

STUDY NOTES

VALIDATING THE MORAL INJURY OUTCOME SCALE IN FRENCH

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HIGHLIGHTS

WHAT ARE STUDY NOTES?

Study Notes provide a plain-language summary of a research project led or supported by the Atlas Institute for Veterans and Families. The aim is to ensure that Veterans and Families can better access and understand emerging research and key findings.

A *single* research study cannot give us all the answers, but every well-conducted study gives us a piece of the puzzle.

- This study aimed to find out if the 14-item French version of the Moral Injury Outcome Scale (MIOS) can be used to accurately and consistently measure moral injury.
- The results show that the French MIOS is a valid and reliable tool that accurately and consistently measured moral injury among French-speaking Canadian Armed Forces members.
- Higher scores on the MIOS were linked to symptoms of posttraumatic stress injury, depression, anxiety and overall psychological distress, especially among those who experienced morally distressing events.
- The scale worked the same in English and French, meaning the MIOS can be used in both English- and French-speaking populations to support research and clinical work.
- As with the English version, the French MIOS worked best when designed to measure two key aspects of moral injury: shame and trust-related outcomes.



WHY IS THE STUDY IMPORTANT?

Moral injury refers to lasting distress resulting from exposure to potentially morally injurious events. These types of events involve actions that violate deeply held beliefs and expectations about right and wrong¹.

Moral injury can have a serious impact on the mental health and well-being of military personnel²⁻⁵. It is therefore important to be able to effectively assess moral injury in French-speaking members of the Canadian Armed Forces (CAF).

There are various tools to measure moral injury. The Moral Injury Outcome Scale (MIOS) is a 14-item tool designed to measure two different types of responses people may have to morally injurious events: shame-related and trust-violation-related outcomes⁶.

Research shows that the MIOS measures what it is supposed to measure and does so consistently and accurately when used in English and Turkish, but it has yet to be tested in French^{7,8}.



WHAT DID THE STUDY AIM TO FIND OUT?

The study aimed to determine whether the French version of the MIOS actually measures what it is supposed to measure and does so consistently and accurately. Specifically, the researchers set out to assess the **internal consistency**, **factorial validity** and **convergent validity** of the French MIOS.

INTERNAL CONSISTENCY refers to how well various items in a tool work together to measure the same concept. In other words, if the MIOS is meant to measure moral injury, people who strongly agree with one item should also tend to agree with other related items. This helps show that the items within the tool are related and consistent with one another.

FACTORIAL VALIDITY refers to whether the tool's underlying structure matches what is expected. In other words, if the MIOS is supposed to measure two types of moral injury, the items or questions should actually group responses into those two types. This helps show that the scale is organized in a valid and logical way.

CONVERGENT VALIDITY refers to whether the tool aligns as expected with other related tools. In other words, scores on the MIOS should align with scores on another established measure. This helps show that the scale is actually measuring what it claims to measure.



WHAT DID THE STUDY DISCOVER?

POSTTRAUMATIC STRESS DISORDER

A mental health condition that can develop after experiencing or witnessing a potentially traumatic event and is linked to poor mental health outcomes. It is diagnosed by a licensed medical professional based on specific signs, symptoms and behaviours.

The French version of the MIOS accurately measures moral injury and aligns with the original English version. It can be used with both language groups.

Like the English version, the French version of the MIOS captures two distinct yet related dimensions of moral injury: shame-related and trust violation-related outcomes.

Higher scores on the MIOS were linked to worse mental health, including greater symptoms of posttraumatic stress disorder (PTSD), depression, anxiety and overall distress.

People who have experienced potentially morally injurious events scored higher on the MIOS than those who have not experienced those events, supporting the tool's sensitivity to moral injury.



HOW WAS THIS STUDY CONDUCTED?

Data were collected as part of research conducted during Operation LASER, the CAF's response to COVID-19 in which members were deployed to long-term care facilities across Canada.

Participants were invited via email to complete an online survey at three time points. This survey asked people demographic questions. It also asked questions from the MIOS and other relevant scales (e.g. for PTSD, anxiety and symptoms, general psychological distress, posttraumatic growth).

The French MIOS was tested on 390 French-speaking CAF personnel. Data from 490 English-speaking CAF personnel were also collected and analyzed as a comparison.

Researchers used statistical tests to assess the French version and to check whether it worked the same way across English and French.

They also looked at the relationship between moral injury and other mental health outcomes. They assessed whether scores differed depending on exposure to potentially morally injurious events and the deployment context of this exposure.



WHAT ARE SOME STRENGTHS AND LIMITATIONS OF THE STUDY?

JUNIOR NON-COMMISSIONED RANKS

Non-commissioned members (NCMs) ranked Master Corporal, Master Sailor or under.

To see examples:
bit.ly/dnd-ranks

A key strength of this study is that it shows evidence that the French version of the MIOS works like the English version.

There are some limitations, including:

- There was a lack of diversity among those who participated in the study. Participants were mostly young men in junior non-commissioned ranks deployed to long-term care facilities in Quebec. This means that other groups – such as women, senior ranking personnel or those from culturally diverse backgrounds – may have different results.
- The study was done using data from Canadian Francophones. This means that the findings may not apply to other French-speaking populations outside of Canada.



WHAT ARE THE IMPLICATIONS OF THIS STUDY?

For Veterans and Families

It is important to have French tools available to better assess Francophone Veterans. The French version of the MIOS is an accurate and valid tool that can be used to measure moral injury with Francophone Veterans.

For service providers

The French version of the MIOS can be a helpful tool to measure moral injury within clinical settings. It measures what it is supposed to measure and does so consistently and accurately.

For researchers

The MIOS can be used in both languages in research settings. More research should be done to determine whether the French MIOS can accurately and consistently measure moral injury in other groups, such as women or French-speaking people outside Canada.



REFERENCES

1. Litz BT, Stein N, Delaney E, Lebowitz L, Nash WP, Silva C, Maguen S. Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. *Clinical Psychology Review*. 2009;29(8):695-706. [doi:10.1016/j.cpr.2009.07.003](https://doi.org/10.1016/j.cpr.2009.07.003)
2. Griffin BJ, Purcell N, Burkman K, Litz BT, Bryan CJ, Schmitz M, et al. Moral injury: An integrative review. *Journal of Traumatic Stress*. 2019;32(3):350-362. [doi:10.1002/jts.22362](https://doi.org/10.1002/jts.22362)
3. Hall NA, Everson AT, Billingsley MR, Miller MB. Moral injury, mental health and behavioural health outcomes: A systematic review of the literature. *Clinical Psychology & Psychotherapy*. 2022;29(1):92-110. [doi:10.1002/cpp.2607](https://doi.org/10.1002/cpp.2607)
4. Nazarov A, Fikretoglu D, Liu A, Thompson M, Zamorski MA. Greater prevalence of post-traumatic stress disorder and depression in deployed Canadian Armed Forces personnel at risk for moral injury. *Acta Psychiatrica Scandinavica*. 2018;137(4):342-354. [doi:10.1111/acps.12866](https://doi.org/10.1111/acps.12866)
5. Williamson V, Stevelink SA, Greenberg N. Occupational moral injury and mental health: systematic review and meta-analysis. *The British Journal of Psychiatry*. 2018;212(6):339-346. [doi:10.1192/bjp.2018.55](https://doi.org/10.1192/bjp.2018.55)
6. Litz BT, Plouffe RA, Nazarov A, Murphy D, Phelps A, Coady A, et al. Defining and assessing the syndrome of moral injury: Initial findings of the Moral Injury Outcome Scale Consortium. *Frontiers in Psychiatry*. 2022 Jul 5;13:923928. [doi:10.3389/fpsy.2022.923928](https://doi.org/10.3389/fpsy.2022.923928)
7. Tunç MF, Özdemir İ, Ümmet D. Adaptation of moral injury scale into Turkish culture. *TRC Journal of Humanitarian Action*. 2022;1(3):109-116.



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