

Achieving Long-term Goals Amidst Uncertainty: An Integrative Model for the Psychological Resources of Grit

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abstract

This article proposes an integrative model for the psychological resources of grit. The growing body of work in nursing on the topic of grit indicates considerable interest in achieving long-term goals, especially amidst uncertainty from the COVID-19 pandemic. Motivational behaviors are thought to influence engagement in continuing education in nursing, thereby improving clinical practice and patient outcomes. The model was informed by a comprehensive review of the literature. Sixteen attributes for acquiring and strengthening four psychological resources of grit were identified. Each attribute is discussed along with interrelationships and implications for professional nursing development. Given the complex demands placed on health professionals, this model is both timely and relevant for all nurse and education providers interested in enhancing personal characteristics that may mitigate against stress and build capabilities for goal achievement. [*J Contin Educ Nurs.* 2022;53(8):355-363.]

Psychological resources have been shown to protect physical and mental health and aid in personal capabilities (Hobfoll, 2002; Taylor et al., 2000). A focus on mental health has become particularly pertinent following the widespread loss of work and changes to employment conditions following the coronavirus disease 2019 (COVID-19) pandemic (International Labour Organization and Organization for Economic Co-operation and Development, 2020). The rapidly shifting landscape of the workplace has required businesses to find new ways of working while protecting employees' physical, mental,

and social health (de Lucas Ancillo et al., 2021). However, the human brain has evolved to seek out patterns and does not function as well with uncertainty, adding complexity to the current situation (Grant & Goldmamer, 2021). Although uncertainty cannot always be resolved, research suggests personal resources can help to buffer against stress under these conditions (Hobfoll, 2002).

According to Hobfoll's (1989) conservation of resources theory, people tend to retain or expand valuable resources, including objects (e.g., food, accommodation), conditions (e.g., relationships, health), personal characteristics (e.g., attributes, skills), and energies (e.g., time, knowledge). More recently, researchers have expanded the kinds of resources to include "anything perceived by the individual to help attain his or her goals" (Halbesleben et

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al., 2014, p. 1338). Viewed through this theoretical lens, there are many resources that can support personal and professional growth, such as those associated with grit, defined as “perseverance and passion for long-term goals” (Duckworth et al., 2007, p. 1087). People who possess grit appear to remain committed to their aspirations for longer periods—and believe that steadfast focus combined with hard work will likely lead to success. This perceived control over success (rather than mere luck, chance, or fate), combined with reported links to achievement, makes grit a characteristic appealing to both individuals and organizations (Jordan et al., 2019).

Studies of health professionals working in high-stress environments have linked a higher level of grit to less chance of burnout and attrition (Dam et al., 2018; Salles et al., 2017; Walker et al., 2016). The need to improve the psychological health of employees is now more important than ever to counter what has been labeled “The Great Resignation.” In the United States, millions of people have resigned from their jobs, mainly in technical and health care markets, and this trend has been seen in other countries, including Australia (Nguyen, 2021). Many of these transitions are associated with uncertainty, which has been fueled and accelerated by the pandemic (Cook, 2021). People seem to be rethinking their goals and seeking to understand passion and how they can pursue more meaningful work. This seems to be particularly true of mid-career employees, for whom long-term goals are more relevant (Howe et al., 2021).

Grit has been shown to be a vital concept in improving retention, performance, and job satisfaction in nursing (Seguin, 2019; Terry & Peck, 2020). Attracting and retaining committed practitioners passionate about their work is becoming increasingly important as employers work to counter the impact of nursing burnout and turnover amidst uncertainty (Kelly et al., 2021). While considerable literature has advanced our understanding of grit, few studies have focused on the psychological resources of grit and associated attributes or likely behaviors exhibited by individuals. Thus, the aim of this article is to propose an integrative model for the psychological resources of grit. The work presented focuses on personal characteristics to support passion and perseverance for activities and goals. Implications for professional nursing development, limitations, and directions for future research are provided. The proposed model is part of a broader project that includes a concept analysis of grit (Schimschal et al., 2021) and developing a scale to measure the psychological resources of grit (Schimschal et al., in press).

MODEL OVERVIEW

Figure 1 presents the proposed model for the psychological resources of grit. The model may contribute to un-

derstanding the components of grit and interrelationships with other constructs and may provide further insight into approaches for assessment and education. Previous work by Duckworth (2016), who identified four psychological resources of grit, informs the foundations of the model, and a further 16 attributes associated with acquiring these assets are proposed.

The resulting model is divided into four elements: interest, purpose, practice, and hope. The four elements are understood to increase passion and perseverance for long-term goals. The elements on the left (interest and purpose) are aspects of passion in the context of grit. Passion relates to one’s consistency of interests. Individuals with high levels of grit are likely to remain committed to their interests and long-term goals for extended periods (Duckworth et al., 2007). Thus, consistency of interests is enhanced by having long-term goals that provide interest and purpose. The elements on the right (practice and hope) are aspects of perseverance in the context of grit. Perseverance relates to one’s perseverance of effort with long-term goals. Individuals with high levels of grit are likely to persist with skill acquisition and find multiple pathways to achieve (Eskreis-Winkler et al., 2016). Accordingly, perseverance of effort with long-term goals can improve through practice and hope.

Each element contains four associated attributes, which likely underpin the psychological resources of grit. Interest includes attributes of curiosity, self-awareness, courage, and patience, which can help individuals develop and deepen their interests. Purpose includes attributes of self-determination, self-concordance, self-compassion, and emotional intelligence, which can help individuals make their interests more meaningful. Practice includes attributes of hardiness, resilience, self-efficacy, and flow, which can help individuals persist with skill development. Hope includes attributes of goal orientation, growth mindset, optimism, and self-regulation, which can help individuals develop their capacity for goal pursuit.

Educators could use the model to design and develop continuing education programs that target or include the development of personal characteristics that improve competencies, job satisfaction, and in turn, retention. Alternatively, it may assist individuals and managers in identifying attributes that support the achievement of professional development goals. When used as a tool to facilitate development, it is important to consider interrelationships between model components, which are discussed after the attributes associated with each psychological resource of grit.

Attributes Associated With Interest

Curiosity and Self-Awareness. Curiosity involves being open to experiences that facilitate learning and growth and tolerating uncertainty to explore interests in more

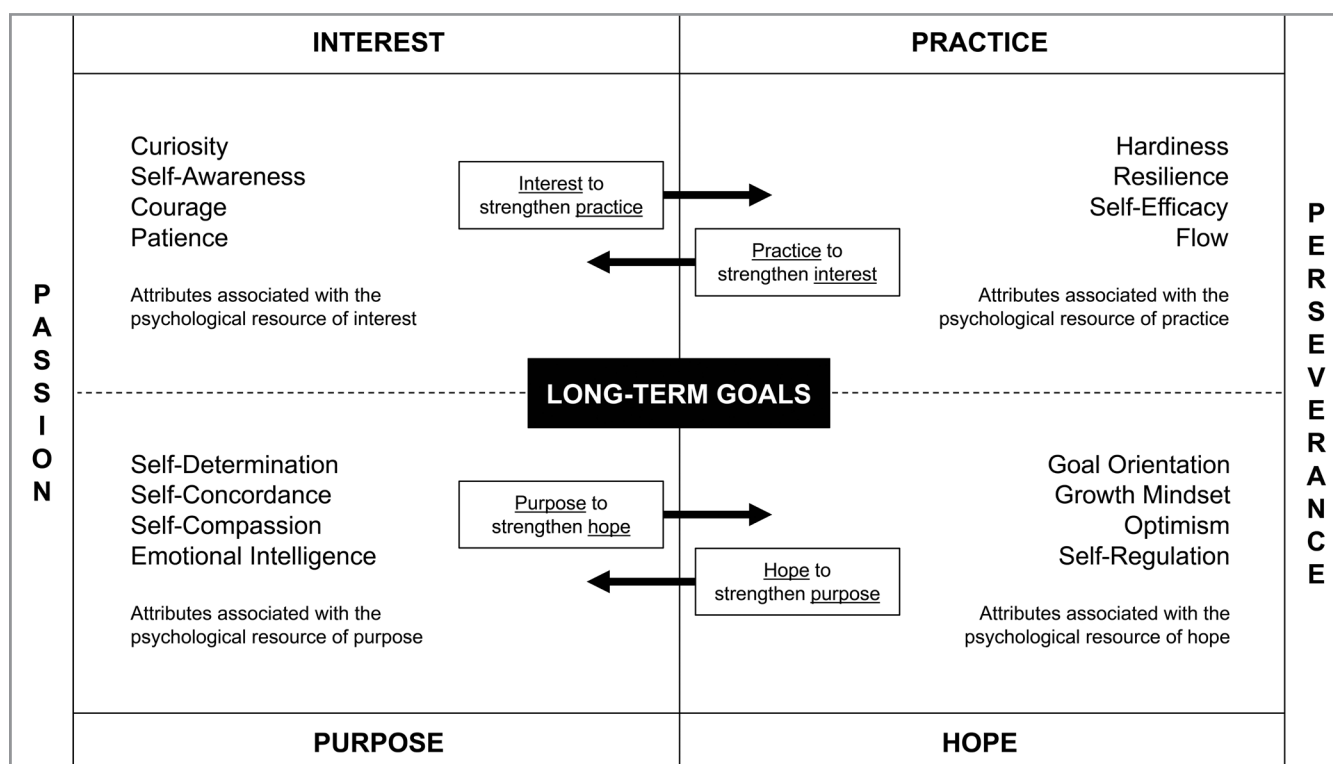


Figure 1. Integrative model for the psychological resources of grit. This model is informed by the previous work on grit by Duckworth (2016), who identified interest, purpose, practice, and hope.

depth (Silvia & Kashdan, 2009). How an individual appraises and responds to situations plays an essential role in determining their motivation to explore interests in more depth (Berlyne, 1954). New events are more likely to be interesting if they are sufficiently novel and complex while still being understandable (Silvia, 2008). Curiosity can be directed toward learning more about the external environment or aspects of the self. Being curious and learning more about one's feelings, thoughts, and behaviors helps to increase self-awareness (Carver, 2012). This process of reflection involves identifying discrepancies between current and desired behavior according to salient standards (Duval & Wicklund, 1972). However, changing thoughts and behaviors to achieve aspirations can be problematic (Silvia & Duval, 2001). To curiously explore and understand internal and external experiences, courage and patience are vital.

Courage and Patience. Courage is a subjective attribute largely dependent on how an individual appraises a particular situation (Rate et al., 2007). When courage is required, it likely involves using the character strengths of bravery, persistence, integrity, and vitality (Peterson & Seligman, 2004). In the context of exploring novel or risky interests, courage can enable the pursuit of goals, despite the presence of fear associated with potential loss or

failure (Rate et al., 2007). Another attribute necessary for interest development is patience, which is often required to unravel complexity and resolve inevitable problems as people deepen their interests. People may experience frustrations ranging from expected delays to significant challenges and setbacks. Patience enables people to cope with and positively adapt to frustrating situations, which in turn facilitates perseverance (Schnitker, 2012).

Attributes Associated With Purpose

Self-Determination and Self-Concordance. Self-determination supports our ability to sustain interest, with the development of this attribute contingent upon conditions that strengthen or undermine satisfaction of three psychological needs: being able to control our actions (autonomy), gain mastery (competence), and engage with others (relatedness) (Deci & Ryan, 1985). The satisfaction of psychological needs facilitates goal pursuit and attainment, along with well-being, whereas unmet needs hinder growth potential and well-being (Vansteenkiste & Ryan, 2013). Self-concordance builds on the construct of self-determination by considering why people decide to pursue certain goals (Sheldon & Elliot, 1999). More specifically, self-concordance considers the extent to which goals are aligned with an individual's needs, values, and interests (Sheldon, 2002). Concordant goals thus lend support for

psychological need satisfaction (i.e., autonomy, competency, relatedness), which in turn facilitates commitment and boosts well-being as goals are achieved (Sheldon & Houser-Marko, 2001).

Self-Compassion and Emotional Intelligence. In addition to one's capacity to pursue personally aligned goals, the attributes of self-compassion and emotional intelligence also strengthen purpose in life. Self-compassion involves feeling kindness toward one's suffering, recognizing that everyone has experience of struggle and failure, and taking non-judgmental approaches to alleviate pain (Neff, 2003). Accordingly, self-compassion is similar to compassion; it is only the focus that is different—the self rather than others. Self-compassion is a positive attribute that requires recognition and understanding of emotions (Neff et al., 2005). In this way, self-compassion requires emotional intelligence, an attribute that involves one's ability to perceive, understand, and manage emotions in self and others to improve relationships and outcomes (Salovey & Mayer, 1990). Emotional intelligence supports purposeful growth as it facilitates connection with past experiences to direct action (Mayer et al., 2004).

Attributes Associated With Practice

Hardiness and Resilience. Research on hardiness emerged following an investigation into how personality may buffer against illness after stressful life events (Kobasa, 1979). Hardiness, an individual's positive mindset toward commitment, control, and challenge, has been shown to improve performance and health outcomes (Maddi, 2002). Hardiness also contributes to resilience, a construct associated with recovering from adversity and subsequent growth (Luthans et al., 2006). Resilience research has a long history across many social science disciplines and fields of study, including positive psychology (Yates et al., 2015) and health professionals (Cleary et al., 2018). In the course of skill development, resilience can improve an individual's adaptive capacity when faced with challenges, setbacks, and failure (Carver, 1998). Likewise, self-efficacy and flow also play essential roles in the development of expertise through practice.

Self-Efficacy and Flow. Self-efficacy concerns the confidence an individual has in their capabilities to achieve goals, which positively influences adaptability and commitment to persevere when under pressure (Bandura, 1977). People who rate themselves as having a high level of self-efficacy are more likely to set challenging goals and recover quickly from failure. This is achieved by attributing setbacks to their effort rather than lack of ability, expanding opportunities for interest development (Bandura, 1994). Bandura (1994) posits that one of the main sources of self-efficacy is mastery experiences (i.e., progressive skill development through practice that incrementally boosts

confidence in abilities). When the challenge matches a person's skill level, it enables flow, a psychological state that increases focus, engagement, and performance (Csikszentmihalyi, 1990). When in flow during practice, people report performing seamlessly without effort or concern for failure, which affords more joy and fulfillment (Csikszentmihalyi, 2014).

Attributes Associated With Hope

Goal Orientation and Growth Mindset. Goal orientation refers to the type of achievement goals people choose to pursue—learning goals to increase competence and performance goals to gain or avoid judgment (Dweck, 1986). Early research involving children (Elliott & Dweck, 1988) is reflected in related studies with adults and has been linked with other motivational concepts such as goal setting and self-efficacy (Seijts et al., 2004). Self-efficacy is enhanced with a learning goal orientation and diminished with a performance goal orientation, and higher efficacy results in higher self-set goals and performance (Phillips & Gully, 1997). One's goal orientation can also be linked to mindset. People with a growth mindset (Dweck, 2006) believe abilities are not fixed and different pathways combined with effort can increase hope (i.e., having the will and the ways; Snyder, 2002).

Optimism and Self-Regulation. Optimistic people explain negative events as external, unstable, and specific. They do not blame themselves, believing that things can change in the future, and abstain from generalizing experiences (Abramson et al., 1978). Research suggests that individuals who take an optimistic approach to deal with adversity are more likely to persevere with their goals rather than give up after experiencing challenges, setbacks, and failure (Carver et al., 2010). Optimism is also associated with self-regulatory behaviors. Self-regulation is an attribute that involves people being able to control their thinking, emotions, impulses, and performance (Baumeister & Heatherton, 1996). Improving self-regulation requires strengths that facilitate setting standards, monitoring progress, and being adaptive (e.g., self-awareness, self-determination, and self-efficacy; Vohs & Baumeister, 2016). However, one's capacity for self-regulation can be depleted over time, so personal resources need to be replenished to avoid failures in self-control (Baumeister, 2002). Now that the model's components have been presented, interrelationships will be considered.

Interrelationships Between Model Components

As indicated by arrows in the proposed model (Figure 1), there is likely an interplay between the psychological resources of interest and practice. Developing interest (Rounds & Su, 2014) requires considerable practice (Ericsson & Pool, 2017) to acquire the necessary skills for goal attainment, and progressive improvement helps sustain

commitment. To illustrate further, although an individual can pursue interests and goals for which they lack passion, this approach is likely to compromise commitment and performance over time (Nye et al., 2012). The model also indicates an interplay between the psychological resources of purpose and hope. Developing purpose (McKnight & Kashdan, 2009) requires hope (Snyder, 2002) to stay the course with interests and goals, and having direction in life can increase motivation.

In addition to the interplay between elements, there are likely interactions between underpinning attributes. For example, recent evidence suggests an interplay between self-efficacy and self-regulation, especially when work is perceived as valuable to the individual (Pasha-Zaidi et al., 2019). Prior research has also established that self-compassion helps to improve resilience when dealing with adverse events (Leary et al., 2007) and significantly predicts emotional intelligence and optimism (Neff et al., 2018). Likewise, studies have shown a link between self-compassion and growth mindset, with the former increasing the latter (Breines & Chen, 2012). Mindset is also associated with other attributes. For instance, a study involving 340 university students showed that those with higher levels of grit exhibited increased resilience and self-control and were more inclined to have a growth mindset (Kannangara et al., 2018). Other studies indicate that growth mindset and self-efficacy interact with goal orientation to improve performance (Albert et al., 2021; Alhadabi & Karpinski, 2020).

IMPLICATIONS FOR PROFESSIONAL NURSING DEVELOPMENT

COVID-19 and the psychosocial challenges resulting from it appear to be driving renewed interest in grit as people look for ways to overcome uncertainty to achieve their goals. This is especially true for professionals significantly impacted by the pandemic, such as nurses and other health care providers (Benfante et al., 2020). The proposed model in this article may provide a useful guide for identifying personal characteristics to improve passion and perseverance for long-term goals. **Table 1** lists example behaviors exhibited by individuals with high levels of attributes associated with the psychological resources of grit and their role in professional nursing development. The potential clinical implications for continuing education in nursing outlined may be of interest to educators, managers, and practitioners, particularly in light of the growing literature on the topic of grit (van Zyl et al., 2021).

As shown in **Table 1**, the attributes associated with interest could facilitate commitment to ongoing education and broadening knowledge of nursing best practices.

Strength in curiosity, self-awareness, courage, and patience may encourage participation in education and collaboration to identify ways to improve patient care outcomes and overcome any clinical challenges. As interests are expanded through lifelong learning, so too is nursing efficacy and workforce capability. Purpose and the associated attributes of self-determination, self-concordance, self-compassion, and emotional intelligence also play an important role in continuing education. Specifically, these characteristics help align goals with personal needs and values and facilitate engagement with others, thereby improving nursing practice and patient outcomes. Together, the psychological resources of interest and purpose can strengthen an individual's dedication to chosen areas of nursing practice and their capacity to demonstrate kindness toward themselves and others during times of difficulty (Tyer-Viola, 2019).

In the rapidly changing field of health care, the psychological resource of practice can help nurses exhibit control and adapt with confidence to improve performance (Welch & Carter, 2018). Individuals who possess high levels of hardiness, resilience, and self-efficacy are likely to engage and persist with development opportunities enabling effective skills transfer. Additionally, when the level of challenges and skills are matched, flow experiences can be triggered, improving commitment to exploring new specialties and career advancement. In addition to practice, hope can positively impact how health professionals use feedback and mindset to improve expertise and regulate behaviors for goal achievement (Munro & Hope, 2019). Notably, goal orientation and growth mindset attributes support positive engagement in annual performance appraisal and pursuit of career development activities to improve competence and the quality of patient care. Likewise, optimism and self-regulation aid in coping with resource constraints and adjusting behavior to meet changing patient needs consistent with workplace guidelines, policies, and procedures. Collectively, the psychological resources of practice and hope have an essential role in strengthening perseverance, which is becoming increasingly important for job satisfaction and retention of nurses (Poghosyan et al., 2022).

CONCLUSION

There are some limitations regarding the model proposed in this article. First, the elements may not be equally influential or include the full range of underpinning attributes. Second, the model has been designed with adults in mind, so it may be less applicable to children. Third, the design does not specifically consider sociocultural or team contexts for resource acquisition. Further work is required to understand how the psychological resources of

TABLE 1
ROLE OF ATTRIBUTES ASSOCIATED WITH THE PSYCHOLOGICAL RESOURCES OF GRIT IN PROFESSIONAL NURSING DEVELOPMENT

Psychological resource	Attribute	Example behaviors exhibited by individuals with high levels of attribute	Role of attribute in professional nursing development
Interest	Curiosity (Berlyne, 1954)	Are inclined to actively seek out and engage in training and development opportunities.	Curiosity drives the desire to expand current knowledge and identify new approaches to improve patient care.
	Self-awareness (Duval & Wicklund, 1972)	Practice self-reflection to gain insights and grow from experiences.	Self-awareness promotes engagement with colleagues to discuss clinical challenges and find solutions.
	Courage (Rate et al., 2007)	Capable of working outside their comfort zone and embracing challenges.	Courage supports engaging in new or different practices to expand nursing efficacy and workforce capability.
	Patience (Schnitker, 2012)	Can tolerate uncertainty with future directions and persist with learning.	Patience underpins an ongoing commitment to continuing education and clinical practice despite challenges.
Purpose	Self-determination (Deci & Ryan, 1985)	Are industrious and exhibit commitment to activities and goals.	Self-determination facilitates dedication to maintaining best practice and improving patient outcomes.
	Self-concordance (Sheldon & Elliot, 1999)	Strive toward goals that are aligned with their needs, values, and interests.	Self-concordance encourages the alignment of goals and expectations to achieve the delivery of high-quality health care.
	Self-compassion (Neff, 2003)	Are kind to themselves and view negative events as opportunities to learn and evolve.	Self-compassion assists with the capacity to accept and learn from mistakes to improve nursing practice.
	Emotional intelligence (Salovey & Mayer, 1990)	Understand and manage their emotions effectively to maintain productivity.	Emotional intelligence helps with recognizing burnout and implementing support to replenish psychological resources.
Practice	Hardiness (Kobasa, 1979)	Maintain control under pressure and persist with developing expertise through practice.	Hardiness aids the transfer of knowledge and skills to new specialties not previously encountered.
	Resilience (Carver, 1998)	Are good at adapting during skill development and rebound after difficulties.	Resilience facilitates the development of nursing expertise through the capacity to overcome setbacks.
	Self-efficacy (Bandura, 1977)	Have confidence in their capability to achieve development goals.	Self-efficacy provides motivation to actively participate in professional development opportunities.
	Flow (Csikszentmihalyi, 1990)	Manage activities to increase focus, engagement, and performance.	Flow experiences triggered by matched challenges and skills improve commitment and future career aspirations.
Hope	Goal orientation (Dweck, 1986)	Use feedback to continuously improve their knowledge, skills, and abilities.	Goal orientation supports positive engagement in annual performance appraisals and career development activities.
	Growth mindset (Dweck, 2006)	Believe they can improve their capabilities and achieve success with effort.	Growth mindset enables belief in striving to achieve higher levels of competence to improve the quality of patient care.
	Optimism (Abramson et al., 1978)	Take an optimistic approach to dealing with problems.	Optimism aids in the realistic appraisal of situations and coping effectively with daily resource constraints.
	Self-regulation (Baumeister & Heatherton, 1996)	Control and alter their behavior to facilitate goal achievement.	Self-regulation strengthens behavioral adjustment to meet varying patient needs consistent with workplace policies and procedures.

grit could be acquired in collectivist cultures and team environments. Nonetheless, this integrative model provides a foundation that could be informed by further research.

The proposed model may be used at an individual level to guide personal and professional development plans and more broadly to inform evidence-based education pro-

grams aimed at strengthening the psychological resources of grit and associated attributes (McCabe, 2016). Grit is widely applicable to many industries and sectors and may help people persist with working in complex and changing environments such as health care. Furthermore, acquiring the psychological resources of grit outlined in the proposed model may provide a buffer against stress and increase one's level of passion and perseverance to improve retention, performance, and well-being (Schimschal, 2021).

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