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Abstract	<p>Life is a collection of moments, some light and pleasant, some dark and unpleasant, some neutral. Character strengths contribute to the full range of human experiences, influencing and creating positive opportunities while also helping us to endure the mundane and embrace and navigate the struggles. Some researchers have argued that thriving, which casts a wider net on the human experience than constructs such as flourishing or resilience, constitutes strong well-being and performance at times of both adversity and opportunity (Brown et al. <a href="#">2017</a>). With this and the many findings in the science of character in mind, six character strengths functions are theorized and then applied across time orientations, making the case for the integral role of character strengths in these matters of thriving. Three opportunity functions are offered, including priming in which character strengths prompt and prepare for strengths awareness and use; mindfulness in which character strengths serve in synergy with mindful awareness of the present reality; and appreciation in which character strengths use expresses value for what has occurred. The three adversity functions include: buffering – character strengths use prevents problems; reappraisal – character strengths explain or reinterpret problems; and</p>	

resilience – character strengths support the bounce-back from life setbacks. Several applications of these six functions for vocational and educational settings are explored.

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Keywords (separated by '-') Character strengths - Thriving - Adversity - Opportunity - Priming - Mindfulness - Appreciation - Buffering - Reappraisal - Resilience

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## **Electronic supplementary material**

### **ESM 1**

(DOCX 21 kb)

# Six Functions of Character Strengths for Thriving at Times of Adversity and Opportunity: a Theoretical Perspective

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## Abstract

Life is a collection of moments, some light and pleasant, some dark and unpleasant, some neutral. Character strengths contribute to the full range of human experiences, influencing and creating positive opportunities while also helping us to endure the mundane and embrace and navigate the struggles. Some researchers have argued that thriving, which casts a wider net on the human experience than constructs such as flourishing or resilience, constitutes strong well-being and performance at times of both adversity and opportunity (Brown et al. 2017). With this and the many findings in the science of character in mind, six character strengths functions are theorized and then applied across time orientations, making the case for the integral role of character strengths in these matters of thriving. Three opportunity functions are offered, including priming in which character strengths prompt and prepare for strengths awareness and use; mindfulness in which character strengths serve in synergy with mindful awareness of the present reality; and appreciation in which character strengths use expresses value for what has occurred. The three adversity functions include: buffering – character strengths use prevents problems; reappraisal – character strengths explain or reinterpret problems; and resilience – character strengths support the bounce-back from life setbacks. Several applications of these six functions for vocational and educational settings are explored.

**Keywords** Character strengths · Thriving · Adversity · Opportunity · Priming · Mindfulness · Appreciation · Buffering · Reappraisal · Resilience

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## Character Strengths, Thriving, and the Full Life

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Life is a collection of moments, some light and pleasant, some dark and unpleasant, some neutral. There are peaks and valleys, zenith and nadir, and plenty of in-between space. Scientists have argued that character strengths are strongly related to the full range of human experiences – the full life and the empty life, the former encompassing a high endorsement of well-being components entailing engagement, pleasure, and meaning while the latter constituting low levels of each (Peterson et al. 2005). Character strengths are personality traits that are part of our identity and when expressed lead to positive outcomes for ourselves and others and contribute to the collective good (Niemiec 2018); in addition, they are personally fulfilling, do not diminish others, ubiquitous and valued across cultures, and generally stable over time (Peterson and Seligman 2004). Character strengths serve as those crucial influencers that help us embrace the positive, endure the mundane, and navigate and manage the struggles.

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In what is arguably the most substantive and wide-reaching project in positive psychology to date, the VIA Classification of 24 character strengths nesting under 6 overarching virtues (Peterson and Seligman 2004), and VIA Survey measurement tool taken by over 6 million people reaching every country, have amounted over 400 peer-reviewed publications since the classification was published in 2004. Character strengths have been linked with many positive elements in life – various aspects of well-being/happiness (e.g., Hausler et al. 2017a; Park, Peterson and Seligman 2004), various health behaviors (Proyer et al. 2013), and better relationships (Lavy et al. 2014a), to name a few. Moreover, some evidence suggests character strengths cause well-being (e.g., Proyer et al. 2012). In examining *any* of the 24 specific character strengths, a myriad of positive benefits can be found, for example, curiosity is linked with interpersonal intimacy (Kashdan et al. 2011), perseverance with achievement (Lounsbury et al. 2009), gratitude with improved physical symptoms (Emmons and McCullough 2003), and zest with positive work outcomes (Peterson et al. 2009). General strengths use has been associated with flourishing in that workers who used their strengths a lot were 18 times more likely to be flourishing than those who reported using their strengths least (Hone et al. 2015).

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It is worth noting that in the original VIA Classification framework, a hierarchy was proposed in which the overarching area of goodness is the six virtues found across religions, ancient and contemporary philosophies, and cultures, followed by the 24 strengths of character and the situational themes in which these strengths are expressed (Peterson and Seligman 2004). The research that has emerged since gives reason to suggest an intermediary level as life domain or context (Niemiec 2018), as there are an infinite number of situational themes that can emerge within a given broader domain/context (work, school, parenting, social life, community, etc.). Figure 1 displays this additional area of context and is the emphasis in this paper.

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The subset of character strengths that has been studied most in general and across contexts is signature strengths, which refers to an individual's highest and most essential and energizing personal strengths. The use of signature strengths has been particularly strong as an intervention, displaying lasting benefits to happiness and depression (e.g., Gander et al. 2013; Seligman et al. 2005), goal progress and needs satisfaction (Linley et al. 2010), hope and engagement (Madden et al. 2011), positive work experiences and work-as-a-calling reports (Harzer and Ruch 2012, a), and

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## 6 Virtues

(wisdom, courage, humanity, justice, temperance, transcendence)



## The 24 Character Strengths



## Context

(work, school, family, social, community)



## Situational Themes

**Fig. 1** The hierarchical structure of the VIA Classification in Peterson and Seligman (2004), with addition of “Context” as noted in Niemiec (2018)

meaning and purpose (Allan and Duffy 2013). It is these signature strengths that seem especially important for matters of thriving in that there are benefits for both increasing well-being and managing ill-being.

Thriving is the ultimate fulfillment in life. In examining definitions of thriving from several research teams, Brown and colleagues (Brown et al. 2017) arrived at the common elements that thriving refers to the joint experience of *development* and *success*, experienced globally as in an individual thriving in all areas of their life or specifically such as someone thriving solely at work. Development refers to progressive improvements that are physical, psychological, or social, while success refers to positive outcomes that are contextually relevant such as good relationships, health, and achievements. Thriving can occur following adversity or opportunity which distinguishes it from resilience and growth which primarily follow adversity (Brown et al. 2017; Feeney and Collins 2015) and from flourishing which tends to emphasize characteristics of positive well-being (Keyes 2002). While there is indeed overlap with these constructs, thriving emerges as a construct especially well-suited for the versatile nature of character strengths and their many healthy functions therein.

There is no theory in the literature that examines the comprehensive nature of character strengths for matters of thriving across not only the positives but also the challenges of life. This paper expands Peterson and colleagues (Peterson et al. 2005) notion of the full life as a life of pleasure, engagement, and meaning. It articulates core processes for attaining those positives while also integrating processes for handling life’s struggles, hence capturing a more complete picture of the full range or vicissitudes of life.

Important themes are emerging from the scientific literature in regard to the many roles character strengths play in the pluses and minuses of life. In devoting my writing and research to the study of these constructs for over a decade, I extracted central themes from the character strengths literature and scholarship. It became clear that character strengths offer an important role in catalyzing, growing, and appreciating the positives and opportunities in life, as well as buffering, re-interpreting, managing, and transforming the adversities and problems of life. Thus, I offer six functions, or purposeful roles in opportunities and adversities that character strengths serve, as hypothesized by the emerging science.

- *The priming function*: character strengths used as preparation for strengths awareness and use.
- *The mindfulness function*: character strengths serving in synergy with mindful awareness of the present reality.
- *The appreciation function*: character strengths used in the expression of value for what has occurred.
- *The buffering function*: character strengths used in the prevention of problems.
- *The reappraisal function*: character strengths serving to explain and/or reinterpret the complex dynamics of problems.
- *The resilience function*: character strengths used in bouncing back from life setbacks or problems.

These 6 functions are outlined in Table 1 using a framework of time orientation across opportunity (positive events, constructive experiences, situations with good potential) and adversity (life challenges, stressors, conflicts, and problems). Opportunities and adversities can occur internally or externally, such as a positive or afflictive feeling (internal) or a positive/negative comment made by one’s employer (external).

There are a few preliminary points worth noting about this table before delving into each of the 6 functions:

- 1) Each of the functions can serve more than one role. This means that each function is not limited to the time orientation in the chart, for example, mindfulness can be directed to the past (after an event) and to situations of adversity (Niemiec 2014a), while reappraisal can be directed to the future (e.g., Roepke et al. 2017) or after a transgression (e.g., Witvliet et al. 2011). The placement of the functions in this chart reflects their potentially most dominant application.

t1.1 **Table 1** Optimal character strengths functions across time orientation in situations of opportunity and adversity

	Prior to	During	After	
t1.3	Opportunity	Priming function	Mindfulness function	Appreciation function
t1.4	Adversity	Buffering function	Reappraisal function	Resilience function

- 2) These six functions are not meant to be exhaustive. Character strengths, by definition, are multidimensional, diverse, and display a myriad of possible roles in thriving at times of joy, suffering, and during the mundane. 139  
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- 3) The six functions are not mutually exclusive. While the functions are distinctive, they are not meant to be completely distinct. The functions correlate with one another, for example mindfulness and reappraisal are closely connected (Garland et al. 2009). 142  
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- 4) Opportunity and adversity are interrelated. Adversity can be turned into opportunities, much like the research on growth mindset has shown (Dweck 2006). The corollary here is that opportunities can be lost, missed, or squandered which may lead to adversity. The use of character strengths around these various functions can serve to augment, highlight, and take advantage of opportunities while simultaneously serving to manage adversities. 146  
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- 5) While it is unknown empirically, it is hypothesized that each of the 24 character strengths, to at least some degree, can contribute to fulfilling each function. It is likely that some character strengths will more strongly align than other strengths with particular functions, such as the strength of perseverance with the resilience function (e.g., as hypothesized by Peterson et al. 2008) and the strength of curiosity with the mindfulness function (e.g., curiosity is an established part of the operational definition of mindfulness, see Bishop et al. 2004). The dominance of certain strengths with a particular function would not exclude the strength's alignment with other functions. 152  
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- 6) To take the previous point to further detail, the emphasis here with the 6 functions is their connection with character strengths, which can be multifaceted and bidirectional in that character strengths can be the subject which acts upon the object (i.e., one of the 6 functions) or the object being acted upon. Examples of character strengths as object include are that character strengths can be appreciated (which creates well-being opportunities), and can be used as a buffer (which prevents adversities). Character strengths can also be the subject in that they play an important role in the construct of the function itself, for example, in order to enable the function of "appreciation" one might necessarily deploy strengths of gratitude and appreciation of beauty, however, in order to enable the function of "reappraisal" of a situation, the strengths of perspective to see the bigger picture and judgment to use critical thinking to see additional angles may be paramount. In these examples of character strengths as subject, there are likely dominant strengths for each function, although this has not been tested empirically. As the object (which is the focus in this paper), any of the 24 are ostensibly possible in priming us, being attended to with mindfulness, appreciated in ourselves or others, or used to buffer, re-appraise, or bounce back from problems. Future evidence might show some strengths are more beneficial than others for these purposes (e.g., it might be more useful to appreciate a person's bravery than their strength of teamwork, although this is likely to be situation-specific and unique to each individual). 161  
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- 7) It is assumed that optimal thriving for an individual would entail the use of character strengths across many or all 6 functions. 180  
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The bulk of this article will focus on these areas of adversity and opportunity, with respect to the six functions of character strengths. 183  
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## Opportunity Functions

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*All that is valuable in human society depends upon the opportunity for development accorded the individual.*

-Albert Einstein

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Character strengths are closely connected with a wide range of positive phenomena. These include flourishing, engagement, meaning, work calling, happiness, health, vitality, and achievement (e.g., Hausler et al. 2017b; Peterson et al. 2007), to name a few. In other words, character strengths have a strong positivity effect. Each of these are well-being opportunities for humans to thrive. The focus on opportunities refers to the positives we experience or create in life. These are our well-being *and* well-doing (Lottman et al. 2017). We can make the most of these positives by priming for them, mindfully observing and being present to them, and by appreciating them through reflection, reminiscence, and discussion after they occur.

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Character strengths help us broaden our skills and positive responding in the moment while simultaneously building resources for our future, as aligned with the broaden-and-build theory of positive emotions (Fredrickson 2001). For example, using our strengths of social intelligence or curiosity in a new interpersonal situation allows us to use good social skills and see new opportunities for social intimacy (Kashdan et al. 2011) and are ways of exercising the strengths to make it more likely they'll be used in the future due to practice and rehearsal effects. Character strengths boost positive emotions and mood (e.g., Lavy et al. 2014b) and build resources for individuals in the future such as satisfaction, meaning, and calling (e.g., Harzer and Ruch 2015a).

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Another important feature of character strengths is their social nature. Character strengths are expressed in one-on-one situations and in groups at home, work, and school. Such knowledge and practice can be seen as a communal, shared good we have to contribute to others. This inextricable link with other people presents us with seemingly limitless opportunities.

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Each of these are opportunities character strengths help us deepen the positive and optimize the peaks of our experiences. Namely, the functions of priming, mindfulness, and appreciation will be discussed.

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### The Priming Function

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In order to increase the likelihood that strengths in general or specific character strengths will be deployed, a priming strategy can be used. Prior to an event, character strengths can be reflected on. Among psychotherapists, the focus on a client's strengths immediately prior to a therapeutic encounter, known as resource priming, led to greater strengths activation, therapeutic relationship, mastery experiences, and therapy outcomes (Flückiger and Grosse Holtforth 2008). In another study, therapists and clients in the priming group verbalized client competencies and personal goals more often than those in the control groups, and this priming of strengths had a positive impact on outcome (Flückiger et al. 2009). The researchers explain that strengths priming creates a positive feedback circuit in which strengths breed strengths.

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Specific character strengths have been the subject of the priming function and elicited benefit for individuals. For example, the labeling of the strength of bravery/courage has been shown as a way to enhance that strength (Hannah et al. 2007). Kindness is a strength that can be primed in that exposure to acts of kindness can lead to more kindness and positivity (Carlson et al. 1988). The pay-it-forward effect of kindness has found success across contexts showing that kindness can prime the kindness of others (Layous et al. 2017; Pressman et al. 2015).

### The Mindfulness Function

The consensual, operational definition of mindfulness is the self-regulation of attention with an attitude of curiosity, openness, and acceptance (Bishop et al. 2004). Mindfulness allows individuals to more clearly see the realities of the present moment – to not only see struggles but also the positives and strengths they have been omitting. Related, mindfulness has been shown to be important for helping individuals overcome personal blind spots in their self-knowledge (Carlson 2013), making way for new possibilities and capacities to be uncovered or enabled (Niemiec 2014a). The most common time orientation in which mindfulness is directed is the present, which includes all the vicissitudes of life from adversity to opportunity to the mundane of life. Mindful attention can be brought to character strengths in any present moment; this approach is known as mindful strengths use (Niemiec 2014a), and allows individuals to make use of their personal strengths, understand the context of their present moment, navigate the situation, and take action.

The mindfulness function in fostering the positive, such as well-being, is associated with an abundance of research literature (e.g., Sedlmeier et al. 2012). Emerging research is underlining the value-add of character strengths and mindfulness to make the most of such opportunities (Ivtzan et al. 2016a, b; Pang and Ruch 2018). A popular example is strengths-spotting which is a form of strengths mindfulness. Strengths-spotting is a skill that refers to the process of observing the behaviors of oneself or others and then naming the observed strengths and offering behavioral evidence for them. This activates the individual's strengths awareness and potential use. Correlational studies have repeatedly shown the value of strengths awareness and use (e.g., Hone et al. 2015).

There is a powerful, albeit hypothetical, synergy between character strengths and approaches to mindful living, such as mindful eating, driving, working, walking, speaking, and listening, in which each mutually enhances the other and creates opportunities for personal transformation (Niemiec 2012). For example, consider mindful listening, which refers to bringing full attention to the verbal and nonverbal expressions of another person while in conversation. When an individual listens and responds in the present moment to something positive with enthusiasm and offers follow-up questions (i.e., uses zest and curiosity), this is referred to as active-constructive responding and is connected with well-being benefits for the speaker and listener (Gable et al. 2004; Lambert et al. 2011; Reis et al. 2010). In these instances, it seems the function of mindfulness opens the opportunity for character strengths expression and subsequent benefit.

### The Appreciation Function

Appreciation means to convey value to a person for their actions. In the context of character strengths, appreciation brings strengths-spotting to a deeper level, allowing the recipient to

understand that their character strengths matter. Science has revealed several benefits of appreciation. Those who express appreciation to their partner are more committed to them and more likely to stay in the relationship (Gordon et al. 2012). Appreciation expressed toward one's partner has been associated with stronger relationships, higher marital satisfaction, and greater willingness to share concerns in the relationship (Algoe et al. 2010; Lambert and Fincham 2011). The recognition and appreciation of character strengths of one's partner is connected with higher commitment in relationships, higher relationship satisfaction, higher sexual satisfaction, and greater reporting of basic psychological needs being met (Kashdan et al. 2017). A spouse might say to their partner how much they value them for their curiosity in asking so many interesting questions at a dinner with friends and how they appreciate their partner's strength of fairness in including everyone in the conversation. Any of the 24 character strengths can be spotted and appreciated. In a representative sample of thousands of New Zealand workers, it was found that those who felt highly appreciated by others were 30 times more likely to be flourishing than those who did not feel appreciated (Hone et al. 2015).

Savoring, the deliberate cultivation of positive experiences, can be directed to the past, present, or future (Bryant and Veroff 2007). When directed to the past as a form of appreciation, this is often referred to as positive reminiscence which has been shown to boost well-being (Bryant et al. 2005). Character strengths have been discussed as an important element to integrate with savoring in a bi-directional way and involves appreciation and reminiscence of the strengths of oneself and others (Niemiec 2018). Niemiec discusses three points of integration; here are examples of each: an individual might reminisce about their use of kindness with a homeless person (referred to as "savored strength") or improve their savoring capacity by using perseverance strength to practice savoring for 15 min a day (referred to as "strong savoring") or savor the character strength that results from a savoring practice such as gratitude that emerges after looking at vacation videos (referred to as "the strength that rises").

Research has also shown that individuals can appreciate their own strengths and the positive events that occur in their life by sharing that positivity with others. This is a way to capitalize on the good. The sharing of positive events with others (compared to not sharing) has been shown to boost energy and vitality, where more frequent sharing of positive events has led to greater vitality 3 weeks later (Lambert et al. 2011). In other words, reflecting on the recent past of a positive event, and appreciating it by sharing it with others brings gains to happiness, positive emotions, and life satisfaction (Lambert et al. 2011).

## Adversity Functions

*To go in the dark with a light is to know the light.  
To know the dark, go dark. Go without sight,  
and find that the dark, too, blooms and sings,  
and is traveled by dark feet and dark wings.*  
-Wendell Berry

In addition to a focus on the instrumental benefits of character strengths, there have been various scientific efforts to examine the role of character strengths in the struggles,

vulnerabilities, stressors, and problems of life. The science of positive psychology has initiated efforts – some referred to as “second wave positive psychology” (Ivtzan et al. 2016a, b) – to refer to the scientific study of the positive in impacting life challenges and conversely how life’s struggles can create the positive.

Adverse events or adversities come in many forms and offer an opportunity for growth. These include car accidents, bereavement, illness of oneself or others, job loss, terrorism, natural disasters, war, and violence, as well as ongoing, prolonged stressors such as school bullying, workplace harassment, dysfunctional relationships, and poverty. Irritants, daily hassles, arguments, conflicts, body aches and pains, disappointments, anxieties, ennui, and a myriad of other mild stressors can also be viewed as forms of adversity.

Character strengths play a central role in adversity, serving as a buffer or source of protection; offering a unique lens, reframe, or mindset shift; and helping to manage, overcome, heal, transcend, and/or bounce back from problems. These are the buffering, reappraisal, and resilience functions, respectively.

### The Buffering Function

Character strengths offer an important role in preventing problems or buffering individuals from adversities. In the research literature, this is sometimes referred to as protective factors. As discussed by Coie and colleagues (Coie et al. 1993), protective factors (in this case, character strengths) might serve to directly decrease a problem (i.e., relating to the resilience function) or to interact with a risk factor and buffer its effects, undo a risk factor, or disrupt the process leading from the risk factor to the problem. These latter three pathways reflect aspects of the buffering function of character strengths. As mentioned earlier, there is overlap between the different functions and this is an example of an interrelationship between two functions in which the buffering function feeds the resilience function and vice versa.

Table 2 shows a variety of protective factors (from Kumpfer 1999), their alignment with character strengths, as well as additional studies addressing specific character strengths with adversity (buffering and/or resilience function). Interestingly, each of the 24 character strengths has been shown to play at least some role in preventing or managing adversity.

In relationships, feeling understood by one’s partner has been shown to act as a buffer against conflict (Gordon and Chen 2016). The mutual sharing and understanding of character strengths are important elements for relationship partners “feeling understood” by one another. In another study, character strengths were shown to act as a buffer against negative affect (Lavy et al. 2014b). Character strengths have been shown to act as buffers of adversity in different contexts such as education (Duckworth et al. 2009), work (Harzer and Ruch 2015b; van Woerkom et al. 2016), and health (Peterson et al. 2006).

Specific character strengths have been targeted and shown to buffer against a wide range of problems. For example, high levels of perseverance/grit buffered the relationship between negative life events and suicidal ideation (Blalock et al. 2015); kindness (as self-compassion/self-kindness) buffered against negative social comparison and negative self-consciousness (Neff and Vonk 2009); fairness buffered against the negative correlates of job insecurity (Silla et al. 2010); humility against death anxiety (Kesebir 2014) and against marital stress (Goddard et al. 2016); gratitude buffered

**Table 2** Scientific links between character strengths and protective factors, supporting the buffering and resilience functions

	Character strength	Corresponding protective factors from Kumpfer (1999), with connections denoted from Peterson and Seligman (2004)	Examples of other studies linking protective factors and character strengths
t2.1			
t2.3	Creativity	Creativity	Hutchinson et al. (2011)
t2.4	Curiosity	X	Hutchinson et al. (2011); Kashdan et al. (2013)
t2.5	Judgment	Problem-solving skills	X
t2.6	Love of learning	X	Peterson et al. (2008)
t2.7	Perspective	Insight	X
t2.8	Bravery	X	Martinez-Marti and Ruch (2016)
t2.9	Perseverance	Determination	X
t2.10	Honesty	Belief in uniqueness of oneself (i.e., authenticity)	X
t2.11	Zest	Good health; happiness	Martinez-Marti and Ruch (2016); Shoshani and Slone (2016)
t2.12	Love	X	Peterson and Seligman (2003)
t2.13	Kindness	X	Ai et al. (2013)
t2.14	Social intelligence	Recognition of feelings; empathy	X
t2.15	Teamwork	X	Peterson and Seligman (2003)
t2.16	Fairness	Moral reasoning	X
t2.17	Leadership	X	Peterson and Seligman (2003)
t2.18	Forgiveness	X	Hutchinson et al. (2011); Shoshani and Slone (2016)
t2.19	Humility	X	Chung (2008)
t2.20	Prudence	Planning ability	X
t2.21	Self-regulation	Emotional management skills; ability to delay gratification; ability to restore self-esteem	X
t2.22	Appreciation of beauty/excellence	X	Peterson et al. (2008)
t2.23	Gratitude	X	Kleiman et al. (2013); Peterson and Seligman (2003); Shoshani and Slone (2016)
t2.24	Hope	Hope & optimism; dreams and goals	Mak et al. (2011); Martinez-Marti and Ruch (2016); Peterson and Seligman (2003); Shoshani and Slone (2016)
t2.25	Humor	Humor	Shoshani and Slone (2016)
t2.26	Spirituality	Purpose/meaning in life; spirituality	Ai et al. (2013); Peterson and Seligman (2003); Shoshani and Slone (2016)

hopelessness and depressive symptoms (Kleiman et al. 2013), and hope buffered 362  
 negative affect and emotional exhaustion (Littman-Ovadia and Nir 2014). Other 363

character strengths have been found to be protective against psychological distress such as forgiveness (Orcutt 2006), religiousness/spirituality (Braam et al. 1997), and humor (Nezu et al. 1988). The strengths of gratitude and spirituality were also found to serve as protective factors against anxiety and depression (Rosmarin et al. 2010).

Similarly, Huta and Hawley (2010) found that character strengths protect against psychological vulnerabilities that can lead to depression and anxiety, such as perfectionism and the need for admiration; this study specifically examined the transcendence virtue which consists of the character strengths of appreciation of beauty/excellence, hope, gratitude, humor, and spirituality. In a research review, Park and Peterson (2009) reported that character strengths such as hope, kindness, social intelligence, self-regulation, and perspective buffer against the negative effects of stress and trauma.

### The Reappraisal Function

*When one door closes another door opens; but we so often look so long and so regretfully upon the closed door that we do not see the ones which open for us.*

– Alexander Graham Bell

To reappraise is to take another look – to reassess and examine something – in other words, to reconsider something we take for granted. This can be viewed as shifting one’s mindset such as seeing stress as an opportunity for growth (Dweck 2006; McGonigal 2015). Often, disorders and other problems are viewed as being set in stone, codified by rigid criteria, or at the least, solidified and stereotyped in the minds of both the afflicted and the helping professional.

The limitations of a problem-centered approach are clear in a study of 120 therapy sessions, in which Gassmann and Grawe (2006) found that problem activation did not reliably lead to therapeutic progress but when the problem focus was combined with strengths activation, there was greater success. This shows that in the therapeutic context of discussing adversity and problems, the problem should not be the sole focal point and that a reframe or emphasis on client strengths must also be present. Many other researchers have discussed the importance of using strengths to provide a unique lens for viewing problems or establishing positive processes and meaning within the context of counseling problems (e.g., Rashid 2015; Scheel et al. 2013; Seligman et al. 2006; Tomasulo 2014; Wong 2010).

The reappraisal function of adversity experiences can be used in the present moment to reframe a life challenge or it can be applied retrospectively to a previous life challenge or looking ahead to future challenges. The focus here is the present. Research has shown that strategies such as meaning making, benefit-finding, and compassion-focused reappraisal offer substantial benefits (Witvliet et al. 2011) and all are processes that can be tailored to an individual’s character strengths in the present moment (Niemiec 2018).

To view problems as something other than a collection of symptoms requires a reappraisal. The character strengths language provides a reappraisal language allowing for explaining and understanding problems that range from minor interpersonal conflicts and everyday personal vices to major psychological disorders. The VIA Institute has examined and framed a “reappraisal language” across each of the 24 character strengths

into practical terms of strengths overuse and strengths underuse, e.g., the overuse of creativity is eccentricity while its underuse is conformity (Niemiec 2014b, 2018). Any of the 24 character strengths can be overused or underused (Grant and Schwartz 2011), and each can be viewed as part of a strengths continuum in which overuse and underuse lie on opposites poles and optimal strengths use or the golden mean of character strengths, which is reliant on contextual, individualized strengths expression, resides in the middle (Niemiec 2014a, b). This is consistent with classical virtue theory around the concept of a golden mean in which there lies a vice of deficiency and a vice of excess for a given virtue that is expressed optimally in context (Aristotle 2000). Recent research has supported this notion as well. The first empirical study on this topic found that not only do character strengths overuse, underuse, and optimal-use exist as constructs but each is associated with flourishing, life satisfaction, and depression in expected directions (e.g., overuse/underuse each are associated with more depression and less flourishing and life satisfaction) (Freidlin et al. 2017).

For example, a person who is procrastinating on a paper due the next day might be overusing curiosity as they do multiple web searches instead of putting pen to paper, and at the same time are underusing prudence as they opt not to create an outline or a plan; another procrastinator might be overusing hope, feeling confident they can do extensive work in a short period of time however have no justification for such confidence. A person who is depressed might be underusing zest (e.g., not activating their behavior) or they might be overusing perseverance (e.g., persevering with negative thoughts) while also underusing perseverance (e.g., not persisting in socializing with others). Thus, there is often not one explanation of overuse/underuse for a given problem as difficulties have a complex interplay of individual and contextual factors (Niemiec 2014b). Instead, overuse and underuse offer a unique perspective to problems through reappraisal and catalyze potential ways to handle them, such as through the tempering of an overused strength or use of other strengths to boost up an underused strength. Research is beginning to examine combinations of overuse and underuse in conceptualizing disorders. For example, one study examined people with and without social anxiety disorder, a condition characterized by an excessive and unreasonable fear of social situations leading to anxiety and fear of being watched and criticized (American Psychiatric Association 2013). The researchers found that the combination of six character strengths imbalances – the overuse of social intelligence and humility and the underuse of zest, humor, self-regulation, and social intelligence – correctly sorted over 87% of people with social anxiety from those that do not have the disorder (Freidlin et al. 2017). A similar approach was taken with obsessive-compulsive disorder which revealed a unique constellation of strengths overuse and underuse (Littman-Ovadia and Freidlin 2018).

Character strengths and psychopathology have been examined together in other studies providing additional groundwork for the reappraisal function. These include character strengths and gelotophobia (the fear of being laughed at, Proyer et al. 2014a, b), character strengths and veterans with and without PTSD (Kashdan et al. 2006), curiosity and social anxiety disorder (Kashdan and Roberts 2004), and strengths-based approaches for children with attention-deficit/hyperactivity disorder (Climie and Mastoras 2015). The explanation of psychological disorders as “disorders of character strengths” was proposed by Peterson (2006) noting, in which an example is to consider the “disorders of courage” which would contain the exaggeration, absence, and

opposite of each strength. Seligman (2015) argued that with additional research this approach could shift the way mental illness is viewed, diagnosed, and treated. The reframe of disorders in the context of imbalance – overuse, underuse, optimal-use (Niemiec 2018) – and its accompanying measurement tool (Freidlin et al. 2017), may provide the proper nuance, semantics, and catalyst for such a reframe.

It is also worth noting that any problem can be viewed through the lens of character strengths. In everyday life, we have relationship problems, various stressors, we get locked into bad habits, and display an array of personal vices, each of which can be reappraised through the filter of character strengths use, overuse, and underuse. Consider the 7 deadly sins – bad habits people have struggled with for centuries. These can be viewed from a scientific perspective as having positive elements (Laham 2012), and at the same time, reappraisal offers an immediate and novel perspective. For example, the sin of sloth might be viewed as the underuse of zest and perseverance, which means that these strengths might help to explain some of the dynamics of sloth as well as provide a direction for managing or transcending sloth. Table 3 offers hypothetical links for each of the 7 deadlies; it should be noted that the strengths dynamics with each sin will have some variance from context to context.

Another strengths reappraisal is especially a propos for interpersonal situations. “Character strengths collisions” can occur as two or more people approach a situation from different character strengths and subsequently tension emerges. For example, one member of a couple might approach her young child who has misbehaved from a perspective of prudence and self-regulation and chastises the child (i.e., emphasizing setting boundaries) while the other member approaches the child softly, with love and forgiveness. The couple then begins to battle with one another arguing for the importance and priority of their respective approach to child-rearing. A collision has occurred, despite both parties being justified in their strengths expression. Reappraisal of the situation from a strengths lens can offer a unique explanation for the conflict and potentially a solution. This kind of reappraisal offers one of a myriad of explanations and solutions and as each situation and interpersonal and intrapersonal dynamics are complex, having a range of lenses (including a positive lens) is important.

A final form of strengths reappraisal, which does not involve overuse or underuse, is what is referred to as a “pure strengths reframe” (Niemiec 2018). This involves looking at a problem or conflict and naming the character strengths that are present and being used in the situation. While a person with social anxiety who is chronically avoiding

t3.1 **Table 3** The 7 deadly sins and hypothetical character strengths reframes

	7 Deadly sin	Character strength underused	Secondary strength underused
t3.3	Lust	Love	Kindness (compassion)
t3.4	Gluttony	Self-regulation	Prudence
t3.5	Greed	Gratitude	Kindness (generosity)
t3.6	Sloth	Zest	Perseverance
t3.7	Wrath	Forgiveness	Self-regulation
t3.8	Envy	Kindness (caring)	Perspective
t3.9	Pride	Humility	Social intelligence

participating in social events can be diagnosed with a disorder of social phobia and plenty of strengths overuse and underuse lingo can be applied, a pure strengths reframe offers a third perspective. Looking solely at strengths expression, one might notice the person is at home meditating (reframe of spirituality), is studying hard for their exams (reframe of love of learning), is quietly socializing on social media platforms (reframe of social intelligence), and/or is feeling confident that they don't need to participate in the in-person social events to be happy (reframe of hope).

## The Resilience Function

Resilience is central to any discussion on adverse events as it refers to positive adaptation to adversity, colloquially meaning to “bounce back” from a setback. It is a construct that has been applied in many contexts such as relationship resilience, social resilience, resilience in the military, and has gone by many names over the years ranging from hardiness, post-traumatic growth, grit, perseverance, growth mindset, and inner strength to name a few. The many faces of resilience show it is a complex, multi-dimensional construct, with many conceptualizations (Ivtzan et al. 2016a, b, reported a study noting as many as 122 definitions in the literature). Another useful conception for resilience is “the courage to grow from stress” (Maddi 2008). Kelly McGonigal (2015) builds off this arguing that this is what it means to be good at stress in that it is not about being unaffected by adversity but it is about using stress to awaken core human strengths involving courage, connection, and growth.

The formal connection between character strengths and resilience has been sporadically addressed over the last decade and a half, with a recent increase as evidenced by popular books on the important role of character strengths at times of tragedy (e.g., Hone 2017) and loss (e.g., Sirois 2016). The literature is not nuanced enough to argue for connections between the specific types of resilience. That said, there is evidence that each of the 24 character strengths have been connected with resilience in some way. See the aforementioned Table 2 for a review of these. On one hand, this indicates the importance of all 24 character strengths to help individuals grow from stress and tap into resilience to face and overcome problems. At the same time, this should be viewed as “emerging evidence,” not forgone conclusions, as some character strengths are mixed in their relationship with resilience (e.g., humility) and other character strengths come up strong in one study of resilience but not in others (e.g., appreciation of beauty). Some of this has to do with the population being studied and the resilience context (e.g., natural disaster survivors, abuse survivors, etc.). Another issue is the relationship between character strengths and resilience which may be a bi-directional relationship in that character strengths lead to resilience and resilience leads to character strengths (Martinez-Marti and Ruch 2016). What has been completely unexplored at this point with resilience is whether each person's unique signature strengths – if consciously tapped and expanded – could contribute to and enhance resilience.

Studies have shown character strengths are intertwined in dealing with the unexpected (e.g., natural disasters), personal traumas, ongoing external turmoil (e.g., war), and ongoing internal turmoil (e.g., physical illness). In a study of 1078 adolescents exposed to lengthy periods of war, terrorism, and political conflict, character strengths were negatively associated with psychiatric symptoms. There were moderating effects for certain interpersonal character strengths on the relationship between violence



exposure and psychiatric and PTSD symptoms. Character strengths have an important role in the resilience function of adolescents and practical, strengths-building practices can be applied to the adolescents growing up in these war-affected environments (Shoshani and Slone 2016). Another resilience researcher, Panter-Brick, described her face-to-face interviews with over a thousand Afghani families and boiled their displays of resilience down to a single character strength – hope – as their life was focused more on harnessing resources toward securing a better future than focusing on the traumas of the past (Southwick et al. 2014).

Character strengths not only help people to manage and transcend suffering but can emerge as a result of suffering and tragedy, and then in turn, offer support and sustenance in maintaining recovery and healing. Peterson and Seligman (2003) found that several character strengths appeared to be catalyzed by the September 11th (2001) attack on the World Trade Center in New York City as evidenced by an increase in gratitude, hope, kindness, leadership, love, spirituality, and teamwork in a U.S. sample but not in a European sample two months after the tragedy; ten months after September 11th, these character strengths were still elevated but to a lesser degree. In a partial replication of this study, Schueller and colleagues (Schueller et al. 2014) found there were significant changes in character strengths in one of 3 groups experiencing traumatic events. Peterson and colleagues (Peterson et al. 2008) have also reported that the more traumatic events an individual reports, the higher the character strengths scores, with the exception of love, hope, and gratitude.

One type of resilience called posttraumatic growth can be described as several areas of growth following a tragedy, including better relationships with others, openness to new possibilities, greater appreciation of life, enhanced personal strength, and spiritual development (Tedeschi and Calhoun 1995). A number of character strengths can be linked with each of these areas of posttraumatic growth including love, curiosity, gratitude, perseverance, and spirituality (Peterson et al. 2008).

Two studies explored the link between virtues in the VIA Classification and posttraumatic growth among people in China who had experienced the trauma of a natural disaster or a range of traumatic experiences. Results revealed significant, positive correlations between virtues and posttraumatic growth (Duan and Guo 2015) and a significant relationship between virtues and trait resilience where the former contributed more to posttraumatic growth while the latter was a strong predictor of PTSD (Duan et al. 2015). Across two samples in the workplace (a nurses sample and a mixed sample of various occupations), character strengths were connected with improved coping and stress management (Harzer and Ruch 2015b). Being high in specific traits such as hope, zest, and leadership related to less problems with anxiety and depression; while being high in perseverance, honesty, prudence, and love related to fewer externalizing problems such as aggression (Park and Peterson 2008); and bravery, humor, and kindness were instrumental in life satisfaction recovery for those managing physical illness (Peterson et al. 2006).

Character strengths help people emerge from their suffering, better navigate the terrain of their symptoms and struggles, and manage their stress and problems. This is clear in the sphere of character strengths interventions. Interventions have been fairly widely applied with good results, such as leading to less depression and increased happiness (Gander et al. 2013; Proyer et al. 2014a, b; Seligman et al. 2005), and helping parents who are caring for children with a disability to lower stress and increase

hope (Fung et al. 2011). Interventions that promote specific character strengths such as hope (Cheavens et al. 2006) and forgiveness (Reed and Enright 2006) have been found to reduce symptoms of depression. In addition, the targeting of an individual's strengths rather than deficits has been found in a randomized trial to lead to significant improvements in depression and reduced relapse (Cheavens et al. 2012). One intervention program, mindfulness-based strengths practice (MBSP), designed to improve character strengths awareness and use, has led to substantial participant reports of improved problem management and stress management (Ivtzan et al. 2016a, b; Niemiec 2014a; Niemiec and Lissing 2016). When applied to a past event and attempting to learn and grow from the event, strategies such as benefit-finding and compassion-focused reappraisal are important resilience interventions (e.g., Witvliet et al. 2011).

Character strengths interventions have also been evidenced across various settings and populations where resilience with adversity becomes central, including people with traumatic brain injury (Andrewes et al. 2014), those who are suicidal/depressed on an inpatient unit (Huffman et al. 2014), those who are depressed and in psychotherapy (Rashid 2015), Veterans Administration clients with chronic conditions (Kobau et al. 2011), and those struggling to manage physical symptoms (Emmons and McCullough 2003), to name a few.

## Applications in Vocational and Educational Settings 600

Vocational and educational settings have been the most studied domains of character strengths research to date. Please see the online supplemental section for details on the following five ways any or all six of the character strengths functions might be targeted in these settings: 601  
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- Use a signature strength 605
- Target a character strength linked with opportunity or adversity 606
- Build mindfulness and reappraisal 607
- Integrate character strengths into any positive psychology activity 608
- Comprehensive programming 609

This section continues at this supplemental section link: 610

## Conclusion and Future Directions 611

These six functions of priming, mindfulness, appreciation, buffering, reappraisal, and resilience have been emerging in the character strengths research literature offer perspective on the vicissitudes of life – a vision that includes the positives, successes, healthy development, and untapped opportunities as well as the embracing, managing, and transcending of the vices, struggles, and suffering inherent in life. 612  
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These functions offer a theory for researchers to explore and for practitioners to experiment with clients. Further research might examine which character strengths align most with each function and consider causal links between strengths use and each function within opportunity and adversity. In addition, a mechanistic examination of 617  
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“how” character strengths fulfill these functions deserves further focus. The focal point of context has been occupational and vocational settings, as these domains have enjoyed a surge in character strengths research, however, the functions and applications herein are relevant outside these domains. Researchers and practitioners might examine these functions in health, spirituality, relationships, parenting, and sport.

There are important benefits our problems and suffering can bring us, ranging from catalyzing character strengths and resilience to providing us an opportunity to express the best parts of ourselves to engender healing. Similarly, there are numerous opportunities for growth that reside outside of suffering, within the joys and celebrations as well as the routines and miniature moments of life. Indeed, there remains much to explore in the study and application of character strengths and their many functions.

As the reader reflects on these ideas, a final question is left lingering:

How can we find fulfillment and make the most of life’s opportunities as well as heal or overcome adversity and suffering without using our character strengths?

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- Q1. Please check provided Address in affiliation 1 if correct.
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- Q3. The citation “Peterson, Park, & Seligman, 2005” has been changed to “Peterson et al., 2005” to match the author name/date in the reference list. Please check if the change is fine in this occurrence and modify the subsequent occurrences, if necessary.
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