King, and King et al. (1996; p. 412) note that “there is a growing consensus that social support can come from both work and non-work sources and that this support is primarily in the form of either emotional support (e.g., listening and providing empathy) or instrumental support (e.g., tangible assistance aimed at solving a problem).”

**Community factors.** The discussion of resilience has even moved beyond the realm of individual-focused psychology to include resilience at the community or national level. This type of resilience goes beyond individual capacities and takes into account economic, institutional, ecological, and infrastructure capacities when evaluating which communities are most likely to be resilient in the face of tragedies such as terrorist attacks, natural disasters, or even economic downturns (Cutter et al., 2008; Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008; Murphy, 2007). For instance, it might not only be necessary to know whether or not a given area has emergency services, but also how well integrated the services are in terms of communication and coordination. Importantly, community resilience need not be limited to government institutions. For example, in the aftermath of Hurricane Katrina, Wal-Mart famously was able to reach beleaguered areas with supplies before the federal and state governments because they had contingency plans in place for just such an event and adapted their plans as events unfolded.

**Resilience as a process.** Simply put, the process approach to studying resilience looks more at *how* individuals cope with hardship and, in particular, is often associated with assessing patterns of well-being over time to determine who is resilient in periods of stress (Luthar, Cicchetti, & Becker, 2000; Windle, 2011; Becker & Ferry, 2016). It has been suggested that there are three general patterns that reflect resilience: 1) functioning well under adverse conditions; 2) a relatively quick recovery to normal functioning after facing adverse conditions; and 3) developing in the face of adversity (Bonanno, 2004, 2005; Masten, Best, & Garmezy, 1990).

**Figure 1. Patterns of Recovery from Trauma**

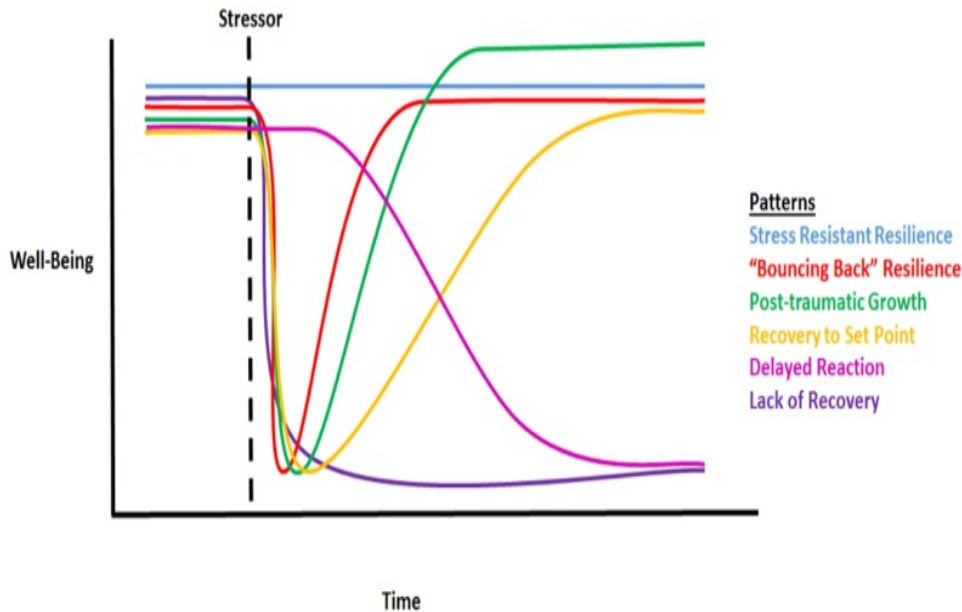


Figure 1 provides an overview of these different patterns. In this figure, the first three patterns all represent a form of resilience. The first two patterns, which have been labeled *stress resistant resilience* and *“bouncing back” resilience*, reflect the most common forms of resilience (Bonanno, 2005). In the case of stress resistance (blue), individuals do not appear to display any adverse reaction to the stressor or negative event. Rather, they continue on with their lives in spite of it. In the case of the “bouncing back” pattern (red), the individuals experience a loss but quickly adapt to it. The *post-traumatic growth* pattern (green) largely parallels the ‘bouncing back’ pattern, but additionally reflects the idea that positive development can occur after stressors – and importantly, *because* of exposure to these stressors – although this does not necessarily occur quickly. The final three patterns all reflect individuals who are not considered high in resilience. The basic *recovery to set point* pattern is meant to indicate that some individuals will eventually return to levels of well-being similar to those that they experienced pre-trauma, but that it will take an extended period of time to recover. The *delayed reaction* pattern (pink) represents individuals who initially appear to be healthy, but eventually begin to display signs of distress. The final pattern, *lack of recovery* (purple), reflects an individual who displays chronic problems caused by the stressor or trauma that are never fully dealt with or resolved.

## Developing Resilience

### Life History

There is an extensive literature showing that resilience in adulthood can be traced to childhood experiences (e.g. Masten, 2001; Masten & Tellegen, 2012; Obradovic et al., 2009; but see also Ong, Bergeman, & Boker (2009) for a review of later life events impacting resilience). Specifically, a history of poverty, disease, or abuse is typically associated with lower levels of resilience later in life (Schibli, Wong, Hedayati, & D’Angiulli, 2017; Windle, 2011). At the same time, there are those who argue that harsh environments can help individuals develop resilience since these early experiences provide the opportunity to develop the skills necessary to overcome setbacks (e.g. Crane & Searle, 2016; Duckworth, 2016; Goldstein, 2008; Rutter, 1999). In other words, experiences of stress and hardship can, for some people, be an opportunity to learn and grow and become more ready to meet the next challenge. Individuals who

never experience challenges may experience high well-being on a regular basis, but they may also be more likely to fall apart when they finally do face adversity (Davydov, Stewart, Ritchie, & Chaudieu, 2010). That said, it has also been pointed out that individuals may also develop strategies for overcoming hardship that could be grossly inappropriate in non-threat environments (Schibli et al., 2017). For example, upon becoming a parent, an individual who had developed a detachment strategy for dealing with interpersonal conflict is likely to discover that this strategy is inappropriate for dealing with infants.

### **Resilience-Training Programs**

Resilience-training programs have utilized several different approaches to increasing individual levels of resilience (Yost, 2016). These include encouraging a growth mindset, deliberative practice, meditation, teaching coping strategies, and providing social support.

One of the most famous developmental interventions for children is the Penn Resiliency Program (Gillham, Reivich, Jaycox, & Seligman, 1995). This program is based on cognitive behavioral therapy approaches and is usually implemented in school or group settings. At its core, the program attempts to help participants develop cognitive and emotional skills that they can utilize when encountering setbacks. For example, one cognitive skill that is taught is decatastrophizing or “putting things in perspective”. That is, participants are instructed to step back and evaluate how important a failure event or embarrassing situation may be. Such a response is a form of cognitive reappraisal, widely considered the most effective form of emotion regulation (Gross, 2015). Cognitive reappraisal is an antecedent-focused strategy that occurs when an individual changes his or her subjective evaluation of the situation or event that has stimulated the emotion in order to change the emotion that they feel (Fisher, Minbashian, Beckmann, & Wood, 2013). As such, cognitive reappraisal allows the individual to avoid overreacting to negative events.

One of the most popular resilience interventions in the research literature is the Penn Resiliency Program. While meta-analytic work has shown the program produced some positive effects, its results were highly variable and, in general, it was not more effective than other active control conditions or other interventions designed to improve mental health and well-being (Brunwasser, Gillham, & Kim, 2009).

Beyond classroom settings, resilience-training initiatives are now becoming more popular in corporate and government environments. Although it is believed that almost anyone can benefit from such programs, there is also a consensus that resilience may be most important for occupations such as first-responders (i.e. police, firefighters, etc.) or medical personnel where high levels of stress are common and exposure to secondary trauma—which is concerned with the intrapersonal emotive responses a person can experience during or following an interaction(s) with another individual who shares their personal stories of disempowerment, trauma, or abuse (Williams, Helm, & Clemens, 2012)—is frequent (Britt et al., 2016). Consequently, military organizations have been on the forefront of developing resilience-building programs (Harms, Krasikova, Vanhove, Herian, & Lester, 2013). Of particular note has been the Comprehensive Soldier and Family Fitness (CSF2) program by the U.S. Army, which is based on the Penn Resiliency Program and has been implemented at every level of the Army. CSF2 entails not just regular self-assessments of resilience, but also includes online modules to address particular concerns of the soldiers and embeds Master Resilience Trainers (MRTs) in units across the force to implement group-based training of cognitive and behavioral skills that are associated with higher levels of resilience and well-being. The CSF2 program proved to be more effective at developing resilience in younger soldiers than in older soldiers (Lester, Harms, Herian, Krasikova, & Beal, 2011) and has also been shown to be related to lower levels of substance abuse in units which receive the training (Harms, Herian, Krasikova, Vanhove, & Lester, 2013).

A recent meta-analysis of organizational resilience interventions (Vanhove, Herian, Perez, Harms, & Lester, 2016) has shown that not all resilience programs are created equal and not all people respond in the same way to such programs. For example, although the benefits of resilience-development programs tend to wear off for most people over time, there was evidence that for the most at-risk populations, the benefits tended to accrue over time. Analyses also revealed that computer-based interventions were the least effective medium for resilience training while one-on-one training was the most effective. Overall, the results of these studies have suggested that social factors that promote resilience can interact with individual factors and that well-designed interventions should target resilience development across levels in order to achieve the best results.

## **The Relationship Between Resilience and Well-Being**

Resilience and well-being are fundamentally related and, as noted above, in some instances resilience is even measured using well-being instruments (Davydov et al., 2010; Windle, 2011). This conflation creates problems with where to position resilience in models of well-being. First, it should be

pointed out that although meta-analyses have demonstrated that there are robust relationships between measures of resilience and measures of well-being (Hu, Zhang, & Wang, 2015; Lee et al., 2013), there is evidence that self-report measures of resilience are not simply redundant with indices of well-being (Burns & Antsey, 2010; Martínez-Martí & Ruch, 2017). At the same time, the relationship between resilience and well-being is not straightforward.

Some researchers have argued that higher levels of well-being serve as an antecedent of resilience (e.g. Kuntz, Näswall, & Malinen, 2016). In particular, there has been extensive work showing that positive emotions facilitate resilience (e.g. Fredrickson, Tugade, Waugh, & Larkin, 2003; Ong, Bergeman, Bisconti, & Wallace, 2006; Ong, Zautra, & Reid, 2010; Tugade & Fredrickson, 2004). Research suggests that positive emotions can promote greater resilience because they promote flexible thinking (Isen, Daubman, & Nowicki, 1987) and facilitate both adaptive coping (Folkman & Moskowitz, 2000) and the maintenance of social relationships (Keltner & Bonanno, 1997).

Others have suggested that the relationship between well-being and resilience can also work in the opposite direction. For example, several researchers have used resilience to directly predict a number of well-being outcomes including depression (Loh, Schutte, & Thorsteinsson, 2014), job satisfaction (Luthans, Avolio, Avey, & Norman, 2007), and subjective well-being (Cohn, Fredrickson, Brown, Mikels, & Conway, 2009; Liu, Wang, Zhou, & Li, 2014). Still others have argued that resilience and related constructs can serve as moderators between stressors and well-being outcomes (e.g. Flinchbaugh, Luth, & Li, 2015; Min, Kim, & Lee, 2015).

That said, there is nothing inherently wrong with acknowledging that all of these theoretical positions are potentially true. Positive individuals may ultimately be more resilient because they approach situations expecting better outcomes and tend to elicit more positive responses (Wood, Harms, & Vazire, 2010). And although it is probably correct to position resilience indicators (the individual, social, and community factors mentioned earlier) as moderators between stressors and well-being, that does not mean that studies showing a direct path cannot infer that resilience is moderating several unmeasured stress events over a long period of time and that the direct path simply captures the general trend across events.

A challenge, however, to conflating resilience and well-being is that the abilities honed by resilient individuals may be more generative of self-efficacy, and in fact may actually hinder well-being. For example, an individual cast away by his or her only family at a young age may learn how to navigate very challenging environments to succeed. An individual's resilience may lead to high self-efficacy and a successful approach to his or her career, yet may also produce an "it's all about me and getting what I deserve" attitude that can undermine well-being. Considering that longitudinal research has found that receiving social support is an antecedent of well-being (Elder, 1974, 1998), such an individual may isolate him or herself from sources of such support.

Additionally, some individuals who experience high levels of well-being may lack the focus that produces resilience. The positive emotions associated with well-being, such as joy and calmness, tend to generate a diffuse contentment rather than the sharp, vivid focus on challenges associated with resilience (Fredrickson, 1998; Silard, 2016). In fact, the action tendencies produced by positive emotions—such as inactivity from contentment and free activation from joy—are often less specific (in terms of goal orientation) and lacking in autonomic reactivity (Fredrickson & Branigan, 2005). It may be possible that some antecedents of well-being and resilience diminish the attainment of the other. Future research might better uncover these potential disparities.

## Other Related Constructs

As noted above, a lack of strong theory surrounding resilience has meant that its position in the nomological network can often be confusing and seemingly contradictory. The same issue applies to other closely related personality characteristics. Recent reviews of resilience have suggested a number of constructs that conceptually appear very similar to resilience (e.g. King, Newman, & Luthans, 2016; January, 2016). The following section identifies some major constructs that are closely related to resilience.

### Psychological Capital

Psychological capital (PsyCap) is argued to be a set of four psychological factors associated with overcoming obstacles that together form a higher-order construct (Luthans et al., 2007; Youssef & Luthans, 2007). Specifically, these psychological factors are self-efficacy, optimism, hope, and resilience. Resilience in this model is often simply described as the capacity to adapt in the face of adversity. Because of the self-report nature of the instrument and the limited number of questions typically asked, PsyCap assessment tools generally have to assume that the resilience component is unidimensional, that

respondents have experienced appropriate setbacks in order to make informed judgments, and that they are able to meaningfully average across the responses to multiple adverse events. Because of these potential issues, there have been recent efforts made to create implicit measures of PsyCap that better reflect the individual's actual levels of resiliency (Harms & Luthans, 2012). Both the explicit and the implicit instruments have been shown to predict health and well-being across multiple domains (Avey, Reichard, Luthans, & Mhatre, 2011; Harms, Vanhove, & Luthans, 2017; Luthans, Youssef, Sweetman, & Harms, 2013). For example, one recent study found that PsyCap was predictive of both mental health and substance abuse in a large sample of U.S. soldiers (Krasikova, Lester, & Harms, 2015). That said, although there has been a great deal of research using PsyCap measures to predict important outcomes both in and out of the workplace, there is still an ongoing debate as to whether combining the components of PsyCap into a single score is appropriate or whether they are best considered independent of one another. In particular, it could be argued that resilience should not be included in the set of PsyCap factors because it is theoretically positioned as an outcome of the other three.

### **Character Strengths**

Character strengths are conceived of as “naturally recurring patterns of thought, feeling, or behavior that can be productively applied” (Hodges & Clifton, 2004, p. 257). In other words, they are a broad array of personality characteristics distinguishable from other traits because they are associated with high levels of functioning both behaviorally and psychologically (Peterson & Seligman, 2004). In practice though, they tend to be assessed as efficacies or self-appraisals of ability to function well on particular activities or in specific domains. High levels of character strengths have been suggested to be key antecedents of resilience (Martínez-Martí & Ruch, 2017; Peterson, Park, & Castro, 2011; Peterson & Seligman, 2004) or as potential indicators of resilience itself (Goodman, Disabato, Kashdan, & Machell, 2017). However, the empirical evidence of this assertion is somewhat mixed in terms of which strengths are associated with well-being (Goodman et al., 2017; Park, Peterson, & Seligman, 2004). That said, there is fairly good evidence that self-assessments of character strengths are useful predictors of mental health outcomes (e.g. suicide and substance abuse; Lester, Harms, Bulling, Herian, & Spain, 2011). There are, however, numerous criticisms of strengths measures in terms of their construct definitions, their theoretical structure, the way they are scored, and their interpretation (Kaiser & Overfield, 2011; Kaplan & Kaiser, 2013). Consequently, although the relationship between strengths and resilience looks promising, further refinement of character strengths instruments is needed before it can be determined whether strengths are antecedents of resilience or whether “resilience” as a trait should simply be considered redundant with specific characteristics already contained in existing strengths measures.

### **Grit**

Popularized by Duckworth (Duckworth, Peterson, Matthews, & Kelly, 2007), grit is conceived of as perseverance in the face of challenges and experiencing passion in the pursuit of long-term goals. The relationship with resilience is immediately apparent based on this definition in that one component of grit, perseverance, seems to reflect a resilient personality and even the “passion” component might be considered a possible antecedent of resilient behavioral patterns. However, meta-analytic evidence suggests there is a trivial relationship between measures of resilience and grit even though grit appears to be related to well-being outcomes such as depression and life satisfaction (Credé, Tynan, & Harms, 2017). That said, once again measurement issues limit the degree to which firm conclusions can be drawn about grit. First, the combination of the two factors of grit is not supported by either theory or empirical evidence. Moreover, the current measures of grit have been demonstrated to largely overlap with existing measures of trait conscientiousness (Credé et al., 2017). Consequently, little can be meaningfully said about overall “grit” at this point and further scale refinement is necessary before any firm conclusions can be drawn.

### **Hardiness**

Of the closely-related constructs, hardiness probably comes closest in terms of conceptual similarity to resilience. Individuals high in hardiness are described as being “unshakeable,” and they tend to attack problems directly and willingly (Kobasa, 1979). Specifically, hardiness itself is conceived of as a cognitively-based personality trait consisting of three characteristics that shape how hardy individuals view events in their lives: control, commitment, and challenge (Bartone, 2006; Maddi, Kahn, & Maddi, 1998). Control reflects the degree to which one believes that they have a high level of influence over their lives. Commitment refers to the tendency or ability to find purpose in one's life or to attach meaning to one's efforts. Challenge reflects a tendency to see difficult circumstances as an opportunity for growth as opposed to nuisances or threats. Further, meta-analytic evidence shows that individuals with high trait hardiness tend to have higher levels of psychological well-being, better coping skills, higher levels of health, and more well-developed social support networks (Eschleman, Bowling, & Alarcon, 2010). The

primary difference between resilience and hardiness at the measurement level is that hardiness has a very concrete theoretical model both in terms of structure and rationale. Resilience models have not yet arrived at a consensus as to what should be included in the measures and what the specific antecedents are.

## Future Directions

Not to belabor the point, but there is a real need for construct clean-up in the domain of resilience. Not only are there several related constructs that need to be differentiated from resilience, but it is unclear as to whether many measures of resilience are even measuring the same construct (Britt et al., 2016). Further, as noted in the above sections, one important future direction for resilience and related measures is to further refine their theories and measurement tools. Too often, resilience measures combine antecedents and outcomes of resilience along with overall assessments in their measures and then try to infer a trait based on structuralist logic that because variables are correlated, they must necessarily go together. Particularly problematic is the inclusion of items that refer to well-being outcomes in the resilience measures themselves as this tendency tends to create spuriously high correlations between constructs (Wood & Harms, 2016). Instead, it would be preferable to embrace a functionalist approach to assessing resilience (see Harms & Wood, 2016; Wood, Gardner & Harms, 2015), that is, to tease out the antecedent psychological components of resilience and investigate how they interact to produce behavioral and emotional resilience. Another fruitful approach may be to move away from questionnaire-based approaches altogether and attempt to develop assessments of resilience based on neurological measurements (e.g. Quisenberry, 2015), implicit measures (e.g. Harms & Luthans, 2012), or situational tests (e.g., Kirschbaum, Pirke, & Hellhammer, 1993).

At the same time, it may not be necessary to completely eschew self-report measures if the goal is to assess resilience as process or pattern. There have been many calls for more longitudinal research to investigate resilience as patterns of well-being rather than the cross-sectional, retrospective studies which tend to dominate in the literature (Britt et al., 2016; King et al., 2016). Recent work by Welbourne (2014) has shown that even asking a single question concerning well-being repeatedly over several days can produce enlightening results in terms of determining an individual's overall resilience. Taking this logic a step further is recent research by Sotak (2015), who has demonstrated that daily and weekly patterns in emotions and well-being can be removed from such assessments in order to garner a more accurate view of fluctuations in response to stressors.

Hand-in-hand with the development of new instruments and techniques is the need to validate those instruments and techniques. A recent review of resilience measures showed that almost none of them had gone through rigorous validation procedures and the overall validity of most resilience measures was questionable at best (Windle, Bennett, & Noyes, 2011). Without appropriate tools, it is hard to see how we can put much faith into much past research or how we are to move the field forward.

Beyond the need for new measures is a real need for theoretical development in the field of resilience. In particular, it is reasonable to expect a little more precision in predictions than simply that resilience should be positively correlated with good outcomes and negatively correlated with bad outcomes. Clinical psychologists are fairly clear about what they expect in terms of outcomes of resilience. When bad things happen, resilience is established by how one recovers from stress. However, researchers in the positive psychology movement have been inconsistent in terms of what to expect from resilience interventions. For them, the goal is or should be to see if they can promote individual flourishing. At the same time, it is acknowledged that the degree to which programs based on positive psychology are deemed effective is the extent to which they reduce mental illness (Seligman & Fowler, 2011). Likewise, industrial psychologists attempt to tie resilience to all manner of work outcomes with little regard for theory (Britt et al., 2016). Having more clearly defined constructs and models would help prevent this shotgun approach to science and save precious resources and time.

## Conclusions

Resilience is more than just a buzz word used to sell books in airports. It is a valuable framework for understanding how individuals cope with stress and maintain their levels of well-being. The past few decades of research have revealed a great deal in terms of what factors are most important for driving resilience and how interventions can be designed to facilitate growth and recovery in the face of adverse events. Nonetheless, challenges remain in terms of the theory surrounding resilience, its measurement, and its meaning. However, new approaches to assessing resilience show great promise for the study of resilience in the future.

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