





# MINDFULNESS TRAINING: A KEY ENABLER TO INCREASE CANADIAN ARMY'S RESILIENCE AND ITS ABILITY TO APPLY LAND POWER

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# MINDFULNESS TRAINING: A KEY ENABLER TO INCREASE CANADIAN ARMY'S RESILIENCE AND ITS ABILITY TO APPLY LAND POWER

### **AIM**

1. This following paper will analyze how Emotional Intelligence (EI), specifically mindfulness, can increase Canadian Army's (CA) resilience. Resilience or the lack thereof could be the greatest challenge facing the Canadian Army's ability to apply land power over the next ten years. Because of the nature of their jobs, CA's members can be exposed to traumatic situations and find themselves at risk of battling mental health issues. It has been recognized in Canada's defence policy that Operational Stress Disorder (OSI) affects CA's operational effectiveness and more needs to be done to prevent and treat the injuries. Mindfulness Training (MT) has proven to be efficacious in reducing stress in different civilian context. Research with the United States (U.S.) military has been conducted with encouraging results. MT should be considered in order to increase CA resilience and operational effectiveness in order to face emerging threats.

#### INTRODUCTION

2. The emerging threats of the future land operating environment will be increasingly complex and diverse. Economic inequalities, youth employment, scarcity of resources and the

<sup>&</sup>lt;sup>1</sup> Department of National Defence, *Strong, Secure, Engage, Canada's Defence Policy* (Ottawa: DND Canada, 2017), 26.

<sup>&</sup>lt;sup>2</sup> Elizabeth A. Stanley, John M. Schaldach, Anastasia Kiyonaga and Amishi P. Jha, "Mindfulness-based Mind Fitness Training: A Case Study of a High-Stress Predeployment Military Cohort," *Cognitive and behavioral Practice* 18, no. 4 (November 2011): 566, https://www.sciencedirect.com/science/article/pii/S1077722911000083.

disastrous effects of climate change can all escalate and lead to an armed conflict. Radical groups can easily use the internet and social media for recruitment and propaganda to their advantage. State and non-state actors will be equipped with more advanced technologies. In order to remain effective and relevant in the wide range of potential conflicts, CA's main challenge will be to increase the resilience of its personnel. With the best equipment and the most sophisticated technologies, soldiers might survive lethal threats, but it is useless if operational effectiveness is affected by OSI. The uncertainties found in the future land operating environment will augment the necessity for rapid recovery from difficulties and setbacks.

3. Military personnel are at greater risks of suffering from mental health disorders due to trauma experienced in combat and peacekeeping missions, time spent away from family and stress caused by recurrent relocation and by uncertainties.<sup>4</sup> Some of the mental health disorders experienced by CA's members are substance abuse and addiction, depression and suicide, post-traumatic syndrome (PTSD), operational stress injuries<sup>5</sup> (OSI) and generalized anxiety disorder.<sup>6</sup> A study done on Canadian Armed Forces (CAF) members deployed to Afghanistan between 2001 and 2008 showed that 13.5% of the participants had been diagnosed with a mental health

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<sup>&</sup>lt;sup>3</sup> Department of National Defence, *Close Engagement : Land Power in the Age of Uncertainty* (Ottawa : DND Canada, 2017), 4.

<sup>&</sup>lt;sup>4</sup> Minister of Industry, *Mental health of the Canadian Armed Force* (Ottawa: Canada Communication Group, 2014), 3.

<sup>&</sup>lt;sup>5</sup> Department of National Defence, *Strong, Secure, Engage, Canada's Defence Policy* (Ottawa: DND Canada, 2017), 26.

<sup>&</sup>lt;sup>6</sup> Minister of Industry, *Mental health of the Canadian Armed Force* (Ottawa: Canada Communication Group, 2014), 4.

dysfunction.<sup>7</sup> In the CAF, mental health disorders are the leading cause of absenteeism which impacts production.<sup>8</sup>

4. Following a Statistics Canada survey which showed that up to 96% of CAF members meeting a criterion of mental health disorder didn't seek medical help because they thought they didn't require medical attention, it became obvious that mental health training was necessary. The Road to Mental Readiness (R2MR) program was created to enable military members to recognize mental distress within themselves and others, eliminate stigma and increase resilience. The R2MR program provides resilience training by proposing four skills to the CAF member: goal setting, visualization, self-talk and tactical breathing. This paper will explore how MT should be added to the mental health R2MR education program in order to increase its effectiveness.

#### **DISCUSSION**

### Mindfulness and its benefits

5. Mindfulness can be explained as focusing one's attention to the present. It also means acceptance of the present. While being in the moment of the present, one acknowledges body,

<sup>&</sup>lt;sup>7</sup> *Ibid.*, 3.

<sup>°</sup> Ibid.

<sup>&</sup>lt;sup>9</sup> Suzanne Bailey, Canadian Forces Health Services Road to mental Health Readiness program," *MCIF* (April 2015): 1.

http://www.ptsdconference.mun.ca/Presentations/P9 Bailey.pdf.

feelings and emotions without judging them.<sup>11</sup> Since the human mind is always wandering between past and future, being in the moment creates a feeling of calm and well-being. One cannot change the past and doesn't know how the future will unfold. The only thing one can control is the present.

6. MT resulted in measurable evidence by alleviating the perception of stress and reducing the number of sick days while increasing concentration, creativity, productivity and happiness. <sup>12</sup> It also improves one's capacity to recognize emotions in themselves and in others. It improves the ability to resolve conflicts in personal life and in the workplace and to recover quickly from difficulties. <sup>13</sup>

#### Scientific Evidences

7. Eastern philosophies and traditions have a long history of mindfulness but has now made its way to the Western world. In the last two decades, a lot of research has been conducted on mindfulness in the field of neuroscience, psychology and medicine and it has proven to be an effective approach against stress and mental health disorders.<sup>14</sup> There is considerable evidence of

<sup>11</sup> Xueming Bao, Song Xue and Feng Kong, "Dispositional mindfulness and perceived stress: The role of emotional intelligence," *Personality and Individual Differences* 78, (2015):48.

<sup>&</sup>lt;sup>12</sup> Richard Mogg, "Mindfulness for Military: Improving Human Performance, Cognitive Mastery, Emotional Intelligence and Resilience," *Grounded Curiosity:Intellect and innovation for warfighing capability*," last modified 19 November 2016, https://groundedcuriosity.com/mindfulness-for-military-improving-human-performance-cognitive-mastery-emotional-intelligence-and-resilience/.

<sup>&</sup>lt;sup>13</sup> Chade-Meng Tan, Search Inside Yourself (New York: HarperCollins Publishers, 2012), 5-6.

<sup>&</sup>lt;sup>14</sup> Elizabeth A. Stanley, John M. Schaldach, Anastasia Kiyonaga and Amishi P. Jha, "Mindfulness-based Mind Fitness Training: A Case Study of a High-Stress Predeployment Military Cohort," *Cognitive and behavioral Practice* 18, no. 4 (November 2011): 566, https://www.sciencedirect.com/science/article/pii/S1077722911000083.

the effectiveness of MT to alleviate mental health disorders such as personality disorder, substance abuse, anxiety disorder and PTSD.<sup>15</sup>

- 8. Furthermore, some neurobiology research demonstrated a correlation with MT and the activation of the left prefrontal cortex, a part of the brain activated during positive emotions such as joy and enthusiasm. Researchers Pagnoni and Cekic were able to prove with magnetic resonance imaging (MRI) that regular MT protects the neuron from degradation due to aging. The MRI showed a higher density of the cerebral cortex which is responsible for human's cognitive capabilities such as thinking rationally, problem solving, focusing and managing emotions. The MRI also revealed a higher density in the hippocampus, the part of the brain credited for learning and memory. The magnetic redited for learning and memory.
- 9. In addition, it has been proven in a study on cancer patients that MT improved their sleep quality and reduced their fatigue and stress. <sup>18</sup> Military personnel can find their sleep quality reduced by shift work, long working hours during operation or sleep patterns affected by PTSD. If MT helps cancer patient sleep better, it might also be able to increase sleep quality for personnel deployed in a stressful conflict environment.

<sup>16</sup> Chade-Meng Tan, Search Inside Yourself (New York: HarperCollins Publishers, 2012), 2.

<sup>&</sup>lt;sup>15</sup> *Ihid* 567

<sup>&</sup>lt;sup>17</sup> G. Pagoni and M. Cekic, "Age Effects on Gray Matter Volume and Attention Perfromance," *Neurobiology of Aging Volume 28*, no. 10 (2007): 1623-1627.

<sup>&</sup>lt;sup>18</sup> L.E. Carlson and S.N. Garland, "Impact of Mindfulness Based Stress Reduction (MBSR) on Sleep, Mood, Stress and Fatigue Symptoms in Cancer Outpatients," *International Journal of Behavioural Medicine* 12, no. 4 (2005): 278.

10. Overall, MT enables a person to connect with their thoughts and emotions without being overwhelmed and drowning in them. Therefore, it facilitates self-regulation and allows individuals to pause and deliberately pick the most useful and efficient way to deal with a situation instead of being reactive and carried away by emotions.<sup>19</sup>

# **Civilian Applications of Mindfulness Training**

11. Many corporations created their MT program. The precursor was Google with training called Search Inside Yourself. It quickly became Google's most popular professional development activity amongst their employees. The effects of the training on the employees were significantly measurable: increase in productivity, creativity, overall well-being. Other innovative corporations such as SAP, General Electric, Cochlear, Harvard University, Ford, Sony, Citrix, IKEA, Microsoft, Accenture, Nike, Ratheon and Deutsche Bank has now followed Google's footsteps and created their own MT programs. MT programs have also been implemented in some correctional facilities in the U.S. as a means to improve community reintegration of the prisoner and to reduce the return-to-prison rate which is about 45%. Amongst many research, a ten-day Vipassana meditation retreat was introduced in a high

<sup>&</sup>lt;sup>19</sup> Richard Mogg, "Mindfulness for Military: Improving Human Performance, Cognitive Mastery, Emotional Intelligence and Resilience," *Grounded Curiosity:Intellect and innovation for warfighing capability*," last modified 19 November 2016, https://groundedcuriosity.com/mindfulness-for-military-improving-human-performance-cognitive-mastery-emotional-intelligence-and-resilience/.

<sup>&</sup>lt;sup>20</sup> Chade-Meng Tan, Search Inside Yourself (New York: HarperCollins Publishers, 2012), 2.
<sup>21</sup> Richard Mogg, "Mindfulness for Military: Improving Human Performance, Cognitive Mastery,
Emotional Intelligence and Resilience," Grounded Curiosity:Intellect and innovation for warfighing capability," last modified 19 November 2016, https://groundedcuriosity.com/mindfulness-for-military-improving-human-performance-cognitive-mastery-emotional-intelligence-and-resilience/.

<sup>&</sup>lt;sup>22</sup> Abigayl M. Perelman, Sarah L. Miller, Carl B. Clements, Amy Rodriguez, Kathryn Allen and Ron Cavanaugh, "Meditation in a Deep South Prison: A Longitudinal Study of the Effects of Vipassana," *Journal of Offender Rehabilitation* 51, no. 3 (April 2012): 192.

security prison in Alabama. The researchers found that inmates with MT had better emotional intelligence and emotional management than the comparison group even a year after the retreat.<sup>23</sup>

12. The interest in MT has also reached the United Kingdom (UK) which created the Mindfulness All-Parliamentary Group. The objectives of the enquiry were to review research data, find MT best practices and propose recommendations for MT implementation in the public sector. Impressed with the findings, the group recommended MT to be conducted in all government departments with a long-term goal of being a leading nation on the subject. They are also conducting a pilot project in schools, creating programs for businesses and implementing MT in the health care system.<sup>24</sup>

# **Military Applications of Mindfulness Training**

- 13. MT has many useful applications to the military. The soldiers operating in a digitalized environment with multiple screens and device to monitor require higher concentration skills. The multiple electronic devices are a challenge for the attention span. In order to be efficient, managing attention is a necessary cognitive skill.
- 14. MT can also strengthen attention since it reduces mind wandering and increases concentration. Research suggests that adults are spending 46.9% of their time thinking about the

Ibid., 176.
 Report by the Mindfulness All-Party Parliamentary Group. Mindful Nation UK (London: UK) Communication Group, 2015), 6-7.

past or the future instead of thinking about the task they are executing. <sup>25</sup> Mind wandering can be triggered by negative mood, craving and stress. Attentional skill proves to be useful for a military member in a conflict zone. Some research was conducted on U.S. Army military members demonstrated that MT increased the attentional performance during high stress period. <sup>26</sup>

- 15. MT can also augment information management efficiency. Research demonstrates that information overload combined with multitasking not only diminishes effectiveness and productivity but also impacted stress level and health.<sup>27</sup> By increasing concentration, MT also improves information management while reducing perceived stress level.
- 16. As tempting as multitasking can be, research has proven that it gives a false sense of effectiveness and productivity. Eurthermore, the brain becomes addicted to digital stimulation and multitasking. It becomes excited by the change of task and the distraction. Eventually, the brain gets more exhausted from switching from one task and to another, less productive and

<sup>25</sup> M.A. Killingsworth and D.T. Gilbert, "A Wandering Mind In an Unhappy Mind," *Science* 330, no. 6006 (September 2010): 932. http://www.danielgilbert.com/KILLINGSWORTH%20&%20GILBERT%20(2010).pdf.

<sup>27</sup> David Bawden and Lyn Robinson, "The Dark Side of Information: Overload, Anxiety and Other Paradoxes and Pathologies," *Journal of Information Science* 25, no.2 (2009): 184-185.

<sup>&</sup>lt;sup>26</sup> Amishi P. Jha, Alexandra B. Morrison, Justin Dainer-Best, Suzanne Parker, Nina Rostrup and Elizabeth A. Stanley, "Minds "At Attention": Mindfulness Training Curbs Attentional Lapses in Military Cohorts," *PLOS One* 10, no. 2 (2015): 2,

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4324839/.

<sup>&</sup>lt;sup>28</sup> Richard Mogg, "Mindfulness for Military: Improving Human Performance, Cognitive Mastery, Emotional Intelligence and Resilience," *Grounded Curiosity:Intellect and innovation for warfighing capability*," last modified 19 November 2016, https://groundedcuriosity.com/mindfulness-for-military-improving-human-performance-cognitive-mastery-emotional-intelligence-and-resilience/.

efficient and retains less information.<sup>29</sup> MT can help focusing at the task at hand, while fully aware of the surroundings. Therefore, MT increases effectiveness and productivity.

- 17. Research is suggesting that MT in the workplace reduced the level of stress, anxiety and depression.<sup>30</sup> Moreover, a study done on U.S. Marines during their pre-deployment training indicated that MT decreased the perception of stress and increased the sensation of well-being.<sup>31</sup>
- 18. Although research on MT in the workplace is still in its infancy, the benefits are promising. Many research demonstrates a positive correlation between MT and resilience. A mindfulness working environment allows people to recognize sources of stress and enables them to deal with stress more efficiently. This translates into a more optimistic workforce where depression, burnout, conflicts, absenteeism and suicide are on the decline.<sup>32</sup> Also, there is a positive correlation between MT in the workplace and collaboration between employees, performance, creativity and innovation.<sup>33</sup>
- 19. Some studies suggest that MT positively impacts leadership. For example, a study was performed on 96 supervisors who received MT. It identified a relation between the employer's

<sup>&</sup>lt;sup>30</sup> Simon Gregoire and Lise Lachance, "Evaluation of a Brief Mindfulness-Based Intervention to Reduce Psychological Distress in the Workplace," *Mindfulness* 6, no. 4 (August 2005): 836.

Elizabeth A. Stanley, John M. Schaldach, Anastasia Kiyonaga and Amishi P. Jha, "Mindfulness-based Mind Fitness Training: A Case Study of a High-Stress Predeployment Military Cohort," Cognitive and behavioral Practice 18, no. 4 (November 2011): 567, https://www.sciencedirect.com/science/article/pii/S1077722911000083.

<sup>&</sup>lt;sup>32</sup> Jamie Bristow, "Building a Case for Mindfulness in the Workplace," *The Mindfulness Initiative* (London: Mindfulness Initiative, 2016), 9-10, http://www.themindfulnessinitiative.org.uk/images/reports/MI Building-the-Case\_v1.1\_Oct16.pdf.

33 Ibid., 12-15.

MT and the employee's well-being and work performance.<sup>34</sup> MT would allow leaders to notice their thoughts and emotions and instead of reacting impulsively. MT trained leaders can add perspective and deliberately choose the best response to a situation.<sup>35</sup>

20. Lastly, there are many evidences that MT can alleviate mental health issues such as anxiety and depression. It also reduces relapse by 50%. In a study done on U.S. military veterans suffering from PTSD who received MT, there was a meaningful improvement of the PTSD symptoms. 37

#### **CONCLUSION**

21. The CA's is facing the challenge of keeping its member operationally fit in order to face emerging threats. The number of personnel battling mental health disorders is alarming. The percentage of military members committing suicide after a deployment is also concerning.

Mental Health is also impacting retention as some members are medically released. The R2MR program has been created to address the need for helping military members recognize distress symptoms in themselves and in others and to change the stigma on mental health issues. To be

<sup>34</sup> *Ibid.*, 12.

<sup>36</sup> Report by the Mindfulness All-Party Parliamentary Group. *Mindful Nation UK* (London: UK Communication Group, 2015), 20.

<sup>&</sup>lt;sup>35</sup> *Ibid*.

Anthony P. King, Thane M. Erickson, Nicholas D. Giardino, Todd Favorite, Sheila A.M. Rauch, Elizabeth Robinson, Madhur Kulkarni and Israel Liberzon, "A pilot study of group mindfulness-based cognitive therapy (MBCT) for combat veterans with posttraumatic stress disorder (PTSD)," *Depression and Anxiety: The official journal ADAA* 30, no. 7 (July 2013): 638.

robust and resilient, CA needs to look out for a breakthrough in research and innovations on resilience and the reduction of mental health issues in the workplace.

- 22. MT has proven itself to be efficient in alleviating mental health disorders such as substance abuse, anxiety disorder and PTSD, all of which are affecting CA's members. It is also successful in reducing the perception of stress and increasing the sensation of well-being. All of which are reducing CA's resilience.
- 23. MT has demonstrated its potential for improving workplace relations and leadership. It can also increase work performance, concentration, information management, creativity and innovation. The benefits of MT are so meaningful that many innovative corporations have implemented a MT program. MT programs have also been put in place in the UK's parliamentary and public function, in incarceration facilities and in the U.S. Army and other armed forces
- 24. If CA wants to keep a competitive edge, improve resilience and retention, it should innovate and set up an MT program.

#### RECOMMENDATION

- 25. It is recommended that several studies be conducted by Defence Research and Development Canada (DRDC) to test the best method of instruction for CA's member and to identify MT best practices and teaching methods.
- 26. MT delivery in the workplace can take various forms. Some corporations use teacher-led courses with some practice exercises to be completed at home. Others have opted for online courses since it allows reaching greater audience at less cost. Nevertheless, research on the effectiveness of the different programs are limited.
- 27. There are many ways that CA can incorporate MT in the military routine. For example, Google offers both teacher-led and online courses. Mindfulness practises are available in 35 of Google working locations around the globe. Also, retreats are offered to employees in five locations. Google is also conducting research on MT. Keeping personnel practising mindfulness has been identified as the greatest challenge. In order to mitigate this, Google incorporated MT into meetings and is encouraging initiatives of mindfulness practises in the workplace.<sup>38</sup>
- 28. The CA should reach out to its allies to partner with them on research projects on MT.

  The Australian Defense Force has started MT trials with the Royal Australian Air Forces during

 $<sup>^{38}</sup>$  Report by the Mindfulness All-Party Parliamentary Group. *Mindful Nation UK* (London: UK Communication Group, 2015), 44.

their resilience training. The Australian Headquarters Force Command is also conducting lunchtime MT on a weekly basis. Furthermore, the Australian's Special Operations Command is conducting MT as part of their Human Performance Optimization Program.<sup>39</sup> Also, the UK with their mindfulness initiative is looking at implementing MT for their armed forces. Furthermore, the U.S. Army has an MT program and is conducting studies in collaboration with the University of Miami.<sup>40</sup> Many options for partnerships with allies are available for the development of CA's MT program.

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<sup>&</sup>lt;sup>39</sup> Richard Mogg, "Mindfulness for Military: Improving Human Performance, Cognitive Mastery, Emotional Intelligence and Resilience," *Grounded Curiosity:Intellect and innovation for warfighing capability*," last modified 19 November 2016, https://groundedcuriosity.com/mindfulness-for-military-improving-human-performance-cognitive-mastery-emotional-intelligence-and-resilience/.

<sup>&</sup>lt;sup>40</sup> Melissa Myers, "Improving Military Resilience Through Mindfulness Training," last modified 1 June 2015, https://www.army.mil/article/149615/improving\_military\_resilience\_through\_mindfulness\_training.

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