

RESEARCH NEWSLETTER - ISSUE#1 (AUGUST 2023)



Welcome to the inaugural issue of Research Compass, the Atlas Institute's new regular newsletter about our Veteran and Family well-being research. We recognize that Veterans and their Families are interested in receiving updated information about the studies they have read about or participated in, so we created this newsletter to keep you up to date on our latest developments and activities.

At the Atlas Institute, we pride ourselves on being at the forefront of leading and supporting novel research in the field of Veteran and Family mental health and well-being. As we believe that the insights of Veterans and Families are invaluable in creating relevant and effective responses that support well-being, a foundational principle of our approach to research is the active engagement of people with lived experience in our studies. Sharing progress and updates is integral to engagement, and so we are excited to have another way to connect with our community and communicate the latest findings and initiatives from our Applied Research, Clinical Research, and Research Partnerships teams.

In each issue, you can expect a diverse range of content, including research highlights, links to access our latest results, a behind the scenes look at how we conduct research, and updates on ongoing projects. We will also provide information about upcoming events, training opportunities, and resources that can further enhance your understanding and engagement with research.

We look forward to sharing valuable information to empower you to stay informed and engaged in the field of Veteran and Family mental health research in Canada.

Fardous Hosseiny
President and CEO

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Some current topics:



Adult children of Veterans



Aging Veterans' mental health



Intimate partner violence (IPV)



Moral injury



Neural correlates of mental health



Novel treatment interventions



Peer support



Traumatic brain injury

Our research teams

The Atlas Institute is fortunate to have three teams dedicated to research. Our teams apply their combined expertise from social and developmental psychology, neuroscience, psychiatry, philosophy, epidemiology, social work, and public health to the study of Veteran and Family mental health and well-being.

Applied Research

The Applied Research team's work is informed by the social determinants of health and a bio-psycho-social approach to mental health.

With a strong emphasis on interview and survey-based research methods, we strive to answer underexplored questions.

We use qualitative research methods to capture and describe Veterans' and Families' lived experiences of a certain phenomenon. In these studies, we strive to offer a deeper and more nuanced understanding of the nature and meaning of human experiences. In parallel, we recognize the importance of quantitative research in providing a broader perspective and generating robust data to support service and program improvements. Our statistical analyses examine trends over time, systemic issues, and health disparities among Veterans and their Families.

By blending qualitative and quantitative research methods, we bring together the power of personal stories and statistical evidence to drive change. Our interdisciplinary approach allows us to conduct research from multiple perspectives, ensuring a comprehensive understanding of the complex experiences of Veterans and their Families.

Research Partnerships

The Research Partnerships team endeavors to enhance knowledge and research capacity throughout Canada. Through the provision of funding opportunities and collaborative partnership agreements, including targeting emerging researchers, we strive to expand our understanding of diverse subjects pertaining to the mental health and well-being of Veterans and their Families.

Annually, we offer collaborative funding opportunities through a transparent and equitable [request for proposal process](#) (RFP), ensuring a competitive selection process.

To secure funding, researchers are required to demonstrate, within the RFP framework, how their research aligns with the overarching mission of the Atlas Institute, how their project will positively impact Veteran and Family communities, and how individuals with lived and living experiences will be actively engaged throughout every stage of the research endeavor.

The specific topics addressed through our funding rounds are tailored to reflect the identified needs derived from a comprehensive analysis of research and knowledge mobilization gaps, and invaluable insights shared directly by the Veteran and Family communities.

Clinical Research

The Clinical Research Team aims to better understand the neurobiological basis of the mental health conditions that can affect Veterans and their Families and to develop novel treatment and assessment tools for these conditions.

Here, we take a multipronged approach to investigating the neural pathways that may lead to mental illness. By partnering with the Brain Imaging Centre at the Royal Ottawa Hospital, we implement neuroimaging methods (i.e., fMRI, PET and EEG) to study the brain. Importantly, our brain imaging studies are often paired with qualitative research methods (i.e., 1:1 interviews and focus groups), such that the lived experience of Veterans and Families effectively guide our study design and planned analyses.

We are also developing a number of novel treatment interventions for trauma and stressor-related disorders (including neurofeedback, and cognitive behavioural therapies), as well as new assessment tools for mental health conditions.

Further, our team is involved in training the next generation of clinician-scientists at the University of Ottawa within the School of Psychology and the Faculty of Medicine graduate programs (i.e., teaching courses and supervising graduate students).

[Read more about our areas of specialization »](#)

Research Spotlight

The Athena Project

There is a lot that remains to be discovered about the lived experiences and health of women Veterans in Canada. Led by the Applied Research team, the Athena Project is a new initiative dedicated to research and building community in support of women Veterans' well-being.

The Athena Project takes a community-based approach, which integrates people with lived experience into the research team to ensure the study is informed by lived experience and meaningful to women Veterans. A working group has been created to guide the work, composed of women who served in the Canadian Armed Forces (CAF) and Royal Canadian Mounted Police (RCMP) and Atlas researchers who are passionate about advancing research in the field of women Veterans' well-being. Harnessing the power of shared learning, collaboration, and empathy, together, they will learn from each other and shape new research by those, and for those, most affected by its outcomes.

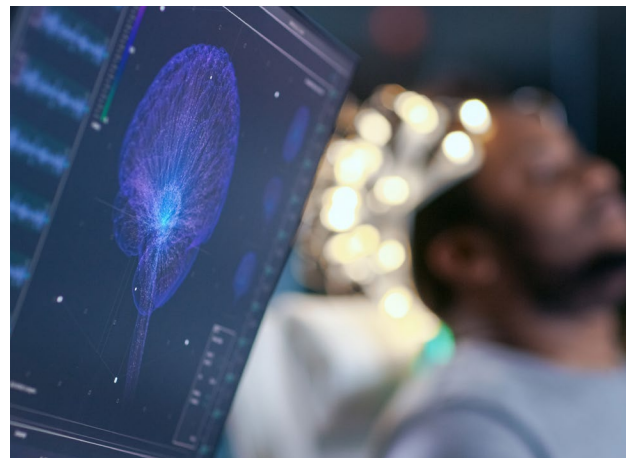


[Learn more about women Veterans' health »](#)

Neurofeedback therapy

When people develop posttraumatic stress disorder (PTSD), specific regions of their brain can be over or under-activated, leading to thoughts, emotions, moods and behaviours that can be unhelpful or distressing. Neurofeedback is a non-invasive therapy that is emerging as a promising treatment for PTSD and other mental health conditions that does not involve pain or medication, and helps individuals gain control over their brain activity by learning how to self-control.

The Atlas Institute for Veterans and Families in collaboration with Western University has recently launched a real-time fMRI neurofeedback study in individuals suffering from PTSD symptoms focused on studying its efficacy. In this study, we will see whether individuals with PTSD can learn to self-regulate their own brain responses to emotion inducing words by examining the effects of multiple sessions of fMRI-neurofeedback and compare changes in PTSD symptoms and brain activity for two different brain areas that are associated with PTSD.



[Learn more about neurofeedback therapy and Atlas's ongoing clinical research »](#)

The Minority Mosaic study

Minority stress is the excess stress, discrimination, and prejudice that individuals face due to their minority status/ stigmatized identity (i.e., race, sexual orientation, gender, ethnicity, etc.). These experiences can lead to significant adverse changes in thoughts and behaviours, which can either compromise the mental health of sexual minorities or lead to resilience i.e., “strength through adversity.”

At Atlas Institute for Veterans and Families, we are conducting research to uncover the effect of minority stress exposure on the brain in order to promote change, foster resiliency, and help those who have been psychologically injured by these experiences. Our research examines both the lived experience, and the adaptations to the brain and body, that are associated with minority stress exposure among sexual minorities with intersecting identities. These findings will help to elucidate the neurobiological basis of minority stress and will inform how systemic societal oppression influences risk and protective factors for mental health outcomes.

[Learn more about minority stress exposure and mental health »](#)

Public policy portfolio development

Public policies are developed at all levels of government (federal, provincial, territorial and municipal). Developed with input from citizens, government staff and elected officials public policies can be guidelines, rules, regulations, laws, principles or directions that specify what should be done, by whom, for whom and how it is to be done.

The Atlas Institute initiated three, interrelated foundational projects (set to be completed August 2023) to map out existing public policies and associated gaps and to set priorities for impact:

1. A policy scan specific to Veterans and Families mental health and well-being using academic and grey literature.
2. Policy engagement with organizations that serve an intermediary, advocacy and/or knowledge mobilization role.
3. An internal policy framework based on Canadian and international evidence and leading practices.

[See full information sheet for more details »](#)

Mental health and well-being of Afghan-Canadian Language and Cultural Advisors (LCAs) who served with the Canadian forces abroad

A small group of civilians, known as language and cultural advisors (LCAs for short), were a critical – yet largely unknown – part of Canada’s over decade-long presence in Afghanistan. As recent immigrants to Canada, approximately 65 people were recruited to support our 40,000 soldiers, often going “outside the wire” (or off base) to provide linguistic and cultural advice.

Despite their critical role in the conflict in Afghanistan, there is little awareness about the existence, role and contributions of LCAs. There is also limited knowledge on their mental health status and support needs after their return home to Canada. Research on **[Canadian Armed Forces members](#)** tells us that the post-service transition period is critical and may be when support needs are highest. This may also be the case for LCAs given similarities in their deployment experiences. As a first step in building knowledge and improving understanding of this particular group, the Atlas Institute for Veterans and Families **[led a study](#)** on the experiences of former LCAs, guided by an advisory group.

[Learn more about Afghan-Canadian Language and Cultural Advisors who served with the Canadian Forces abroad »](#)

Getting involved in research at Atlas

Recruiting studies

Interested in participating in research? Research participation helps expand our understanding of Veteran and Family mental health and well-being and can support the improvement of treatments, programs, and services. The Atlas Institute leads and supports research projects and new opportunities to participate, with varying levels of involvement, regularly become available. Check out a few of the studies currently looking for participants!

Led by Atlas

- **The neural correlates of minority stress: Uncovering systemic oppression related to the intersectionality of identity with neuroimaging and machine learning**
- **Self-regulation of Post-traumatic Stress Disorder (PTSD) neurocircuitry using multiple sessions of real-time functional Magnetic Resonance Imaging (rt-fMRI)**

Find out if you're eligible to participate! Email ella.bawagan@theroyal.ca

Supported by Atlas

- **Feasibility and effectiveness of a cognitive rehabilitation intervention for Veterans with mTBI**
- **Studying the effectiveness and implementation of Sudarshan Kriya Yoga for Canadian Veterans with PTSD**
- **Brain measures linked to hyperarousal in PTSD using MRI**
- **Experiences of Intimate Partner Violence (IPV) and help-seeking among Veterans and Family Members**

[Learn more about recruiting research projects »](#)

Other ways to get involved

To expand our connections with the Veteran and Family community, we have developed a volunteer Cadre to help the Atlas Institute engage and work with a larger and more diverse group including Francophone Veterans and Families. We also are seeking to improve our ability to connect with individuals with lived expertise who are available to participate in projects, including research projects, by participating in surveys, panels, webinars and town hall events.

[APPLY TO THE CADRE](#)



Latest publications

moral injury

public safety personnel

“Against everything that got you into the job”: Experiences of potentially morally injurious events among Canadian public safety personnel.

2023/05/12

Rodrigues, S., Mercier, J. M., McCall, A., Nannarone, M., & Hosseiny, F.

European journal of psychotraumatology

[Read the paper](#)

post-traumatic stress disorder

brain imaging

Altered Resting-State Functional Connectivity in the Anterior And Posterior Hippocampus in Post-traumatic Stress Disorder: The Central Role of the Anterior Hippocampus

2023/04/28

Chaposhloo, M., Nicholson, A. A., Becker, S., McKinnon, M. C., Lanius, R., & Bhaskar Shaw, S.

Neuroimage: Clinical

[Read the paper](#)

post-traumatic stress disorder

neurofeedback

EEG

Homeostatic normalization of alpha brain rhythms within the default-mode network and reduced symptoms in post-traumatic stress disorder following a randomized controlled trial of electroencephalogram neurofeedback

2023/03/16

Nicholson, A. A., Densmore, M., Frewen, P. A., Neufeld, R. J. W., Théberge, J., Jetly, R., Lanius, R. A., & Ros, T.

Brain communications

[Read the paper](#)

post-traumatic stress disorder

brain imaging

clinical assessment

Increased top-down control of emotions during symptom provocation working memory tasks following an RCT of alpha-down neurofeedback in PTSD

2023-01-03

Saurabh Bhaskar Shaw, Andrew A. Nicholson, Tomas Ros, Sherain Harricharan, Braeden Terpou, Maria Densmore, Jean Theberg, Paul Frewen, and Ruth A. Lanius

Neuroimage: Clinical

[Read the paper](#)

peer support

scoping review

Peer support activities for Veterans, serving members, and their families: Results of a scoping review

2023/02/18

Mercier, J-M., Hosseiny, F., Rodrigues, S., Friio, A., Brémault-Phillips, S., Shields, D. M., & Dupuis, G.

International journal of environmental research and public health

[Read the paper](#)

fMRI neurofeedback

post-traumatic stress disorder

Posterior cingulate cortex targeted real-time fMRI neurofeedback recalibrates functional connectivity with the amygdala, posterior insula, and default-mode network in PTSD

2023/02/15

Lieberman, J. M., Rabellino, R., Densmore, M., Frewen, P. A., Steyrl, D., Scharnowski, F., Théberge, J., Neufeld, R. J. W., Schmahl, C., Jetly, J., Narikuzhy, S., Lanius, R. A., & Nicholson, A. A.

Brain and behavior

[Read the paper](#)

[List of all published research »](#)

CONTACT US



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Disclaimer: Views and opinions expressed are solely those of the Atlas Institute for Veterans and Families and may not reflect the views and opinions of the Government of Canada.

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