



Citation for published version:

Brown, D, Arnold, R, Fletcher, D & Standage, M 2017, 'Human thriving: A conceptual debate and literature review', *European Psychologist*, vol. 22, no. 3, pp. 167-179. <https://doi.org/10.1027/1016-9040/a000294>

DOI:

[10.1027/1016-9040/a000294](https://doi.org/10.1027/1016-9040/a000294)

Publication date:

2017

Document Version

Peer reviewed version

[Link to publication](#)

© 2017 Hogrefe Publishing. This article does not exactly replicate the final version published in the journal "European Psychologist". It is not a copy of the original published article and is not suitable for citation.

University of Bath

Alternative formats

If you require this document in an alternative format, please contact:
openaccess@bath.ac.uk

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

Human Thriving: A Conceptual Debate and Literature Review

Daniel J. Brown and Rachel Arnold

University of Bath, United Kingdom

David Fletcher

Loughborough University, United Kingdom

Martyn Standage

University of Bath, United Kingdom

Author Note

Daniel J. Brown, Rachel Arnold, and Martyn Standage, Department for Health,
University of Bath, United Kingdom.

David Fletcher, School of Sport, Exercise, and Health Sciences, Loughborough
University, Loughborough, United Kingdom.

Daniel J. Brown is now at the Department of Sport & Exercise Science, University of
Portsmouth, United Kingdom.

Correspondence concerning this article should be addressed to Rachel Arnold,
Department for Health, University of Bath, Claverton Down, Bath BA2 7AY, United
Kingdom. Telephone: 4412-2538-5107. E-mail: R.S.Arnold@bath.ac.uk

1 Abstract

2 Humans have an inherent drive for self-improvement and growth (Maslow, 1965; Ryan &
3 Deci, 2002). In a quest to understand how humans achieve fulfilment, researchers have
4 sought to explain why some individuals thrive in certain situations, whereas others merely
5 survive or succumb. The topic of thriving has become popular with scholars, resulting in a
6 divergent body of literature and a lack of consensus on the key processes that underpin the
7 construct. In view of such differences, the purpose of this paper is threefold: (i) to review a
8 number of existing theoretical and conceptual debates, and to propose a conceptualization of
9 thriving applicable across different populations and domains; (ii) to consolidate pertinent
10 bodies of extant thriving research and identify key personal and contextual enablers to inform
11 applied practice; and (iii) to identify noteworthy gaps within existing literature so as to make
12 recommendations for future research and, ultimately, support the development of effective
13 psychosocial interventions for thriving.

14 *Keywords:* functioning, health, performance, thrive, well-being.

1 Human Thriving: A Conceptual Debate and Literature Review

2 Humans have an inherent drive for self-improvement and growth (Maslow, 1965;
3 Ryan & Deci, 2002). This desire for personal fulfilment, however, can place humans in
4 unfamiliar scenarios (e.g., first day at school, job promotion, getting married) and expose
5 them to situational demands that they likely react to in a wide range of ways. For instance,
6 on occasions, these demands may prove overwhelming and some individuals may
7 subsequently struggle with and succumb to the scenario, whereas in other instances,
8 individuals may manage and survive. Alternatively, when exposed to a scenario, individuals
9 may *thrive*; that is, they may grow or develop well and vigorously, and they may prosper and
10 be successful (cf. Simpson, Weiner, Murray, & Burchfield, 1989; Soanes & Stevenson,
11 2005).

12 Within the academic literature, the quest for understanding human fulfilment and
13 thriving gathered momentum towards the end of the 20th century. This focus culminated in
14 the *American Psychologist* publishing a Positive Psychology special issue for their millennial
15 edition (see, Seligman & Csikszentmihalyi, 2000a), which marked a prominent landmark in
16 the field of psychology and set in motion a paradigmatic shift from an emphasis on pathology
17 towards positive human functioning (cf. Seligman & Csikszentmihalyi, 2000b). Indeed, in
18 the introductory article of the special issue, Seligman and Csikszentmihalyi (2000b)
19 concluded with a prediction that, in the 21st century, “a psychology of positive human
20 functioning will arise that achieves a scientific understanding and effective interventions to
21 build thriving in individuals, families, and communities” (p. 13). Researchers continue to
22 work towards this goal and a recent review of positive psychology literature found that the
23 field had burgeoned since the special issue in 2000, with over 1300 articles published
24 between 1999 and 2013 (Donaldson, Dollwet, & Rao, 2015). However, this expansion of
25 human functioning literature has been divergent and a lack of consensus exists on many of

1 the key processes that underpin thriving. Accordingly, within this paper, we aim to discuss a
2 number of existing theoretical and conceptual debates, and propose a conceptualization of
3 thriving applicable across different populations and domains; consolidate pertinent bodies of
4 thriving research and identify key personal and contextual enablers; and identify noteworthy
5 gaps within existing literature so as to make recommendations for future research. To
6 address this aim, the narrative is split into three main sections: Critical Issues in
7 Understanding Human Thriving, Influential Psychosocial Variables for Human Thriving, and
8 Future Directions for Research and Practice.

9 **Critical Issues in Understanding Human Thriving**

10 **What is Thriving?**

11 Although the topic of *thriving* is of interest to many researchers, much confusion
12 exists regarding what is explicitly meant by the term. In part, this confusion has resulted
13 from ambiguity introduced from temporal and contextual variance in the construct (cf.
14 Lerner, 2004). To elaborate on the temporal variation, Benson and Saito (2001) identified
15 different thriving indicators for youth (e.g., positive nutrition, school success) and adult (e.g.,
16 community engagement, work effectiveness) populations. The variety of indicators suggest
17 that thriving is multifaceted and may appear qualitatively different across individuals, making
18 it difficult to integrate extant work and to establish a coherent operational definition to
19 accurately reflect the construct across samples. In terms of contextual variance in the
20 construct, researchers have espoused various conceptualizations based on the type of domain
21 investigated (e.g., developmental, performance). Specifically, researchers examining human
22 thriving in developmental domains (e.g., positive youth development) have generally
23 conceptualized thriving as a developmental and growth oriented process (see, e.g., Benson &
24 Scales, 2009; Bundick, Yeager, King, & Damon, 2010; Lerner, Dowling, & Anderson, 2003),
25 whereas in performance domains (e.g., business) thriving has typically been based on a sense

1 of accomplishment, prosperity, success, and wealth (see, e.g., Bakker, van Veldhoven, &
2 Xanthopoulou, 2010; Cui, 2007; Jackson, McDonald, & Wilkes, 2011; Sarkar & Fletcher,
3 2014). These domain-specific conceptualizations have resulted in a variety of thriving
4 definitions (see Table 1), creating confusion as to whether thriving is a state, a process, or
5 both a state and a process (cf. Benson & Scales, 2009). Additionally, questions remain as to
6 whether thriving is a domain-specific experience or whether it requires a more global
7 realization (Benson & Scales, 2009; see also, Sarkar & Fletcher, 2014). The divergent
8 meanings of thriving and the lack of a commonly accepted definition is problematic for
9 scholars, because conceptual consensus provides direction and boundaries for scientific
10 inquiry (Kaplan, 1964). To overcome these issues and advance the field, a ubiquitous and
11 robust definition of thriving is required that is applicable across different populations and
12 domains.

13 When developing such a definition of thriving, it is necessary to identify the
14 commonalities in existing definitions and conceptual interpretations. By reflecting on the
15 definitions of thriving in Table 1, it is apparent that two recurrent themes are development
16 and success. More specifically, the development component of thriving relates to progressive
17 enhancements that are either of a physical (e.g., an infant learning to walk), psychological
18 (e.g., learning adaptive coping styles), or social (e.g., establishing a friendship group) nature.
19 The success component is typically evidenced through a variety of temporally and
20 contextually relevant outcomes (e.g., attainment scores, cardiovascular capacity, wealth).
21 Furthermore, thriving is recognized as being multifaceted in nature (see, e.g., Spreitzer et al.,
22 2005), with development and success experienced in tandem rather than in isolation (cf. Su,
23 Tay, & Diener, 2014). Indeed, Su et al. (2014) stated that “to thrive in life is not only marked
24 by feeling of happiness, or a sense of accomplishment, or having supportive and rewarding
25 relationships, but is a collection of all these aspects” (p. 272). Therefore, thriving can be

1 broadly defined as *the joint experience of development and success*. The definition proposed
2 here overcomes the temporal restrictiveness apparent in previous definitions that have been
3 specific to certain age groups (e.g., Benson & Scales, 2009; Lerner et al., 2003), whilst also
4 considering a more broad focus than definitions that have been devised for particular contexts
5 (e.g., Spreitzer et al., 2005) or scenarios (e.g., Park, 1998). Furthermore, it recognizes that
6 thriving can be a global construct (e.g., an individual can be thriving in all areas of their lives)
7 or it can be experienced in specific scenarios (e.g., an individual can be experiencing
8 development and success in their schooling, but not necessarily in their sport).

9 To achieve both development and success an individual needs to experience holistic
10 functioning (cf. Su et al., 2014), which has typically been determined through indices of well-
11 being and performance (see, e.g., Sarkar & Fletcher, 2014; Scales et al., 2000; Spreitzer et al.,
12 2005). Well-being is described as the state of being or doing well in life and can be
13 categorized into physical (Scheier & Carver, 1987), emotional (Keyes, 2002), psychological
14 (Ryff, 1989), and social (Keyes, 1998) dimensions. High levels of well-being are important
15 for thriving as they demonstrate that the personal and social functioning necessary for
16 development is occurring (cf. Ryan & Deci, 2001). Turning to performance, this is
17 determined by the level of quality shown in the execution of an action, operation, or process
18 (Simpson et al., 1989), and can be assessed, for example, on a range of artistic, athletic,
19 cognitive, motor, or work-related tasks. An individual's performance on such tasks is
20 considered to reflect their level of functioning (cf. Sarkar & Fletcher, 2014) and, if a high-
21 level of functioning is achieved, superior performance may orientate an individual to achieve
22 success (cf. Lerner et al., 2003; Scales et al., 2000). The multifaceted nature of thriving
23 means that subjectively perceiving high levels on only one of these indices, however, would
24 not be sufficient for an individual to achieve development and success. To elaborate, if an
25 individual was to perceive a high-level of performance and experience a low-level of well-

1 being (e.g., vitality) he or she may be successful, but this may be accompanied by negative
2 outcomes that could, ultimately, undermine development (e.g., increased risk of burnout;
3 Spreitzer et al., 2005). Conversely, if an individual was to experience a high-level of well-
4 being but perceive a low-level of performance, it is likely that his or her impaired task
5 execution would hinder success. Based on this summary, it is suggested that thriving can be
6 realized through effective holistic functioning and observed through the experience of a high-
7 level of well-being and a perceived high-level of performance. This adjectival description
8 captures the essence of thriving in state form and in response to a situation. Longer term, if
9 an individual repeatedly perceived high-levels of well-being and performance across a series
10 of situations, then the experience of thriving could lead to sustained development and success
11 (Carver, 1998; see also, Sarkar & Fletcher, 2014).

12 It is important to differentiate thriving from other terms (e.g., prospering, resilience,
13 growth, flourishing) referred to by scholars which may at first glance appear to be similar, yet
14 have fundamental differences. To illustrate, the term prospering appears similar to thriving in
15 that it captures the success component of thriving (cf. Soanes, & Stevenson, 2005); however,
16 it is different because does not capture the developmental aspect. Resilience and growth are
17 additional terms that have been closely associated with thriving, since all three terms have
18 been used to reflect a capacity for positive adaptation to adversity. Specifically, following
19 adversity, resilience is considered to represent a maintenance of functioning (Bonanno,
20 2004), whereas stress-related growth (Park, Cohen, & Murch, 1996), posttraumatic growth
21 (Tedeschi & Calhoun, 1996), and thriving (O'Leary & Ickovics, 1995) have been suggested
22 to describe establishing an elevated level of functioning. Despite this apparent similarity,
23 resilience, growth, and thriving are distinct constructs because resilience and growth typically
24 occur following an adverse event, but thriving does not depend on the occurrence of a
25 negative encounter (Carver, 1998; Sarkar & Fletcher, 2014; Spreitzer et al., 2005). Instead,

1 thriving can be experienced following both life adversity and life opportunity (see, Feeney &
2 Collins, 2015); the similarity between thriving following adversity and growth following
3 adversity remains an aspect of thriving which has not yet been satisfactorily addressed in the
4 wider literature. Future research designed to address this issue is warranted.

5 The term that arguably has the greatest conceptual similarity with thriving is
6 flourishing. An individual is said to be flourishing when he or she displays positive feeling
7 and functioning in life and is, subsequently, described as mentally healthy (Keyes, 2002,
8 2003). Flourishing is similar to human thriving because both constructs are concerned with
9 an individual's experience of development and success; however, attempts have been made in
10 the extant literature to differentiate the two constructs (see, e.g., Benson & Scales, 2009;
11 Spreitzer et al., 2005). For example, Benson and Scales (2009) identify spiritual
12 development and prosocial orientations as explicit indicators of thriving in adolescent
13 populations, whereas these themes are not pronounced in flourishing research (see, e.g.,
14 Keyes, 2007). The presentation of thriving including both well-being and performance
15 components in the present paper highlights a further distinction between thriving and
16 flourishing. More specifically, although both constructs encompass subjective well-being
17 (i.e., an individual's evaluations of their affective states and psychological and social
18 functioning; Keyes & Waterman, 2003), thriving is distinct because it also encapsulates
19 performance (see, e.g., Sarkar & Fletcher, 2014). Additionally, it is noted that flourishing
20 focuses predominantly on psychosocial and emotional well-being (cf. Fredrickson, 2006;
21 Fredrickson & Losada, 2005), whereas thriving typically encapsulates both an individual's
22 mental health and his or her physical state (cf. Epel, McEwen, & Ickovics, 1998).

23 **Assessment of Thriving**

24 The aforementioned temporal and contextual variance in human thriving mean that
25 various potential indicators of development and success exist, and have been proposed within

1 the literature (see, Benson & Saito, 2001; Carver, 1998; Feeney & Collins, 2015; King et al.,
2 2005; Lerner et al., 2003; Sarkar & Fletcher, 2014; Scales, Benson, Leffert, & Blyth, 2000;
3 Spreitzer et al., 2005). In addition to monitoring the presence of these collections of
4 indicators, psychometric measures of thriving have been developed either through the
5 application of measures previously devised for other constructs (e.g., psychological well-
6 being, stress-related growth; see, Cohen, Cimboric, Armeli, & Hettler, 1998; Su et al., 2014)
7 or through the creation of domain and temporally specific measures (see, e.g., Benson &
8 Scales, 2009; Lerner, von Eye, Lerner, Lewin-Bizan, & Bowers, 2010; Porath, Spreitzer,
9 Gibson, & Garnett, 2012). To elaborate on the temporally specific measures, both Benson
10 and Scales (2009) and Lerner et al. (2010) proposed measures to assess thriving in
11 adolescents. These measures offer a comprehensive assessment of thriving within this age-
12 group; however, they are not readily applicable to, and nor are they validated with, the
13 broader population. In contrast, grounded in Spreitzer et al.'s (2005) suggestion that thriving
14 comprised the joint experience of vitality and learning, Porath et al. (2012) devised a measure
15 of thriving at work for application with all individuals. This measure has subsequently been
16 applied in work (see, e.g., Paterson, Luthans, & Jeung, 2014) and sport (see, e.g., Gucciardi,
17 Hanton, Gordon, Mallett, & Temby, 2015) contexts and has helped identify relationships
18 between thriving and other variables (e.g., mental toughness, task focus). However, when
19 considering the definition of thriving proposed in this paper, the dimensions of vitality and
20 learning are too narrow because they only encapsulate the development aspect of thriving (cf.
21 Spreitzer et al., 2005). Thus, a more systematic development of measures to assess thriving
22 is needed.

Influential Psychosocial Variables for Human Thriving

24 The construct of thriving has been examined throughout the human lifespan (i.e., from
25 infants to the elderly; see, e.g., Haynes, Cutler, Gray, & Kempe, 1984; Tremethick, 1997) and

1 across a variety of contexts and domains such as during adversity (e.g., O’Leary & Ickovics,
2 1995), and in health (e.g., Wright & Birks, 2000), the military (e.g., Jarrett, 2013), work (e.g.,
3 Sumsion, 2004), and youth development (e.g., Gestsdottir, Urban, Bowers, Lerner, & Lerner,
4 2011). Within these diverse scenarios, researchers have identified an abundance of
5 psychosocial variables that may facilitate thriving. These variables can be broadly separated
6 into two groups: personal enablers and contextual enablers (cf. Carver, 1998; Spreitzer et al.,
7 2005). Rather than providing an exhaustive list of all potential associations within these
8 categories, the following synthesis aims to provide readers with a brief, narrative review of
9 the enablers that have been identified in studies where thriving has been a target variable of
10 interest¹. Accordingly, this section defines both types of enablers, presents examples of each,
11 and discusses the evidence for their relationship with types of performance, well-being, and
12 ultimately thriving. Further, the potential processes through which enablers may facilitate
13 thriving are discussed.

14 **Personal Enablers**

15 Personal enablers are the attitudes, cognitions, and behaviors of an individual that
16 help him or her to thrive (cf. Park, 1998). Examples of personal enablers identified in the
17 thriving literature include, but are not limited to, a positive perspective (see, e.g., Sarkar &
18 Fletcher, 2014), religiosity and spirituality (see, e.g., Park, 1998), proactive personality (see,
19 e.g., Sumsion, 2004), motivation (see, e.g., Benson & Scales, 2009), knowledge and learning
20 (see, e.g., Niessen, Sonnentag, & Sach, 2012), psychological resilience (see, e.g., Gan, Xie,
21 Wang, Rodriguez, & Tang, 2013), and possessing social competencies (see, e.g., Tedeschi &
22 Calhoun, 1996).

¹ It is acknowledged that the conceptualizations of thriving used in the included studies are likely to vary contingent on the authors’ chosen interpretation (e.g., considering thriving analogous with stress-related growth or as a sense of vitality and learning), and caution is therefore needed when extending previously identified enablers to the prediction of thriving as it is defined in this paper.

1 **Positive perspective.** To elaborate on the role of a positive perspective as a personal
2 enabler, thriving researchers initially proposed that being optimistic, having high self-
3 efficacy, and being honest to one's values could enable individuals to thrive by maintaining
4 task engagement when coping with an adversity or stressor (see, e.g., Carver, 1998; Park,
5 1998). This suggestion has subsequently been supported through qualitative research
6 conducted with high achievers (Sarkar & Fletcher, 2014) and teachers (Sumsion, 2004), with
7 the latter identifying a positive moral purpose and philosophical stance as important for
8 sustaining personal and professional satisfaction, and thus increasing the likelihood of
9 thriving in the context of a staffing crisis. However, an optimistic and hopeful perspective is
10 not only applicable for thriving when faced with intense stressors. Under the broader rubric
11 of developmental assets (Benson, Leffert, Scales, & Blyth, 1998) and adolescent strengths
12 (Lerner, Lerner, & Benson, 2011), self-esteem, possessing positive views of one's personal
13 future, and having hopeful future expectations have been explored as potential enablers for
14 components of adolescent thriving (e.g., competence, success in school). Additionally,
15 within the context of thriving at work, Niessen, Sonnentag, and Sach (2012) have suggested
16 that optimism and self-efficacy are important variables for future research to consider.

17 **Religiosity and spirituality.** For some individuals, religiosity, spirituality, and faith
18 were considered enablers of thriving. For example, Park (1998) speculated that religious
19 coping may enable thriving and stress-related growth through one's relationship with God
20 and a religious social support network. In addition to the direct effect of religiosity on
21 development and success, religiosity can also act as a mediator on the relationship between
22 spirituality and thriving (Dowling et al., 2004). Through their work, Dowling et al. (2004;
23 see also, Dowling, Gestsdottir, Anderson, von Eye, & Lerner, 2003) found that spirituality,
24 believed to reflect an individual's value in moral and civic identities, was directly related to
25 thriving as a form of adolescent functioning, but also indirectly related through relationships

1 with religiosity (i.e., participation in the practices of a faith-based institution related to a
2 supernatural power).

3 **Proactive personality.** Another personal enabler previously linked with thriving is
4 an individual's proactive personality (see, e.g., Globerman, White, Mullings, & Davies, 2003;
5 Sarkar & Fletcher, 2014; Sumsion, 2004). For example, Sarkar and Fletcher (2014) noted
6 that thriving high achievers show a desire to actively seek out opportunities for challenge.
7 Furthermore, Sumsion (2004) found that teachers who engaged in purposeful career decision
8 making were more likely to thrive, and Globerman et al. (2003) identified that, by proactively
9 articulating one's values to the organization, social workers were more likely to thrive in a
10 hospital setting. Proactive personality has also been examined in the context of positive
11 youth development, where researchers have examined the impact of intentional self-
12 regulation on thriving (see, e.g., Gestsdottir et al., 2011). Grounded in the belief that
13 individuals play an active role in their development (Brandtstädter & Lerner, 1999),
14 Gestsdottir et al. (2011) proposed that adolescents adopt the self-regulatory processes of
15 selection (i.e., selecting appropriate goal content), optimization (i.e., seeking resources that
16 are compatible with personal values to pursue a goal), and compensation (i.e., avoiding or
17 minimizing losses when faced with a loss of goal-relevant means) to obtain the resources
18 from their environment that enable them to function optimally and thrive.

19 **Motivation.** Previous research has shown that thriving individuals are intrinsically
20 motivated and energized by their personal talents and interests (Benson & Scales, 2009). To
21 elaborate, an individual's core passions act as 'sparks' to fuel one's interest in growing
22 knowledge and/or skills, drive the creation of a nurturing environment and, ultimately, enable
23 thriving through the execution of actions that are mutually beneficial to the individual and his
24 or her society (Benson & Scales, 2009; see also, Scales, Benson, & Roehlkepartain, 2011).
25 High quality forms of motivation such as intrinsic motivation (i.e., engaging in an activity

1 because the behavior is inherently rewarding) may also arise and result in high-level
2 performance and well-being when a task is perceived as being meaningful (i.e., has purpose
3 and significance; Hackman & Oldham, 1980). To elaborate, Spreitzer et al. (2005)
4 speculated that when an individual experienced positive meaning in their work, he or she
5 would be more likely to engage in agentic (i.e., autonomous) behaviors that could ultimately
6 lead to thriving. In support of this assertion, Niessen et al. (2012) found that employees who
7 experienced positive meaning at work in the morning, showed signs of thriving (i.e., felt
8 more vital, had a higher sense of learning) at the end of the working day.

9 **Knowledge and learning.** An individual's personal motivation is important for
10 establishing his or her commitment to learning, and this desire to learn is relevant to thriving
11 in all populations. For example, being motivated to learn is a key internal asset for
12 adolescents, whose academic performance is often considered a marker of thriving (see, e.g.,
13 Lerner et al., 2005; Scales et al., 2000; Smith & Barker, 2009). In relation to adults, learning
14 and possessing knowledge is important for thriving at work. Indeed, within the work
15 literature, studies have highlighted that to thrive in their roles, employees should stay current
16 and remain aware of recent developments in their field (Globerman et al., 2003), be
17 knowledgeable (Niessen et al., 2012; Spreitzer et al., 2005), and possess psychological capital
18 (Paterson et al., 2014). In addition to academic and vocational contexts, researchers have
19 also found that under hardship, experience and learning (Sarkar & Fletcher, 2014) and
20 excellence, wisdom, and creativity (Bradshaw, Richardson, & Kulkarni, 2007) are personal
21 enablers that support development and success.

22 **Psychological resilience.** Possessing resilient qualities (e.g., flexibility and
23 adaptability), or displaying resilience more generally, has frequently been advocated for
24 thriving following an adversity or when experiencing strain (Beltman, Mansfield, & Price,
25 2011; Bradshaw et al., 2007; Gan et al., 2013; Jackson, Firtko, & Edenborough, 2007; Jarrett,

1 2013; Sarkar & Fletcher, 2014). To provide some examples, resilience was identified as
2 important for thriving, assessed through positive future expectations and effective adjustment,
3 in survivors of the 2008 Sichuan earthquake (Gan et al., 2013), and for combat soldiers
4 exposed to sudden trauma (e.g., loss of a fellow soldier, perpetrating harm on others) and
5 experiencing intense, unrelenting stressors (e.g., fatigue, prolonged separation from family;
6 Jarrett, 2013). Similarly, within the vocational literature, Jackson et al. (2007) found that
7 nurses who developed personal resilience were able to withstand workplace adversity (e.g.,
8 excessive workloads) and thrive (i.e., report higher levels of job satisfaction). Further,
9 Beltman et al. (2011) noted that resilient protective factors (e.g., altruistic motives) assisted
10 teachers to stay in their roles and to subsequently thrive, rather than just survive.

11 **Social competencies.** Across scenarios where an individual may thrive, it may be the
12 case that his or her response will be affected by social agents present (e.g., family, friends,
13 colleagues) and the perceived support available in that environment (Feeney & Collins,
14 2015). Interpersonal exchanges with parents, for example, may provide a young student with
15 reassurance when preparing for a challenging examination. To access and benefit from these
16 social exchanges, an individual will likely draw on personal enablers to enhance his or her
17 ability to form an interpersonal bond and sustain a lasting connection. For example, social
18 competencies such as peaceful conflict resolution and interpersonal/cultural competence
19 enable an individual to retain his or her personal and environmental resources and employ
20 them in an attempt to thrive (Benson et al., 1998).

21 **Contextual Enablers**

22 Contextual enablers are the characteristics of an environment which can foster
23 continued task engagement and subsequent thriving (Carver, 1998). Some of these enablers
24 apply across the majority of contexts (e.g., the opportunity for challenge), whereas others are
25 more context specific (e.g., employer support). Examples of contextual enablers identified in

1 the thriving literature include, but are not limited to, a challenge environment (see, e.g.,
2 O’Leary & Ickovics, 1995), attachment and trust (see, e.g., Carmeli & Spreitzer, 2009),
3 family support (see, e.g., Weine et al., 2013), and colleague/employer support (see, e.g.,
4 Paterson et al., 2014).

5 **Challenge environment.** Research suggests that situations that provide an
6 appropriate balance of challenge and difficulty can evoke task engagement and facilitate
7 thriving (Carver, 1988; O’Leary & Ickovics, 1995). Examples of appropriate scenarios
8 include those that offer learning and career opportunities (Bakker et al., 2010), a high
9 promotion focus (Wallace, Butts, Johnson, Stevens, & Smith, 2013), and set boundaries and
10 expectations (Benson et al., 1998). If a situation contains a high-level of hindrance stressors
11 (i.e., those which thwart growth) and is perceived as having too much difficulty, this will
12 result in a threat appraisal and, whilst still potentially evoking task engagement, undermine
13 thriving (Carver, 1998; Flinchbaugh, Luth, & Li, 2015). Examples of situations that may be
14 perceived as threatening include those which have a high level of turbulence and volatility as
15 these reduce employees’ perceptions of autonomy, competence, and relatedness, thus
16 ultimately precluding feelings of development and success (cf. Spreitzer & Porath, 2014).

17 **Attachment and trust.** Interpersonal relationships can act as resources to permit the
18 exploration of a challenging situation and the instigation of agentic behaviors which, in either
19 case, can increase the likelihood of an individual thriving (Carver, 1998; Feeney & Collins,
20 2015; Spreitzer et al., 2005). Common factors that provide stable foundations for these
21 interpersonal bonds and subsequent thriving are attachment and trust (Bowlby, 1969, Carver,
22 1998). For example, relationships established with a high security of attachment and
23 acceptance from significant others can act as secure bases and safe havens for exploration.
24 Trust implies a willingness to place personal vulnerability in the hands of another party on
25 the belief that their future actions will be mutually beneficial (Robinson, 1996). In relation to

1 thriving, Carmeli and Spreitzer (2009) found that trust in an employee-employer relationship
2 was pertinent to an employee reporting high-levels of learning and vitality in his or her role.
3 Interpersonal relationships built on secure attachment, acceptance, and trust can act as
4 contextual enablers for thriving across the entire human lifespan (see, e.g., Haynes et al.,
5 1984; Tremethick, 1997); however, it is likely that the significant partner in these
6 relationships may change (e.g., parents, friends, colleagues, romantic partners, children).

7 **Family support.** The impact that parents could have on thriving first became clear in
8 medical research investigating the failure-to-thrive syndrome (FTT) in newborn babies and
9 infants (see, e.g., Bullard, Glaser, Heagarty, & Pivchik, 1967; Haynes et al., 1984). This
10 developmental syndrome is characterized by signs of growth failure, severe malnutrition, and
11 variable degrees of impaired development; and can result from organic (e.g., illness) or
12 nonorganic (e.g., parental) causes (see, for a review, Elice & Fields, 1990). To elaborate on
13 the nonorganic causes, Bullard et al. (1967) found evidence of parental neglect and maternal
14 deprivation across 50 cases of infants who were experiencing FTT. Additionally, Haynes et
15 al. (1984) identified differences in mother-child interactions between thriving and FTT
16 groups. Although recent research has challenged the role of parental factors in FTT (see, e.g.,
17 Emond, Drewett, Blair, & Emmett, 2007; Wright & Birks, 2000), it is apparent that the
18 quality of parental care and the nature of interactions between the parent and child are
19 important for an infant's positive growth and development (see, e.g., Connell & Prinz, 2002;
20 Poehlmann & Fiese, 2001). This parental role also appears to extend to enabling thriving in
21 adolescents, where parents may provide guidance in relation to an adolescent's schooling
22 (see, e.g., Theokas et al., 2005) and financial support for the child to access facilitative
23 opportunities and resources (see, e.g., Weine et al., 2013). More recent investigations have
24 broadened extant research on family support to include the role of spouses in promoting
25 thriving (see, Sarkar & Fletcher, 2014; Tomlinson, Feeney, & Van Vleet, 2016). Within

1 these studies, partners were suggested to alleviate strain caused by time-related work
2 pressures (Sarkar & Fletcher, 2014) and that their support acted as a relational catalyst for
3 thriving through the support of goal-strivings (Tomlinson et al., 2016).

4 **Colleague and employer support.** On reaching adulthood and becoming employed,
5 the social agents impacting on an individual's experience of development and success are
6 likely to change from parents towards colleagues and employers (cf. Erikson, 1959;
7 Levinson, 1986). Working among a group of colleagues can provide an individual with a
8 source of support and guidance for completing daily tasks and overcoming challenges. For
9 example, an open environment that encourages broad information sharing between colleagues
10 enables individuals to obtain necessary knowledge for completing novel tasks (Spreitzer &
11 Porath, 2014) and an opportunity to air grievances (Sarkar & Fletcher, 2014). Furthermore, if
12 an employee receives recognition from colleagues about their professional expertise or feels a
13 valued part of the team, this can instill confidence and a sense of relatedness (Liu & Bern-
14 Klug, 2013; Sumsion, 2004). Most recently, research has suggested that dyadic relationships
15 between employees can become resilient to within-dyad adversity and that this resilience can,
16 ultimately, help promote dyadic thriving over time (Thompson & Ravlin, 2016). These
17 environmental and interpersonal features can, therefore, lead to colleagues acting as
18 contextual enablers for enhanced performance and well-being.

19 Turning from colleagues to employers, Paterson et al. (2014) found a significant
20 relationship between employees' perceptions of a supervisor supportive climate, their desire
21 to work in collaboration with others, and thriving. Specifically, it was suggested that a
22 supportive supervisor engenders agentic behaviors because employees will not be afraid to
23 take risks under the belief that they will be supported, and that these behaviors result in
24 elevated learning and vitality (see also, Kahn, 1990). In addition to agentic behaviors, a
25 supportive climate may also create various other enablers of thriving (e.g., job autonomy,

1 decision-making discretion, perceived professional freedom and agency; see, e.g., Bakker et
2 al., 2010; Liu & Bern-Klug, 2013; Spreitzer & Porath, 2014; Spreitzer et al., 2005; Sumsion,
3 2004; Wallace et al., 2013). Employers can further support employee development and
4 success through the provision of performance feedback (Spreitzer & Porath, 2014). To
5 elaborate, it is suggested that feedback provides employees with informational guidance
6 about their job performance, which is likely to facilitate their perception of competence and,
7 in turn, enable thriving (Spreitzer & Porath, 2014).

8 **Potential Processes**

9 Researchers have tended to focus on two processes through which enablers may
10 facilitate thriving: the satisfaction of basic psychological needs and the manifestation of a
11 challenge appraisal. Grounded within self-determination theory (Deci & Ryan, 1985; Ryan
12 & Deci, 2000), it is proposed that humans have three basic psychological needs (i.e., for
13 autonomy, competence, and relatedness) and experiencing satisfaction of these needs has
14 been forwarded as a prerequisite for thriving (cf. Deci & Ryan, 2000; Sheldon, 2009).
15 Indeed, in support for this assertion, extant research has found a relationship between needs
16 satisfaction and thriving outcomes across a range of domains, including education (see, e.g.,
17 Sheldon & Krieger, 2007), the performing arts (see, e.g., Quested & Duda, 2010), sport (see,
18 e.g., Reinboth, Duda, & Ntoumanis, 2004), and work (see, for a review, Spreitzer & Porath,
19 2014). Building from the conceptual standpoint of needs acting as the proximal determinants
20 of thriving, researchers have examined how personal (e.g., perceiving positive meaning in
21 work) and contextual (e.g., supportive work) enablers can influence an individual's
22 perceptions of needs satisfaction and subsequent thriving (see, e.g., Spreitzer & Porath,
23 2014).

24 An alternative or additional mechanism linking personal and contextual enablers to
25 thriving is the elicitation of a challenge appraisal (see, e.g., O'Leary & Ickovics, 1995).

1 According to Lazarus and Folkman's (1984) transactional model of stress, upon experiencing
2 a potential stressor humans make a judgement about whether the encounter is irrelevant,
3 benign-positive, or stressful (i.e., expectations of harm/loss, threat, or challenge). Harm/loss
4 appraisals are made when damage has already been sustained, whereas threat and challenge
5 appraisals are made in the expectation of future harm/loss or the potential for gain or growth,
6 respectively (Lazarus & Folkman, 1984). Challenge appraisals thus encourage task
7 engagement and create opportunities for positive change, and it is for these reasons that it has
8 previously been associated with thriving (see, Carver, 1998, O'Leary & Ickovics, 1995).
9 Furthermore, influencing the type of stress appraisal made by an individual is a range of
10 personal (e.g., beliefs) and situational (e.g., predictability) factors (Lazarus & Folkman,
11 1984), which may relate to the personal and contextual enablers presented for thriving. For
12 example, the personal enabler of proactive personality could influence a personal belief of
13 control over a situation, which can increase the likelihood of making a challenge appraisal,
14 engaging in a scenario, and potential thriving.

15 **Future Directions for Research and Practice**

16 It is apparent from the literature reviewed in this paper that thriving is of interest to a
17 wide array of researchers and practitioners operating in diverse domains and contexts.
18 However, to continue to advance knowledge and understanding of human thriving, various
19 lines of research inquiry need to be conducted, and in a more coherent manner. The first
20 challenge faced by human thriving researchers is to reach a consensus about what is meant by
21 the construct. As explained in the first section of this paper, the temporal and contextual
22 diversity in how thriving has been examined has resulted in a lack of consensus about the
23 definition of the construct and the key processes that underpin it. In an attempt to address
24 this issue, a definition of human thriving was presented that was conceived to be temporally
25 and contextually robust. Specifically, human thriving was defined as *the joint experience of*

1 *development and success*, which can be realized through effective holistic functioning and
2 observed through the experience of a high-level of well-being and a perceived high-level of
3 performance. Future research should examine the applicability and utility of this
4 conceptualization in various settings, and refine it if appropriate. Furthermore, having agreed
5 on a definition, the systematic development of valid and reliable measurement tools is
6 required.

7 Turning from the definition to the processes underpinning thriving, it is suggested that
8 researchers establish whether the enablers identified in the extant thriving literature support
9 both development and success. In addition, it is recommended that scholars extend the
10 contexts in which they examine personal and contextual enablers. For instance, although
11 considerable attention has been paid to contextual enablers of thriving at work (see, for a
12 review, Spreitzer & Porath, 2014), there are limited specific investigations of thriving or its
13 enablers in other areas (e.g., military, sport, the performing arts). Future research is also
14 needed to examine and clarify the mechanisms that underpin the relationships between
15 personal and contextual enablers and thriving. For example, although some human thriving
16 researchers have proposed the role of agentic or autonomous behaviors in mediating the
17 relationship between enablers and thriving (see, e.g., Spreitzer et al., 2005), others have
18 espoused the role of challenge appraisals (see, e.g., O'Leary & Ickovics, 1995) and, thus, it
19 may be beneficial for future work to examine whether these mechanisms work in isolation or
20 are integrated. A further line of future research inquiry is the study of the lasting, and
21 potentially cumulative, effect(s) of thriving on an individual (cf. Benson & Scales, 2009;
22 Sarkar & Fletcher, 2014). Although the developmental consequences of early life FTT (see,
23 e.g., Corbett & Drewett, 2004) and the effect of positive youth development (thriving) on
24 future contribution and risk behaviors (see, e.g., Jelicic, Bobek, Phelps, Lerner, & Lerner,
25 2007) have already been longitudinally tracked in youth populations, sparse research exists

1 on the lasting effect of thriving in adult samples. To illustrate, little is currently known about
2 whether (and how) thriving in response to one situation (e.g., salesperson closing a deal)
3 significantly affects responses to future scenarios (e.g., future sales pitches); nor is there any
4 evidence on the impact of thriving in one area of life (e.g., sport) on other areas (e.g.,
5 academic attainment).

6 Establishing a robust understanding of human thriving and underpinning processes
7 also has implications for professional practice. To elaborate, the identification of situation
8 salient enablers will assist practitioners in designing and delivering targeted, evidence-based
9 interventions that facilitate the experience of development and success. One example of an
10 existing intervention that aims to facilitate thriving is the Warrior Resilience and Thriving
11 program (WRT; Jarrett, 2013) implemented by the U.S. Army. Specifically, the program
12 teaches soldiers strategies to enhance personal and contextual enablers such as resilience,
13 emotional control, and critical thinking. Treatment programs such as the WRT have
14 traditionally been developed using the framework of post-traumatic growth and, therefore,
15 focus on thriving following extreme adversities. In addition to refining and trialing such
16 interventions in other settings, there is also a need to develop interventions that are
17 appropriate for thriving in non-traumatic situations and for responding to daily stressors.
18 When designing such interventions, practitioners may draw lessons from the appraisal
19 literature to increase an individual's awareness and accuracy when interpreting situational
20 demands and resources (e.g., Lazarus & Folkman, 1984). Furthermore, by considering the
21 enabler literature presented and discussed in this paper (e.g., Lerner et al., 2011; Spreitzer &
22 Porath, 2014), psychologists can develop personal enablers with the individual (see, e.g.,
23 Melnyk, Kelly, Jacobson, Arcoleo, & Shaibi, 2014) and optimize contextual enablers in the
24 surrounding environment (see, e.g., Spreitzer, Porath, & Gibson, 2012) to facilitate
25 individuals' experiences of development and success. Finally, once a greater understanding

1 of the cumulative effect of thriving is established, practitioners might construct strategies to
2 assist individuals in repeating their thriving response in future scenarios.

3 **Conclusion**

4 As anticipated by Seligman and Csikszentmihalyi (2000b), there has been a
5 burgeoning of academic inquiry on the psychology of positive human functioning since the
6 turn of the century. This review, however, has highlighted that much of this human
7 functioning literature has been divergent and a lack of consensus exists on the definition and
8 conceptualization of the main target outcome, human thriving. In recognition of this, we
9 have discussed existing theoretical and conceptual debates, reviewed extant literature
10 examining enablers of thriving, and made recommendations for future investigations on this
11 topic. Furthermore, a conceptualization of human thriving is presented, whereby thriving is
12 defined as *the joint experience of development and success*, which can be realized through
13 effective holistic functioning and observed through the experience of a high-level of well-
14 being and a perceived high-level of performance. Overall, it is hoped that this
15 conceptualization will provide readers with some clarity on the construct of thriving and that
16 the identification of salient psychosocial variables will stimulate further scientific inquiry to
17 support the development of effective psychosocial interventions for thriving.

References

- 1
2 Bakker, A. B., van Veldhoven, M., & Xanthopoulou, D. (2010). Beyond the demand-control
3 model: Thriving on high job demands and resources. *Journal of Personnel*
4 *Psychology, 9*, 3-16. doi:10.1027/1866-5888/A000006
- 5 Beltman, S., Mansfield, C., & Price, A. (2011). Thriving not just surviving: A review of
6 research on teacher resilience. *Educational Research Review, 6*, 185-207.
7 doi:10.1016/j.edurev.2011.09.001
- 8 Benson, P. L., Leffert, N., Scales, P. C., & Blyth, D. A. (1998). Beyond the "village" rhetoric:
9 Creating healthy communities for children and adolescents. *Applied Developmental*
10 *Science, 2*, 138-159. doi:10.1207/s1532480xads0203_3
- 11 Benson, P. L., & Saito, R. (2001). The scientific foundation of youth development. In N.
12 Jaffe (Ed.), *Youth development: Issues, challenges, and directions* (pp. 125-148).
13 Philadelphia, PA: Public/Private Ventures.
- 14 Benson, P. L., & Scales, P. C. (2009). The definition and preliminary measurement of
15 thriving in adolescence. *The Journal of Positive Psychology, 4*, 85-104.
16 doi:10.1080/17439760802399240
- 17 Boddy, J. M., & Skuse, D. H. (1994). The process of parenting in failure to thrive. *Child*
18 *Psychology & Psychiatry & Allied Disciplines, 35*, 401-424. doi:10.1111/j.1469-
19 7610.1994.tb01731.x
- 20 Bonanno, G. A. (2004). Loss, trauma, and human resilience: Have we underestimated the
21 human capacity to thrive after extremely adverse events? *American Psychologist, 59*,
22 20-28. doi:10.1037/0003-066X.59.1.20
- 23 Bradshaw, B. G., Richardson, G. E., & Kulkarni, K. (2007). Thriving with diabetes: An
24 introduction to the resiliency approach for diabetes educators. *Diabetes Educator, 33*,
25 643-649. doi:10.1177/0145721707303808

- 1 Brandtstädter, J., & Lerner, R. M. (Eds.). (1999). *Action and self-development: Theory and*
2 *research through the life-span*. Thousand Oaks, CA: Sage.
- 3 Bullard, D. M., Glaser, H. H., Heagarty, M. C., & Pivchik, E. (1967). Failure to thrive in the
4 "neglected" child. *American Journal of Orthopsychiatry*, *37*, 680-690.
5 doi:10.1111/j.1939-0025.1967.tb00509.x
- 6 Bundick, M. J., Yeager, D. S., King, P. E., & Damon, W. (2010). Thriving across the life
7 span. In R. M. Lerner, M. E. Lamb, & A. M. Freund (Eds.), *The handbook of life-span*
8 *development* (pp. 882-923). Hoboken, NJ: John Wiley & Sons, Inc.
- 9 Carmeli, A., & Spreitzer, G. M. (2009). Trust, connectivity, and thriving: Implications for
10 innovative behaviors at work. *Journal of Creative Behavior*, *43*, 169-191.
11 doi:10.1002/j.2162-6057.2009.tb01313.x
- 12 Carver, C. S. (1998). Resilience and thriving: Issues, models, and linkages. *Journal of Social*
13 *Issues*, *54*, 245-266. doi:10.1111/0022-4537.641998064
- 14 Casey, P. H. (1987). Failure to thrive: Transactional perspective. *Journal of Developmental*
15 *and Behavioral Pediatrics*, *8*, 37-38.
- 16 Cohen, L. H., Cimboic, K., Armeli, S. R., & Hettler, T. R. (1998). Quantitative assessment
17 of thriving. *Journal of Social Issues*, *54*, 323-335. doi:10.1111/0022-4537.681998068
- 18 Connell, C. M., & Prinz, R. J. (2002). The impact of childcare and parent-care interactions on
19 school readiness and social skills development for low-income African-American
20 children. *Journal of School Psychology*, *40*, 177-193. doi:10.1016/S0022-
21 4405(02)00090-0
- 22 Corbett, S. S., & Drewett, R. F. (2004). To what extent is failure to thrive in infancy
23 associated with poorer cognitive development? A review and meta-analysis. *Journal*
24 *of Child Psychology and Psychiatry*, *45*, 641-654. doi:10.1111/j.1469-
25 7610.2004.00253.x

- 1 Cui, Y. (2007). Striving and thriving: Women in Chinese national sport organizations.
2 *International Journal of the History of Sport*, 24, 392-410.
3 doi:10.1080/09523360601101378
- 4 Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human*
5 *behavior*. New York, NY: Plenum.
- 6 Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and
7 the self-determination of behavior. *Psychological Inquiry*, 11, 227-268.
8 doi:10.1207/S15327965PLI1104_01
- 9 Donaldson, S. I., Dollwet, M., & Rao, M. A. (2015). Happiness, excellence, and optimal
10 human functioning revisited: Examining the peer-reviewed literature linked to
11 positive psychology. *The Journal of Positive Psychology*, 10, 185-195.
12 doi:10.1080/17439760.2014.943801
- 13 Dowling, E. M., Gestsdottir, S., Anderson, P. M., von Eye, A., Almerigi, J., & Lerner, R. M.
14 (2004). Structural relations among spirituality, religiosity, and thriving in
15 adolescence. *Applied Developmental Science*, 8, 7-16.
16 doi:10.1207/S1532480XADS0801_2
- 17 Dowling, E. M., Gestsdottir, S., Anderson, P. M., von Eye, A., & Lerner, R. M. (2003).
18 Spirituality, religiosity, and thriving among adolescents: Identification and
19 confirmation of factor structures. *Applied Developmental Science*, 7, 253-260.
20 doi:10.1207/S1532480XADS0704_4
- 21 Elice, C. E., & Fields, H. W. (1990). Failure to thrive: Review of the literature, case report
22 and implications for dental treatment. *Pediatric Dentistry*, 12, 185-189.
- 23 Emond, A., Drewett, R., Blair, P., & Emmett, P. (2007). Postnatal factors associated with
24 failure to thrive in term infants in the Avon Longitudinal Study of Parents and
25 Children. *Archives of Disease in Childhood*, 92, 115-119.

- 1 doi:10.1136/adc.2005.091496
- 2 Epel, E. S., McEwen, B. S., & Ickovics, J. R. (1998). Embodying psychological thriving:
3 Physical thriving in response to stress. *Journal of Social Issues, 54*, 301-322.
4 doi:10.1111/0022-4537.671998067
- 5 Erikson, E. H. (1959). *Identity and the life cycle*. New York, NY: International Universities
6 Press.
- 7 Feeney, B. C., & Collins, N. L. (2015). A new look at social support: A theoretical
8 perspective on thriving through relationships. *Personality and Social Psychology*
9 *Review, 19*, 113-147. doi:10.1177/1088868314544222
- 10 Flinchbaugh, C., Luth, M. T., & Li, P. (2015). A challenge or a hindrance? Understanding the
11 effects of stressors and thriving on life satisfaction. *International Journal of Stress*
12 *Management, 22*, 323-345. doi:10.1037/a0039136
- 13 Fredrickson, B. L. (2006). Unpacking positive emotions: Investigating the seeds of human
14 flourishing. *The Journal of Positive Psychology, 1*, 57-59.
15 doi:10.1080/17439760500510981
- 16 Fredrickson, B. L., & Losada, M. F. (2005). Positive affect and the complex dynamics of
17 human flourishing. *American Psychologist, 60*, 678-686. doi:10.1037/0003-
18 066x.60.7.678
- 19 Gan, Y. Q., Xie, X. F., Wang, T., Rodriguez, M. A., & Tang, C. S. (2013). Thriving in the
20 shadow of the 2008 Sichuan Earthquake: Two studies on resilience in adolescents.
21 *Journal of Health Psychology, 18*, 1232-1241. doi:10.1177/1359105312459897
- 22 Gestsdottir, S., Urban, J. B., Bowers, E. P., Lerner, J. V., & Lerner, R. M. (2011). Intentional
23 self-regulation, ecological assets, and thriving in adolescence: A developmental
24 systems model. *New Directions for Child and Adolescent Development, 133*, 61-76.
25 doi:10.1002/cd.304

- 1 Globerman, J., White, J. J., Mullings, D., & Davies, J. M. (2003). Thriving in program
2 management environments: The case of social work in hospitals. *Social Work in*
3 *Health Care*, 38, 1-18. doi:10.1300/J010v38n01_01
- 4 Gucciardi, D. F., Hanton, S., Gordon, S., Mallett, C. J., & Temby, P. (2015). The concept of
5 mental toughness: Tests of dimensionality, nomological network, and traitness.
6 *Journal of Personality*, 83, 26-44. doi:10.1111/jopy.12079
- 7 Hackman, J. R., & Oldham, G. (1980). *Work redesign*. Reading, MA: Addison-Wesley.
- 8 Haynes, C. F., Cutler, C., Gray, J., & Kempe, R. S. (1984). Hospitalized cases of nonorganic
9 failure to thrive: The scope of the problem and short-term lay health visitor
10 intervention. *Child Abuse & Neglect*, 8, 229-242. doi:10.1016/0145-2134(84)90012-7
- 11 Jackson, D., Firtko, A., & Edenborough, M. (2007). Personal resilience as a strategy for
12 surviving and thriving in the face of workplace adversity: A literature review. *Journal*
13 *of Advanced Nursing*, 60, 1-9. doi:10.1111/j.1365-2648.2007.04412.x
- 14 Jackson, D., McDonald, G., & Wilkes, L. (2011). Thriving in the workplace: Learning from
15 innovative practices. In M. McAllister & J. B. Lowe (Eds.), *The resilient nurse:*
16 *Empowering your practice* (pp. 105-114). New York, NY: Springer Publishing
17 Company.
- 18 Jarrett, T. (2013). Warrior resilience and thriving (WRT): Rational emotive behavior therapy
19 (REBT) as a resiliency and thriving foundation to prepare warriors and their families
20 for combat deployment and posttraumatic growth in Operation Iraqi Freedom, 2005–
21 2009. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 31, 93-107.
22 doi:10.1007/s10942-013-0163-2
- 23 Jellicic, H., Bobek, D. L., Phelps, E., Lerner, R. M., & Lerner, J. V. (2007). Using positive
24 youth development to predict contribution and risk behaviors in early adolescence:
25 Findings from the first two waves of the 4-H study of positive youth development.

- 1 *International Journal of Behavioral Development*, 31, 263-273.
- 2 doi:10.1177/0165025407076439
- 3 Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at
4 work. *Academy of Management Journal*, 33, 692-724. doi:10.2307/256287
- 5 Kaplan, A. (1964). *The conduct of inquiry*. San Francisco, CA: Chandler Publishing
6 Company.
- 7 Keyes, C. L. M. (1998). Social well being. *Social Psychology Quarterly*, 61, 121-140.
8 doi:10.2307/2787065
- 9 Keyes, C. L. M. (2002). The mental health continuum: From languishing to flourishing in
10 life. *Journal of Health and Social Behavior*, 43, 207-222. doi:10.2307/3090197
- 11 Keyes, C. L. M. (2003). Complete mental health: An agenda for the 21st century. In J. Haidt
12 (Ed.), *Flourishing* (pp. 293-312). Washington, DC: American Psychological
13 Association.
- 14 Keyes, C. L. M. (2007). Promoting and protecting mental health as flourishing: A
15 complementary strategy for improving national mental health. *American Psychologist*,
16 62, 95-108. doi:10.1037/0003-066X.62.2.95
- 17 Keyes, C. L. M., & Waterman, M. B. (2003). Dimensions of well-being and mental health in
18 adulthood. In M. H. Bornstein, L. Davidson, C. L. M. Keyes, & K. A. Moore (Eds.),
19 *Well-being: Positive development across the life course* (pp. 477-497). Mahwah, NJ:
20 Lawrence Erlbaum Associates.
- 21 King, P. E., Dowling, E. M., Mueller, R. A., White, K., Schultz, W., Osborn, P., . . . Scales,
22 P. C. (2005). Thriving in adolescence: The voices of youth-serving practitioners,
23 parents, and early and late adolescents. *Journal of Early Adolescence*, 25, 94-112.
24 doi:10.1177/0272431604272459
- 25 Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY:

- 1 Springer Publishing Company.
- 2 Lerner, R. M. (2004). *Liberty: Thriving and civic engagement among America's youth*.
3 Thousand Oaks, CA: Sage Publications.
- 4 Lerner, R. M., Dowling, E. M., & Anderson, P. M. (2003). Positive youth development:
5 Thriving as a basis of personhood and civil society. *Applied Developmental Science*,
6 7, 172-180. doi:10.1207/S1532480XADS0703_8
- 7 Lerner, R. M., Lerner, J. V., Almerigi, J. B., Theokas, C., Phelps, E., Gestsdottir, S., . . . von
8 Eye, A. (2005). Positive youth development, participation in community youth
9 development programs, and community contributions of fifth-grade adolescents:
10 Findings from the first wave of the 4-H study of positive youth development. *Journal*
11 *of Early Adolescence*, 25, 17-71. doi:10.1177/0272431604272461
- 12 Lerner, R. M., Lerner, J. V., & Benson, J. B. (2011). Positive youth development: Research
13 and applications for promoting thriving in adolescence. *Advances in Child*
14 *Development and Behavior*, 41, 1-17. doi:10.1016/B978-0-12-386492-5.00001-4
- 15 Lerner, R. M., von Eye, A., Lerner, J. V., Lewin-Bizan, S., & Bowers, E. P. (2010). The
16 meaning and measurement of thriving: A view of the issues. *Journal of Youth and*
17 *Adolescence*, 39, 707-719. doi:10.1007/s10964-010-9531-8
- 18 Levinson, D. J. (1986). A conception of adult development. *American Psychologist*, 41, 3-13.
19 doi:10.1037/0003-066X.41.1.3
- 20 Liu, J., & Bern-Klug, M. (2013). Nursing home social services directors who report thriving
21 at work. *Journal of Gerontological Social Work*, 56, 127-145.
22 doi:10.1080/01634372.2012.750255
- 23 Maslow, A. H. (1965). Some basic propositions of a growth and self-actualization
24 psychology. In G. Lindzey & L. Hall (Eds.), *Theories of personality: Primary sources*
25 *and research* (pp. 307-316). New York, NY: Wiley.

- 1 Melnyk, B., Kelly, S., Jacobson, D., Arcoletto, K., & Shaibi, G. (2014). Improving physical
2 activity, mental health outcomes, and academic retention in college students with
3 Freshman 5 to thrive: COPE/Healthy lifestyles. *Journal of the American Association
4 of Nurse Practitioners*, 26, 314-322. doi:10.1002/2327-6924.12037
- 5 Niessen, C., Sonnentag, S., & Sach, F. (2012). Thriving at work—A diary study. *Journal of
6 Organizational Behavior*, 33, 468-487. doi:10.1002/Job.763
- 7 O'Leary, V. E., & Ickovics, J. R. (1995). Resilience and thriving in response to challenge: An
8 opportunity for a paradigm shift in women's health. *Women's Health*, 1, 121-142.
- 9 Park, C. L. (1998). Stress-related growth and thriving through coping: The roles of
10 personality and cognitive processes. *Journal of Social Issues*, 54, 267-277.
11 doi:10.1111/0022-4537.651998065
- 12 Park, C. L., Cohen, L. H., & Murch, R. (1996). Assessment and prediction of stress-related
13 growth. *Journal of Personality*, 64, 71-105. doi:10.1111/j.1467-6494.1996.tb00815.x
- 14 Paterson, T. A., Luthans, F., & Jeung, W. (2014). Thriving at work: Impact of psychological
15 capital and supervisor support. *Journal of Organizational Behavior*, 35, 434-446.
16 doi:10.1002/job.1907
- 17 Poehlmann, J., & Fiese, B. H. (2001). Parent-infant interaction as a mediator of the
18 relationship between neonatal risk status and 12-month cognitive development. *Infant
19 Behavior and Development*, 24, 171-188. doi:10.1016/S0163-6383(01)00073-X
- 20 Porath, C., Spreitzer, G., Gibson, C., & Garnett, F. G. (2012). Thriving at work: Toward its
21 measurement, construct validation, and theoretical refinement. *Journal of
22 Organizational Behavior*, 33, 250-275. doi:10.1002/Job.756
- 23 Quested, E., & Duda, J. L. (2010). Exploring the social-environmental determinants of well-
24 and ill-being in dancers: A test of basic needs theory. *Journal of Sport & Exercise
25 Psychology*, 32, 39-60.

- 1 Reinboth, M., Duda, J. L., & Ntoumanis, N. (2004). Dimensions of coaching behavior, need
2 satisfaction, and the psychological and physical welfare of young athletes. *Motivation
3 and Emotion*, 28, 297-313. doi:10.1023/B:MOEM.0000040156.81924.b8
- 4 Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative
5 Science Quarterly*, 41, 574-599. doi:10.2307/2393868
- 6 Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic
7 motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
8 doi:10.1037/0003-066X.55.1.68
- 9 Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research
10 on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166.
11 doi:10.1146/annurev.psych.52.1.141
- 12 Ryan, R. M., & Deci, E. L. (2002). An overview of self-determination theory: An
13 organismic-dialectical perspective. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of
14 self-determination research* (pp. 3-33). Rochester, NY: University of Rochester Press.
- 15 Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of
16 psychological well-being. *Journal of Personality and Social Psychology*, 57, 1069-
17 1081. doi:10.1037/0022-3514.57.6.1069
- 18 Sarkar, M., & Fletcher, D. (2014). Ordinary magic, extraordinary performance: Psychological
19 resilience and thriving in high achievers. *Sport, Exercise, and Performance
20 Psychology*, 3, 46-60. doi:10.1037/spy0000003
- 21 Scales, P. C., Benson, P. L., Leffert, N., & Blyth, D. A. (2000). Contribution of
22 developmental assets to the prediction of thriving among adolescents. *Applied
23 Developmental Science*, 4, 27-46. doi:10.1207/S1532480XADS0401_3
- 24 Scales, P. C., Benson, P. L., & Roehlkepartain, E. C. (2011). Adolescent thriving: The role of
25 sparks, relationships, and empowerment. *Journal of Youth and Adolescence*, 40, 263-

- 1 277. doi:10.1007/s10964-010-9578-6
- 2 Scheier, M. E., & Carver, C. S. (1987). Dispositional optimism and physical well-being: The
3 influence of generalized outcome expectancies on health. *Journal of Personality*, *55*,
4 169-210. doi:10.1111/j.1467-6494.1987.tb00434.x
- 5 Seligman, M. E. P., & Csikszentmihalyi, M. (Eds.). (2000a). Positive psychology [Special
6 issue]. *American Psychologist*, *55*(1).
- 7 Seligman, M. E. P., & Csikszentmihalyi, M. (2000b). Positive psychology: An introduction.
8 *American Psychologist*, *55*, 5-14. doi:10.1037/0003-066x.56.1.89
- 9 Sheldon, K. M. (2009). Providing the scientific backbone for positive psychology: A multi-
10 level conception of human thriving. *Psychological Topics*, *18*, 267-284.
- 11 Sheldon, K. M., & Krieger, L. S. (2007). Understanding the negative effects of legal
12 education on law students: A longitudinal test of self-determination theory.
13 *Personality and Social Psychology Bulletin*, *33*, 883-897.
14 doi:10.1177/0146167207301014
- 15 Simpson, J. A., Weiner, E. S. C., Murray, J. A. H., & Burchfield, R. W. (Eds.). (1989). *The*
16 *Oxford English dictionary* (2nd ed.). Oxford, UK: Clarendon Press.
- 17 Smith, L. H., & Barker, E. (2009). Exploring youth development with diverse children:
18 Correlates of risk, health, and thriving behaviors. *Journal for Specialists in Pediatric*
19 *Nursing*, *14*, 12-21. doi:10.1111/j.1744-6155.2008.00164.x
- 20 Soanes, C., & Stevenson, A. (Eds.). (2005). *Oxford dictionary of English* (2nd ed.). Oxford,
21 UK: Oxford University Press.
- 22 Spreitzer, G., & Porath, C. (2014). Self-determination as a nutriment for thriving: Building an
23 integrative model of human growth at work. In M. Gagné (Ed.), *The Oxford handbook*
24 *of work engagement, motivation, and self-determination theory* (pp. 245-258). New
25 York, NY: Oxford University Press.

- 1 Spreitzer, G., Porath, C. L., & Gibson, C. B. (2012). Toward human sustainability: How to
2 enable more thriving at work. *Organizational Dynamics*, *41*, 155-162.
3 doi:10.1016/j.orgdyn.2012.01.009
- 4 Spreitzer, G., Sutcliffe, K., Dutton, J., Sonenshein, S., & Grant, A. M. (2005). A socially
5 embedded model of thriving at work. *Organization Science*, *16*, 537-549.
6 doi:10.1287/orsc.1050.0153
- 7 Su, R., Tay, L., & Diener, E. (2014). The development and validation of the comprehensive
8 inventory of thriving (CIT) and the brief inventory of thriving (BIT). *Applied*
9 *Psychology: Health and Well-Being*, *6*, 251-279. doi:10.1111/aphw.12027
- 10 Sumsion, J. (2004). Early childhood teachers' constructions of their resilience and thriving: A
11 continuing investigation. *International Journal of Early Years Education*, *12*, 275-
12 290. doi:10.1080/0966976042000268735
- 13 Tedeschi, R. G., & Calhoun, L. G. (1996). The posttraumatic growth inventory: Measuring
14 the positive legacy of trauma. *Journal of Traumatic Stress*, *9*, 455-471.
15 doi:10.1007/BF02103658
- 16 Theokas, C., Almerigi, J. B., Lerner, R. M., Dowling, E. M., Benson, P. L., Scales, P. C., &
17 Von Eye, A. (2005). Conceptualizing and modeling individual and ecological asset
18 components of thriving in early adolescence. *Journal of Early Adolescence*, *25*, 113-
19 143. doi:10.1177/0272431604272460
- 20 Thompson, B., & Ravlin, E. (2016). Protective factors and risk factors: Shaping the
21 emergence of dyadic resilience at work. *Organizational Psychology Review*. Advance
22 online publication. doi:10.1177/2041386616652673
- 23 Tomlinson, J. M., Feeney, B. C., & Van Vleet, M. (2016). A longitudinal investigation of
24 relational catalyst support of goal strivings. *The Journal of Positive Psychology*, *11*,
25 246-257. doi:10.1080/17439760.2015.1048815

- 1 Tremethick, M. J. (1997). Thriving, not just surviving: The importance of social support
2 among the elderly. *Journal of Psychosocial Nursing and Mental Health Services*, 35,
3 27-31.
- 4 Wallace, J. C., Butts, M. M., Johnson, P. D., Stevens, F. G., & Smith, M. B. (2016). A
5 multilevel model of employee innovation: Understanding the effects of regulatory
6 focus, thriving, and employee involvement climate. *Journal of Management*, 42, 982-
7 1004. doi:10.1177/0149206313506462
- 8 Weine, S. M., Ware, N., Tugenberg, T., Hakizimana, L., Dahnweih, G., Currie, M., . . .
9 Levin, E. (2013). Thriving, managing, and struggling: A mixed methods study of
10 adolescent African refugees' psychosocial adjustment. *Adolescent Psychiatry*, 3, 72-
11 81. doi:10.2174/2210676611303010013
- 12 Wright, C., & Birks, E. (2000). Risk factors for failure to thrive: A population-based survey.
13 *Child: Care, Health and Development*, 26, 5-16. doi:10.1046/j.1365-
14 2214.2000.00135.x

1 *Table 1*

2 Definitions of Thriving

Reference	Definition
O'Leary and Ickovics (1995, p. 122, 135)	"The effective mobilization of individual and social resources in response to risk or threat [or challenge]"
Park (1998, p. 269)	"A higher level of functioning in some life domain following a stressful encounter"
Walker and Grobe (1999, p. 152)	"The dynamic relationships among nutrition, weight, and psychosocial functioning across the life span, with positive and negative consequences for health"
Lerner, Dowling, and Anderson (2003, p. 176)	"A developmental concept that denotes a healthy change process linking youth with an adulthood status enabling society to be populated by healthy individuals oriented to integratively serve self and civil society"
Spreitzer, Sutcliffe, Dutton, Sonenshein, and Grant (2005, p. 538)	"The psychological state in which individuals experience both a sense of vitality and a sense of learning"
Benson and Scales (2009, p. 90)	"(1) Represents a dynamic and bi-directional interplay of a young person intrinsically animated and energized by discovering his/her specialness, and the developmental contexts (people, places) that know, affirm, celebrate, encourage, and guide its expression; (2) Involves 'stability of movement' or the 'balance' of movement toward something (Bill Damon, personal conversation, May 11, 2006), that is, thriving is a process of experiencing a balance between continuity and discontinuity of development over time that is optimal for a given individual's fused relations with here or his contexts (per discussion of developmental continuity and discontinuity in Lerner, 2002); and (3) Reflects both where a young person is currently in their journey to idealized personhood, and whether they are on the kind of path to get there that could rightly be called one of exemplary adaptive development regulations"
Bundick, Yeager, King, and Damon (2010, p. 891)	"A dynamic and purposeful process of process of individual ↔ context interaction over time, through which the person and his/her environment are mutually enhanced"
Sarkar and Fletcher (2014, p. 47)	"A sustained high level of functioning and performance that is not necessarily dependent on the occurrence of a potentially traumatic event (cf. Carver, 1998)"
Su, Tay, and Diener (2014, p. 256)	"The state of positive functioning at its fullest range – mentally, physically, and socially"