Private Dariane Ross Vollant, member of the community of Pessamit and participant in the 2023 Carcajou program, laughs at a joke in the training area at 2nd Canadian Division Support Base Valcartier, Quebec, on August 8, 2023.

Image by: Corporal Sébastien Lauzier-Labarre, Valcartier Imagery Services

Finding Character Strengths in How Military Leaders Talk About Resilience

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Talking About Resilience

Over the last 60 years a variety of research fields (e.g., biological sciences, psychological sciences, engineering, disaster recovery, etc.) and industries (e.g., medical, military, government, etc.) have increased their use of, and research on the term "resilience" (Buzzanell & Houston, 2018; Folke, 2016; Hermann et al., 2011; Houston & Buzzanell, 2018; Manyena, 2006; Rutter, 1993). Not surprisingly, usage across these various fields results in a variety of definitions for the term "resilience". For example, the field of mechanical engineering defines resilience as how well a system or structure can withstand and adapt to changes in the environment (Altherr et al., 2018). When applied to humans, at either the individual or group level, the field of psychology defines resilience as the ability to "bounce back" after experiencing challenging circumstance (Buzzanell, 2010). However, some researchers argue that human resilience is not a singular trait that people either have or do not have, but rather a dynamic trait that is developed, maintained and fostered by experiencing challenging situations (Buzzanell, 2010) and that people do not simply "bounce back" but can rebound and perform to a greater magnitude; a term referred to as "antifragility" (Talib, 2012). This ability to bounce back or perhaps thrive in challenging situation is enhanced by the use of one's character strengths and virtues (Niemiec, 2019).

Resilience and antifragility are needed in environments where job demands and/or the challenges faced by personnel are high, dynamic, and complex; this is often characteristic of the public service (Franken, 2019; Franken, Plimmer & Malinen, 2020) including service in the armed forces (Bartone, 2006). Several practical, hands-on resilience-based training programs exist in a variety of military forces around the world (e.g., Canadian Armed Forces: Road to Mental Readiness/R2MR, Bailey, 2015; Fikretoglu et al., 2019; British Army Infantry: Mental Resilience Training, Precious & Lindsay, 2018; Australian Defence Force: BattleSMART, Cohn, Hodson, & Crane, 2010). However, another possible and perhaps more subtle way in which personnel learn about resilience and antifragility is through listening to their superiors talk about this topic. Of particular interest for our team is whether leaders mention, either directly or indirectly, character strengths when discussing resilience in informal settings. That is, do leaders use language associated with character strengths when describing their own experience(s) of resilience? To the best of our knowledge no study to date has examined this possibility. Therefore, as a starting point in understanding how military leaders speak about resilience, we listened to various episodes of the Resilience Plus Podcast that featured currently active or recently retired military leaders (i.e., guests of the podcast ranking at or above Lieutenant-Colonel). We evaluated each episode for the overall message conveyed about resilience and whether it aligned with an identifiable character strength or virtue as detailed below.

Resilient Language in The Resilience Plus Podcast

The Resilience Plus Podcast is part of various initiatives (i.e., Research, Training, Education, Mentoring, Coaching) offered at the Royal Military College and the Royal Military College – Saint Jean. The goal of this on-going project is to provide Naval and Officer Cadets with the opportunity to have conversations about resilience with people who have experienced and demonstrated it in their personal and/or professional lives. Beyond this primary goal, a secondary goal of the podcast is to provide a broader audience (i.e., faculty, staff and students) with stories of resilience from people who have lived it. During the podcast sessions, guests were directly asked to address what resilience means to them and how they demonstrate this quality. All podcast episodes contained both universal questions (asked of all guests) and guest specific questions (asked of only a particular guest) which, by default, created semi-structured interviews about resilience. The podcast sought out a variety of speakers from both military and civilian populations. However, since we were interested in the language of resilience in military leaders, we limited the current evaluation to episodes that featured a person who, at the time of recording, was currently an active serving member or a recently retired senior member of the Canadian Armed Forces (i.e., retired within two years prior to recording).

Each episode that met these criteria was evaluated for whether it contained a specific character strength (or virtue) as detailed by Peterson & Seligman (2004). Briefly, the 24 character strengths (including appreciation of beauty and excellence, bravery, creativity, curiosity, fairness, forgiveness, gratitude, honesty, hope, humility, humor, judgement, kindness, leadership, love, love of learning, perseverance, perspective, prudence, self-regulation, social intelligence, spirituality, teamwork, and zest) cluster into familial groups of resemblance according to 6 main virtues (i.e., wisdom: creativity, curiosity, judgement, love of learning, perspective; courage: bravery, honest, perseverance, zest; humanity: kindness, love, social intelligence; justice: fairness, leadership, teamwork; temperance: forgiveness, humility, prudence, self-regulation; transcendence: appreciation of beauty and excellence, gratitude, hope, humor. For more information, see viacharacter.org/character-strengths as well as Macfarlane, 2019, Peterson & Seligman (2004), Ruch et al., (2021), and Seligman (2011). These character strengths, which we all have within us, contribute to our ability to endure a full range of experiences (i.e., positive, neutral, negative) and allow us to thrive (Macfarlane, 2019; Niemiec, 2019). Therefore, a second goal of the current evaluation was to note, which character strengths (if any) military leaders mentioned during their conversation about resilience. This, of course, was a subtle and indirect aspect to note because at no time were podcast guests asked to highlight a character strength and the character strengths were only identified offline after the semi-structured interview was complete.

Two independent listeners evaluated ten English podcast recordings. After listening to the episode in its entirety, listeners selected the most evident character strength presented by the speaker. The two listeners then compared their identified character strength with each other, and only congruent selections were explored further (i.e., the listeners explained how they selected the character strength and what information within the episode guided this selection). Based on this process, a total of ten character strengths were identified as integral to how resilience was described by military leaders on the podcast. These top ten podcast character strengths are described in more detail below. The presentation below is in alphabetical order and does not reflect a rank of importance or amount of usage within podcast episodes.

> "Emotional strengths, like bravery, are particularly important for the development of resilience because they provide individuals with the necessary means to face adversity."

Character Strengths Presented in the Resilience Plus Podcast Episodes

Bravery. This strength is often described as the antithesis of fear (Rachman, 1990) and is demonstrated when an individual overcomes fear and failure. According to Gruber (2011) it is a cognitive process that "enacts change on a stable system for the intention of positive outcome(s)" (p. 274). It is our behavioural drive toward situations that engage fear or, to a lesser degree, hesitation and is typically demonstrated in times of uncertain outcomes that requires us to be courageous, creative and flexible (Jordan, 2005). Emotional strengths, like bravery, are particularly important for the development of resilience because they provide individuals with the necessary means to face adversity (Martinez-Marti & Ruchs 2017; Ruchs et al., 2010). Not surprisingly, emotional traits, and bravery in particular, are highly correlated with resilience (Martinez-Marti & Ruch, 2017).

Creativity. Like bravery, creativity is considered a cognitive process that is demonstrated when we need divergent thinking (Torrance, 1995), to distance ourselves from stress (Csikzentmihalyi, 1996) and when adapting to solve problems (Kirton, 1994). Unfortunately, most research examining resilience does not include creativity as an influential factor (Metzl & Morrell, 2008) and to the best of our knowledge creativity and its role in facilitating resilience, particularly in military populations, remains an under-represented area within resilience research.

"To experience love of learning, research suggests that people must feel (or expect to feel) some sense of competence and efficacy in the learning process. This means that they must get a sense of mastering a skillset, a sense of filling in the gaps in their knowledge and so on. The paradox, however, is that learning, by definition, also includes instances in in which we fail."

Gratitude. Gratitude has been conceptualized in a number of ways. Generally, it is defined as an experience of noticing and being thankful for the positive emotions, experiences, and outcomes in one's day to day life (Rashid & Seligman, 2018; Oduntan et al., 2022). This is sometimes labelled as dispositional gratitude. In military populations, demonstrating dispositional gratitude has a "dose-response" effect on psychosocial outcomes such as anxiety (e.g., post-traumatic stress disorder; social phobia), mood disorders (e.g., major depressive disorder), substance use/abuse (e.g., nicotine, alcohol) and suicidal ideation (Isaacs et al., 2017; McGuire et al., 2021; McGuire et al., 2022) whereby high levels of gratitude result in low levels of psychosocial outcomes (moderate gratitude leads to moderate outcomes; low levels of gratitude result in the most negative psychosocial outcomes).

Hope. This character strength is considered one of the foundational terms used in the description of positive psychology (Seligman, Steen, Park & Peterson, 2005) and is defined as a positive motivational state that arises when increased goal-directed energy (i.e., agency) interacts with goal-directed behaviour (i.e., a plan or pathway to meet goals;

Snyder, Irving, & Anderson, 1991). According to Snyder and colleagues (Cheavans et al., 2006; Snyder, Feldman, Taylor, Schroeder & Adams, 2000; Snyder, Rand & Ritschel, 2006) people display both approach goals (things we want to achieve, e.g., improving our health) and avoidance goals (avoiding a setback; e.g., barrier(s)to improving our health). Not surprisingly, high levels of hope are associated with being motivated to actively engage in behaviour that pushes us toward the things we want, and low levels of hope are associated with simply avoiding negative outcomes (Snyder, Feldman, Taylor, Schroeder & Adams, 2000; Snyder, Rand & Ritschel, 2006). In this way, when we employ hope as a tool, we are actively (both mentally and physically) and not passively developing our resilience. Interestingly, facilitating hope might be of use when military members transition from service to civilian life where large, and sometimes challenging adjustments in day-to-day life are required (e.g., Umucu et al., 2022).

Kindness. Kindness is a benefit multiplier. When demonstrated, kindness is for the potential betterment of other people, but we also reap the rewards of this character strength (Curry et al., 2018). Using kindness to foster personal and collective resilience means we recognize the dignity of others and can demonstrate emotions like empathy toward their well-being alongside our own. Not surprisingly, this character strength is considered a prosocial behaviour and is necessary among functioning groups (e.g., classrooms, offices, active deployments, etc.) In addition, demonstrating kindness can reduce the expression of avoidance goals (Trew & Alden, 2015) which were noted earlier when discussing hope. Interestingly, however, we do not always have to engage in the action of kindness as several lines of research indicate that simply recalling an act of kindness (whether demonstrated or received) can improve well-being (Aknin, Dunn, & Norton, 2012; Ko et al., 2021; Otake, Shimai, Tanaka-Matsumi, Otsui, & Fredrickson, 2006). However, kindness is not a commonly examined topic within leadership and military research fields and as such it remains an potential future direction of further exploration.

Love of Learning. This character strength is characterized as both a general individual difference and as a universal predisposition (Renninger et al., 2004). More specifically, love of learning describes the way in which a person engages with new information (i.e., whether they approach it openly, ready to absorb as much new knowledge as possible or whether they are avoidant and anxious when new knowledge is available). To experience love of learning, research suggests that people must feel (or expect to feel) some sense of competence and efficacy in the learning process. This means that they must get a sense

of mastering a skillset, a sense of filling in the gaps in their knowledge and so on. The paradox, however, is that learning, by definition, also includes instances in which we fail: where the information we thought was correct, turns out to be wrong, and or when we realize the current path we are on, will not work for us in the long run or in the end (Sansone & Morgan, 1992). Indeed, several lines of empirical science have demonstrated that love of learning is one of the character strengths needed for people to experience post-traumatic growth (Niemiec, 2012; Peterson & Seligman, 2003; Peterson et al., 2008; Tedeschi & Calhoun, 1995).

Perseverance. This character strength is defined as the process of sticking to a task regardless of obstacles and barriers that might arise during the completion of the task. It is synonymous with other trait labels such as tenacity, grit, and steadfastness. Perseverance is dependent on other traits such as hope, creativity, learning / work ethic, goal achievement and conscientiousness but is independent of traits such as intelligence (Duckworth et al., 2007). The connection between perseverance and resilience may seem inherent, but it is also supported by empirical research in a variety of fields. For example, research on candidates at the United States Military Academy, West Point, demonstrated that retention of cadets between first and second year (the most challenging/rigorous part of their time) was highest in those that had high 'grit' (Duckworth et al., 2007). Thereafter, the fast-paced nature of military operations requires members to be operationally ready in the face of stressful environments and maintain optimal levels of mental and physical performance over long periods of time. It is not surprising, then, that perseverance was noted several times by military leaders on the podcast.

Lieutenant-Colonel Luc-Frédéric Gilbert, JTF-U Commanding Officer, addresses the parade at a graduation ceremony at Kharkiv Air Force University on October 29, 2021 in Kharkiv, Ukraine.

Image by: Sergeant Alexandre Paquin, Canadian Armed Forces photo

Perspective. When we see the bigger picture and do not get overwhelmed by the minor details, we have demonstrated perspective. Again, this is a trait that is independent of intelligence but involves the capacity to maintain and use knowledge and critical thinking (Niemeic, 2020). It is one of the key character strengths that can buffer against the negative effects of stress and trauma (Park & Peterson, 2009), which are an inherent part of military service (e.g., Easterbrook et al., 2022; Straud et al., 2019). Additionally, perspective taking in its various forms (e.g., social, moral) is needed in the development of altruism – or the willingness to help others (Underwood & Moore, 1982). While conveyed as important by leaders on the podcast episodes, perspective does not appear to be a skill that is easily trained. It takes time to naturally develop and is something that must be practiced (Eyal, Steffel, & Epley, 2018) over time before we can use and demonstrate it effectively. This might be an opportunity for future military training and resilience research.

Prudence. Another important theme of resilience is found in the demonstration of prudence. While some interpretations of prudence see it as maladaptive and in opposition to resilience (e.g., Littleton et al., 2007; Mushonga, Rashid & Anderson, 2020), this character strength is a self-preservation technique that can protect people who rely on it from future stress or harm (LaMotte et al., 2016). More generally prudence is demonstrated when we are careful in our decision making and avoid unnecessary risk. It is synonymous with practical knowledge or practical wisdom (Connelly & Connelly, 2013). In terms of military leadership, this skill is dependent on 'situational awareness' (see Launder & Perry, 2014; Marusich et al., 2016; Catherwood et al., 2012; Goodwin et al., 2018) and is not only important for one's own professional/personal livelihood and resilience but also for the well-being of one's subordinates (Knighton, 2004).

Self-Regulation. Finally, self-regulation is a multidimensional construct that involves both basic physiological functions (e.g., regulation of stress hormones by the sympathetic nervous system) and complex cognitive functions (e.g., contemplating/gauging an appropriate reaction to stimuli; Bandura 2001; Gestsdóttir et al., 2014; McClelland et al. 2015). As such, it is important for all aspects of a person's ability to adapt (i.e., alter their emotions, thoughts, behaviours and physiology; McClelland et al., 2018) and is an inherent part of functionality within the Canadian Armed Forces. For example, research by Weltman and colleagues (2014) examined the usefulness of a stress resilience training system app in police and military officers. Their research found that training programs that include practical self-regulation skills improve psychological wellness in both law enforcement and military personnel (Weltman et al., 2014).

Why You Should Listen to Stories of Resilience / The Power of Storytelling

Work environments where military leaders demonstrate personal resilience are often more productive and healthier overall (e.g., Ihme & Sundstom 2020; McHugh, 2013). One way in which leaders can demonstrate resilience is by talking openly about the topic. This form of communication and the use of narratives (or storytelling) makes complex concepts easier (Suzuki et al., 2018) and increases our overall understanding of a topic. In addition, listening to how a colleague/superior speaks about a topic allows for a more authentic connection between presenter and listener (Suzuki et al., 2018). Thus, the Resilience Plus Podcast episodes presented by leaders within the Canadian Armed Forces in which the topic of resilience is discussed can increase the overall understanding of resilience. In addition, listeners gain resilience tools and knowledge by listening to what has worked for others in similar lines of work. These later insights might be particularly useful in identifying sustainable and effective opportunities for resilience development and maintenance. It also provides an accessible means for leaders to relay information to more people than their direct team, thereby having a broader impact on resilience development overall. However, as we continue to listen to these stories of resilience on the Resilience Plus Podcast, we recognize the need for a more specific qualitative thematic analysis of this content. This type of precise analysis will help clarify specifically how leaders experience resilience and how they convey this personalized knowledge to their teams and younger members serving in the Canadian Armed Forces.

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References

1. Aknin, L. B., Dunn, E. W., & Norton, M. I. (2012). Happiness runs in a circular motion: Evidence for a positive feedback loop between prosocial spending and happiness. *Journal of happiness studies, 13*(2), 347–355. DOI: 10.1007/s10902-011-9267-5

2. Altherr, L. C., Brötz, N., Dietrich, I., Gally, T., Geβner, F., Kloberdanz, H., Leise, P., Pelz, P. F., Schlemmer, P. & Schmitt, A. (2018). Resilience in mechanical engineering-a concept for controlling uncertainty during design, production and usage phase of load-carrying structures. In *Applied Mechanics and Materials* (Vol. 885, pp. 187–198). doi:10.4028/www.scientific.net/AMM.885.187

3. Bailey, S. (2015). The Canadian Forces Health Services Road to Mental Readiness Programme. *Medical Corps Int Forum*. Retrieved from: https://military-medicine.com/article/3150-canadian-forces-health-services.html

4. Baker Jr, G. H. (2015). *Preparing military leaders: A narrative inquiry exploring how senior enlisted leaders understand their learning as they transition from a technical role to a more strategic leader role.* Northeastern University.

5. Bandura , A. (2001). Social cognitive theory: An agentic perspective. *Annual Review of Psychology,* 52, 1–26. DOI: 10.1146/annurev.psych.52.1.1

6. Bartone, P. T. (2006). Resilience under military operational stress: can leaders influence hardiness?. *Military psychology, 18*(sup1), S131–S148. 8, DOI: 10.1207/s15327876mp1803s_10Buzzanell, P. M. (2010). Resilience: Talking, resisting, and imagining new normalcies into being. *Journal of Communication, 60*(1), 1–14.

7. Buzzanell, P. M., & Houston, J. B. (2018). Communication and resilience: Multilevel applications and insights— A Journal of Applied Communication Research forum. *Journal of Applied Communication Research, 46*(1), 1–4. DOI: 10.1080/00909882.2017.1412086

8. Catherwood D, Edgar GK, Sallis G, Medley A, Brookes D (2012) Fire alarm or false alarm?! Situation awareness and decision-making "bias" of firefighters in training exercises. Int J Emerg Serv 1(2):135–158. DOI: 10.1108/20470891211275920

9. Cheavens, J. S., Feldman, D. B., Woodward, J. T., & Snyder, C. R. (2006). Hope in cognitive psychotherapies: On working with client strengths. *Journal of Cognitive Psychotherapy, 20*(2), 135–145. DOI:10.1891/088983906780639844

10. Cohn, A., Hodson, S., & Crane, M. (2010). Resilience training in the Australian Defence Force. *InPsych, 32* (2), Article: April. DOI: https://psychology.org.au/publications/inpsych/2010/april/cohn

11. Connelly , F. M. , & Connelly , G. C. 2013 . Curriculum policy guidelines: Context, structure and functions. In A. Luke , A. Woods , & K. Weir , *Curriculum syllabus design and equity: A primer and model* (pp. 54-73). New York , NY : Routledge

12. Csikszentmihalyi, M. (1997). Flow and the psychology of discovery and invention. *HarperPerennial, New York, 39*.

13. Curry, O. S., Rowland, L. A., Van Lissa, C. J., Zlotowitz, S., McAlaney, J., & Whitehouse, H. (2018). Happy to help? A systematic review and meta-analysis of the effects of performing acts of kindness on the well-being of the actor. *Journal of Experimental Social Psychology,* 76, 320-329. https://doi.org/10.1016/j.jesp.2018.02.014

14. Duckworth, A. L., Peterson, C., Matthews, M. D., & Kelly, D. R. (2007). Grit: perseverance and passion for long-term goals. *Journal of Personality and Social Psychology, 92*(6), 1087–1101. DOI:

15. Easterbrook, B., Brown, A., Millman, H., Van Blyderveen, S., Lanius, R., Heber, A., McKinnon, M. & O'Connor, C. (2022). Original qualitative research— The mental health experience of treatment-seeking military members and public safety personnel: a qualitative investigation of trauma and non-trauma-related concerns. *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice, 42*(6), Article 252. https://doi.org/10.24095/hpcdp.42.6.03

16. Eyal, T., Steffel, M., & Epley, N. (2018). Perspective mistaking: Accurately understanding the mind of another requires getting perspective, not taking perspective. *Journal of Personality and Social Psychology, 114*(4), 547-571. DOI: 10.1037/pspa0000115

17. Fikretoglu, D., Liu, A., Nazarov, A., & Blackler, K. (2019). A group randomized control trial to test the efficacy of the Road to Mental Readiness (R2MR) program among Canadian military recruits. *BMC Psychiatry, 19,* Article 326. DOI: 10.1186/s12888-019-2287-0

18. Folke, C. (2016). Resilience (Republished). *Ecology and Society, 21*(4), 1-30. DOI: https://www.jstor.org/stable/26269991

19. Franken, E. (2019): Building people up: Leadership and employee resilience. [Doctoral Disseration] Te Herenga Waka-Victoria University of Wellington. https://doi.org/10.26686/wgtn.17142083.v1

20. Franken, E., Plimmer, G., & Malinen, S. (2020). Paradoxical leadership in public sector organisations: Its role in fostering employee resilience. *Australian Journal of Public Administration, 79*(1), 93-110. DOI: 10.1111/1467-8500.12396

21. Gestsdottir, S., von Suchodoletz, A., Wanless, S. B., Hubert, B., Guimard, P., Birgisdottir, F., ... & McClelland, M. (2014). Early behavioral self-regulation, academic achievement, and gender: Longitudinal findings from France, Germany, and Iceland. *Applied Developmental Science, 18*(2), 90-109. https://doi.org/10.1080/10888691.2014.894870

22. Godwin H, Liversedge S, Kirkby J, Boardman M, Cornes K, Donnelly N (2015) The influence of experience upon information-sampling and decision-making behavior during risk assessment in military personnel. *Visual Cognition, 23*(4):415-431. DOI: 10.1080/13506285.2015.1030488

23. Gruber, C. (2011). The psychology of courage: Modern research on an ancient virtue. *Integrative Psychological and Behavioral Science, 45*(2), 272-279. DOI 10.1007/s12124-011-9155-x

24. Herrman, H., Stewart, D. E., Diaz-Granados, N., Berger, E. L., Jackson, B., & Yuen, T. What is resilience? *The Canadian Journal of Psychiatry, 56*(5):258-265. DOI:10.1177/070674371105600504

25. Houston, J. B., & Buzzanell, P. M. (2018). Communication and resilience: Concluding thoughts and key issues for future research. *Journal of Applied Communication Research, 46*(1), 26-27.

26. Ihme, K. R., & Sundstrom, P. (2021). The mindful shield: The effects of mindfulness training on resilience and leadership in military leaders. *Perspectives in Psychiatric Care, 57*(2), 675-688. DOI: 10.1111/ppc.12594

27. Isaacs, K., Mota, N. P., Tsai, J., Harpaz-Rotem, I., Cook, J. M., Kirwin, P. D., ... & Pietrzak, R. H. (2017). Psychological resilience in US military veterans: A 2-year, nationally representative prospective cohort study. *Journal of Psychiatric Research, 84*, 301–309. http://dx.doi.org/10.1016/j.jpsychires.2016.10.017

28. Jordan, J. V. (2005). Relational resilience in girls. In E. Goldstein & R. B. Brooks (Eds.),–*Handbook of resilience in children* (pp. 91–105). New-York, NY: Springer.

29. Knighton, A. L. (2004). *Idle threats: The limits of productivity in 19th-century America.* University of Minnesota.

30. LaMotte A. D., Taft C. T., Weatherill R. P. (2016). Mistrust of others as a mediator of the relationship between trauma exposure and use of partner aggression. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(4), 535–540. DOI: 10.1037/tra0000157

31. Launder D, Perry C (2014) A study identifying factors influencing decision making in dynamic emergencies like urban fire and rescue settings. International Journal of Emergency Services 3(2), 144–161. DOI: 10.1108/IJES-06-2013-0016

32. Littleton H., Horsley S., John S., Nelson D. V. (2007). Trauma coping strategies and psychological distress: A meta-analysis. *Journal of Traumatic Stress, 20*(6), 977–988. DOI: 10.1002/jts.20276

33. Kirton, M. J. (1994). A theory of cognitive style. In M. J. Kirton (Ed.). *Adaptors and innovators: Styles of creativity and problem-solving* (pp. 1–33). London: Routledge.

34. Ko, K., Margolis, S., Revord, J., & Lyubomirsky, S. (2021). Comparing the effects of performing and recalling acts of kindness. *The Journal of Positive Psychology, 16*(1), 73–81. DOI: 10.1080/17439760.2019.1663252

35. McClelland, M. M., John Geldhof, G., Cameron, C. E., & Wanless, S. B. (2015). Development and self-regulation. *Handbook of child psychology and developmental science*, 1–43.

36. McClelland, M., Geldhof, J., Morrison, F., Gestsdóttir, S., Cameron, C., Bowers, E., ... & Grammer, J. (2018). Self-regulation. *Handbook of life course health development*, 275–298. DOI: 10.1007/978-3-319-47143-3_12

37. McGuire, A. P., Fagan, J. G., Tsai, J., Merians, A. N., Nichter, B., Norman, S. B., ... & Pietrzak, R. H. (2022). Dispositional gratitude predicts the development of psychopathology and suicidal behaviors: Results from a 7-year population- based study of US military veterans. Journal of *Psychiatric Research, 149*, 168–176. https://doi.org/10.1016/j.jpsychires.2022.02.028

38. McGuire, A. P., Fogle, B. M., Tsai, J., Southwick, S. M., & Pietrzak, R. H. (2021). Dispositional gratitude and mental health in the U.S. veteran population: Results from the National Health and Resilience Veterans Study. Journal of Psychiatric Research, 135, 279–288. https://doi.org/10.1016/j.jpsychires.2021.01.020

39. McHugh G. (2013). *An Examination of the Influence of Culture, Climate and Leadership as Drivers of a Healthy Workplace.* [Doctoral dissertation] University of Northern British Columbia. ProQuest Dissertations & Theses Global

40. Macfarlane, J. (2019). Exploring how awareness of character strengths can benefit mental health nurses. *British Journal of Mental Health Nursing, 8*(3), 145–152. DOI: 10.12968/bjmh.2019.8.3.145

41. Manyena, S. B. (2006). The concept of resilience revisited. *Disasters, 30*(4), 434–450. DOI: 10.1111/j.0361-3666.2006.00331.x

42. Martínez-Martí, M. L., & Ruch, W. (2017) Character strengths predict resilience over and above positive affect, self-efficacy, optimism, social support, self-esteem, and life satisfaction. *The Journal of Positive Psychology, 12*(2), 110–119, DOI: 10.1080/17439760.2016.1163403

43. Marusich LR, Bakdash JZ, Onal E, Yu MS, Schaffer J, O'Donovan J, Höllerer T, Buchler N, Gonzalez C (2016) Effects of information availability on command-and-control decision making: performance, trust, and situation awareness. Hum Factors 58(2):301–321. DOI: 10.1177/0018720815619515

44. Metzl, E. S., & Morrell, M. A. (2008). The role of creativity in models of resilience: Theoretical exploration and practical applications. *Journal of Creativity in Mental Health, 3*(3), 303–318. doi:10.1080/15401380802385228

45. Mushonga, D. R., Rasheem, S., & Anderson, D. (2021). And still I rise: resilience factors contributing to posttraumatic growth in African American women. *Journal of Black Psychology, 47*(2–3), 151–176. https://doi.org/10.1177/0095798420979805

46. Niemiec, R. M. (2012). Mindful living: Character strengths interventions as pathways for the five mindfulness trainings. International Journal of Wellbeing 2(1), 22–33. doi:10.5502/ijw.v2i1.2

47. Niemiec, R. (2020). Six functions of character strengths for thriving in times of adversity and opportunity: A theoretical perspective. *Applied Research in Quality of Life, 15*, 551–572. https://doi.org/10.1007/s11482-018-9692-2

48. Oduntan, A., Oyebode, O., Beltran, A. H., Fowles, J., Steeves, D., & Orji, R. (2022). I let depression and anxiety drown me: identifying factors associated with resilience based on journaling using machine learning and thematic analysis. *IEEE Journal of Biomedical and Health Informatics*. DOI: 10.1109/JBHI.2022.3149862

49. Otake, K., Shimai, S., Tanaka-Matsumi, J., Otsui, K., & Fredrickson, B. L. (2006). Happy people become happier through kindness: A counting kindnesses intervention. *Journal of happiness studies, 7*(3), 361–375. DOI 10.1007/s10902-005-3650-z

50. Park, N., & Peterson, C. (2009). Character strengths: Research and practice. *Journal of college and character, 10*(4), 1–10. DOI: 10.2202/1940-1639.1042

51. Peterson, C., Park, N., Pole, N., D'Andrea, W., & Seligman, M. E. (2008). Strengths of character and posttraumatic growth. *Journal of Traumatic Stress: Official Publication of the International Society for Traumatic Stress Studies, 21*(2), 214–217. DOI: 10.1002/jts.20332

52. Peterson, C., & Seligman, M. E. (2004). *Character strengths and virtues: A handbook and classification* (Vol. 1). Oxford University Press.

53. Precious, D., & Lindsay, A. (2018). Mental resilience training. *Journal of the Royal Army Medical Corp, 2018*, 1–3. DOI: 10.1136/jramc-2018-001047

54. Rachman, S. J. (1990). *Fear and courage.* WH Freeman/Times Books/Henry Holt & Co.

55. Rashid, T., & Seligman, M. P. (2018). *Positive psychotherapy: Clinician manual.* Oxford University Press.

56. Renninger, K., Sansone, C., & Smith, J. L. (2004). Love of Learning, In C. Peterson & M. E. P. Seligman (Eds.), *Character Strengths and Virtues: A Handbook and Classification* (pp. 161–179). Oxford University Press.

57. Ruch, W., Gander, F., Wagner, L., & Giuliani, F. (2021). The structure of character: On the relationships between character strengths and virtues. *The Journal of Positive Psychology, 16*(1), 116–128. DOI: 10.1080/17439760.2019.1689418

58. Ruch, W., Proyer, R. T., Harzer, C., Park, N., Peterson, C., & Seligman, M. E. P. (2010). Values in action inventory of strengths (VIA-IS). *Journal of Individual Differences, 31*, 138–149. doi:10.1027/1614-0001/a000022

59. Rutter, M. (1993). Resilience: Some conceptual considerations. *Journal of Adolescent Health, 14*(8), 626–631. DOI: 10.1016/1054-139X(93)90196-V

60. Sansone, C., & Morgan, C. (1992). Intrinsic motivation and education: Competence in context. *Motivation and Emotion, 16*(3), 249–270. DOI: 10.1007/BF00991654

61. Seligman, M. (2011). *Flourish: A Visionary New Understanding of Happiness and Well-being.* Free Press, New York. 2011

62. Seligman, M. E., Steen, T. A., Park, N., & Peterson, C. (2005). Positive psychology progress: empirical validation of interventions. *American Psychologist, 60*(5), 410–421. DOI: 10.1037/0003-066X.60.5.410

63. Snyder, C. R., Feldman, D. B., Taylor, J. D., Schroeder, L. L., & Adams III, V. H. (2000). The roles of hopeful thinking in preventing problems and enhancing strengths. *Applied and Preventive Psychology, 9*(4), 249–269. https://doi.org/10.1016/S0962-1849(00)80003-7

64. Snyder, C. R., Harris, C., Anderson, J. R., Holleran, S. A., Irving, L. M., Sigmon, S. T., ... & Harney, P. (1991). The will and the ways: development and validation of an individual-differences measure of hope. *Journal of personality and social psychology, 60*(4), 570–585. DOI: 10.1037/0022-3514.60.4.570

65. Snyder, C. R., Rand, K. L., & Ritschel, L. A. (2006). Hope Over Time. In L. J. Sanna & E. C. Chang (Eds.), *Judgments over time: The interplay of thoughts, feelings, and behaviors* (pp. 100–119). Oxford University Press. DOI:10.1093/acprof:oso/9780195177664.003.0007

66. Snyder, C. R., Ritschel, L. A., Rand, K. L., & Berg, C. J. (2006). Balancing psychological assessments: Including strengths and hope in client reports. *Journal of clinical psychology, 62*(1), 33–46. DOI: 10.1002/jclp.20198

67. Straud, C. L., Siev, J., Messer, S., & Zalta, A. K. (2019). Examining military population and trauma type as moderators of treatment outcome for first-line psychotherapies for PTSD: A meta-analysis. *Journal of Anxiety Disorders, 67*, Article 102133. DOI: 10.1016/j.janxdis.2019.102133

68. Suzuki, W. A., Feliú-Mójer, M. I., Hasson, U., Yehuda, R., & Zarate, J. M. (2018). Dialogues: The science and power of storytelling. *Journal of Neuroscience, 38*(44), 9468–9470. DOI:10.1523/JNEUROSCI.1942-18.2018

69. Taleb, N. N. (2012). *Antifragile: Things that gain from disorder* (Vol. 3). Random House.

70. Tedeschi, R. G., & Calhoun, L. G. (1995). *Trauma and transformation*. Sage.

71. Trew, J. L., & Alden, L. E. (2015). Kindness reduces avoidance goals in socially anxious individuals. *Motivation and Emotion, 39*(6), 892–907. https://doi-org.proxy.queensu.ca/10.1007/s11031-015-9499-5

72. Torrance, E. P. (1995). Insights about creativity: Questioned, rejected, ridiculed, ignored. *Educational Psychology Review, 7*(3), 313–322. https://www.jstor.org/stable/23359353

73. Umucu, E., Chan, F., Phillips, B., Tansey, T., Berven, N., & Hoyt, W. (2017). Evaluating optimism, hope, resilience, coping flexibility, secure attachment, and PERMA as a well-being model for college life adjustment of student veterans: A hierarchical regression analysis. *Rehabilitation Counseling Bulletin*, 1–17. DOI: 10.1177/00343552221127032

74. Underwood, B., & Moore, B. (1982). Perspective-taking and altruism. *Psychological Bulletin, 91*(1), 143–173. DOI: DOI: 10.1037/0033-2909.91.1.143

75. Weltman, G., Lamon, J., Freedy, E., & Chartrand, D. (2014). Police department personnel stress resilience training: an institutional case study. *Global Advances in Health and Medicine, 3*(2), 72–79. DOI: 10.7453/gahmj.2014.015