

The Building Resilience Against Violent Extremism (BRAVE) measure

User Manual

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1. Introduction

This manual is intended to give prospective users of the Building Resilience Against Violent Extremism measure (BRAVE) more information about the tool.

It contains information about the origins of the measure, how it can be contextualised, administered, scored, and more.

We recommend users review this information and the FAQs on the website prior to using the measure.

To cite this manual, please use:

Resilience Research Centre & Alfred Deakin Institute for Citizenship and Globalisation. (2021). *BRAVE User Manual v2.0*. Halifax, NS: Resilience Research Centre, Dalhousie University. Retrieved from <http://www.resilienceresearch.org/>

2. Overview of the BRAVE measure

The BRAVE is a self-report measure of the key risk and protective factors associated with resilience to violent extremism.

The measure was developed and validated as part of a collaborative research initiative between the Alfred Deakin Institute for Citizenship and Globalisation, Deakin University (Australia) and the Resilience Research Centre, Dalhousie University (Canada).

By default, the measure consists of 14 items which are responded to on a 5-point scale. Scores are derived by combining individual items (note that some items are reverse scored).

When you use the measure, we ask you to cite the original source. The main source for the BRAVE is:

- Grossman, M., Hadfield, K., Jefferies, P., Gerrand, V., & Ungar, M. (2020). Youth resilience to violent extremism: Development and validation of the BRAVE-14 measure. *Terrorism and Political Violence*. 1-21.
<https://doi.org/10.1080/09546553.2019.1705283>

Uses for the BRAVE measure

The BRAVE can be used by researchers, government agencies, policy makers, and community stakeholders to:

- Facilitate the comparison of risk and protective factors for young people's resilience to violent extremism;
- Contextualize the ways in which young people are able to resist violent extremism, as well as why they may become vulnerable to using violent extremism as a solution to problems;
- Systematically identify and strengthen existing resilience resources;
- Help to identify current vulnerabilities in youth resilience to violent extremism through community partnerships and program development;
- Support efforts of communities and agencies to develop effective and meaningful youth-focused policies and programs that can identify both what communities already possess as resilience resources (but which may be unrecognized or under-used), and what vulnerabilities or gaps need to be addressed, and how;
- Support evaluations of strategies and programs for strengthening resilience to violent extremism amongst young people, helping to show the effectiveness of innovative, culturally and contextually sensitive interventions.

3. Development of the BRAVE measure

Despite developments in the research agenda on resilience to violent extremism, a major challenge for resilience-based approaches to countering violent extremism (CVE) lies in the difficulty of gaining empirical data that supports operationalising and applying resilience concepts in meaningful and context-relevant ways. This is particularly so in the case of understanding what resilience resources young people may draw on, and what vulnerabilities they may experience, in settings where they face challenges including exposure to violent extremist propaganda, influence and networks. The development of the BRAVE measure is a response to this challenge.

The BRAVE measure was originally developed using findings from a government-funded research project in Australia ('Harnessing Resilience Capital', CVESC/ANZ CTC, 2013-14) and a research project in Canada ('Barriers to Violent Radicalisation:

Understanding Pathways to Resilience among Canadian Youth', Kanishka Project, 2014-15). A subsequent study trialled and validated the measure with 475 young people (18 to 30 years old) from a wide range of culturally diverse backgrounds in Australia and Canada (Grossman et al., 2017).

In creating the BRAVE measure, Grossman et al. (2014) theorised that resilience to violent extremism would be comprised of 13 qualities within 4 overarching factors:

1) Cultural identity and connectedness, made up of:

- cultural knowledge, cultural continuity, cultural security, and cultural adaptability.

2) Relationships and networks, made up of:

- bonding capital, bridging capital, and linking capital.

3) Community norms, behaviours, attitudes, and values, made up of:

- coping with adversity, problem behaviours, and resources for problem solving.

4) Framing, preventing, and responding to violence, made up of:

- beliefs, values, and resources/strategies for non-violent conflict resolution.

Although each of these factors is variably important across contexts, exploratory and confirmatory factor analyses indicated that the structure that best fit the cross-cultural dataset used in the initial validation study was a 5-factor, 14-item model.

These five factors were:

- 1) Cultural identity and connectedness
- 2) Bridging capital
- 3) Linking capital
- 4) Violence-related behaviours
- 5) Violence-related beliefs

You can read more about these factors in Appendix B and about the development of the measure in Grossman, Ungar, Brisson, Gerrand, Hadfield, and Jefferies (2017).

4. Understanding resilience

Resilience is often a nebulous and misunderstood concept, yet it is important to clarify this to understand the intentions of the BRAVE. Most commonly, the term resilience has come to mean an individual's ability to overcome adversity and continue his or her normal development or functioning. However, the RRC uses a more ecological and culturally sensitive definition of resilience. Dr. Michael Ungar, founder and Director of the RRC, has suggested that resilience is better understood as follows:

"In the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to negotiate for these resources to be provided in culturally meaningful ways"

(see Ungar, 2008, 2011).

Understood this way, resilience requires individuals to have the capacity to access supportive resources that bolster well-being, while also emphasizing that it is up to families, communities, and governments to provide these resources in ways individuals and local communities value. In this sense, resilience is the result of having access to resources, the capacity to navigate effectively toward these resources and negotiation for resources to be provided in meaningful ways.

In the context of the BRAVE, the process of resilience is reflected in the presence of specific protective resources and the absence of specific risk factors. These help individuals and communities to overcome or adapt to adversity they have experienced or continue to experience, resisting the draw of violent extremism. *Example:*

**Risk
Exposure**

e.g., returning
foreign fighters



**Protective
Processes
and Factors**

e.g., bridging capital
/ linking capital



**Desired
Outcomes**

Absence of
violent
extremism

Measured by
the BRAVE

You can read more about resilience from this perspective in the following:

- Ungar, M. (2008). Resilience across cultures. *British Journal of Social Work*, 38(2), 218-235. <https://doi.org/10.1093/bjsw/bcl343>.
- Ungar, M. (2011). The social ecology of resilience: Addressing contextual and cultural ambiguity of a nascent construct. *American Journal of Orthopsychiatry*, 81(1), 1-17. <https://doi.org/10.1111/j.1939-0025.2010.01067.x>.
- Ungar, M. (2015). Varied patterns of family resilience in challenging contexts. *Journal of Marital and Family Therapy*, 42(1), 19-31. <https://doi.org/10.1111/jmft.12124>.
- Ungar, M. (2017). Which counts more? The differential impact of the environment or the differential susceptibility of the individual? *British Journal of Social Work*, 47(5), 1279–1289. <https://doi.org/10.1093/bjsw/bcw109>.
- Ungar, M. (2018). Systemic resilience: Principles and processes for a science of change in contexts of adversity. *Ecology & Society*, 23(4), 34. <https://doi.org/10.5751/ES-10385-230434>.
- Ungar, M. & Theron, L. (2020). Resilience and mental health: How multisystemic processes contribute to positive outcomes. *Lancet Psychiatry*, 7(5), 441-448. [https://doi.org/10.1016/S2215-0366\(19\)30434-1](https://doi.org/10.1016/S2215-0366(19)30434-1).
- Ungar, M. (Ed.)(2021). *Multisystemic resilience: Adaptation and transformation in contexts of change*. New York: Oxford University Press. Available open access: <https://oxford.universitypressscholarship.com/view/10.1093/oso/9780190095888.001.0001/oso-9780190095888>
- Grossman, M. (2021). Resilience to violent extremism and terrorism. Chapter 17. In M. Ungar (Ed.), *Multisystemic resilience: Adaptation and transformation in contexts of change*. New York: Oxford University Press. Available open access: <https://oxford.universitypressscholarship.com/view/10.1093/oso/9780190095888.001.0001/oso-9780190095888-chapter-17>

5. Permissions and access

There are no costs or special permissions required to use the BRAVE, provided that:

- (a) Any reproduction of the measure is accompanied by the appropriate copyright information, found below;
- (b) Any report or publication involving the measure is accompanied by the appropriate citation/reference, found below;
- (c) The measure is not sold.

The measure is free to use for not-for-profit purposes but not for commercial purposes (i.e., it is free to use for activities like research or teaching). If you wish to use the measure for commercial purposes, please get in touch with us as licenses are available. Contact the Resilience Research Centre through email at rrc@dal.ca or phone at +1 (902) 494-8482.

To obtain the measure, you must complete the form on the Resilience Research Centre website (<https://brave.resilienceresearch.org/access/>). Once the form is submitted, you will receive instant access to the measure. The information we collect helps us to understand the kind of projects the measure is being used in. It is retained for our records only.

Copyright for the BRAVE:

Copyright © 2022 by Michele Grossman, Ph.D., Kristin Hadfield, Ph.D., Philip Jefferies, Ph.D., Vivian Gerrand, Ph.D., and Michael Ungar, Ph.D.

Reference for the BRAVE:

Grossman, M., Hadfield, K., Jefferies, P., Gerrand, V., & Ungar, M. (2020). Youth resilience to violent extremism: Development and validation of the BRAVE-14 measure. *Terrorism and Political Violence*. 1-21. <https://doi.org/10.1080/09546553.2019.1705283>

6. Contextualising the BRAVE

The BRAVE is a measure that is ready for immediate use. However, to further enhance the precision of the BRAVE, we recommend an additional process of contextualisation prior to beginning your study. This helps fit the measure to your particular setting, potentially improving the validity of the measure and improving the accuracy of the data.

Background to contextualising the measure

The BRAVE was developed by identifying risk and protective factors from theory and the evidence base and exploring these through analysis of a multicultural dataset from two countries. This led to a focused measure containing the factors that were found to be most important for both the studied locations, as well as a common language to identify them. The final measure therefore works well for assessing the resilience of individuals and communities in different locations around the world. However, a more precisely fitting measure is one that is specifically tuned to a single context.

- For instance, the factor of Cultural Identity and Connectedness is addressed by asking individuals whether they believe it is important to them to maintain cultural traditions, whether they are familiar with traditions, and whether their cultural identity guides the way they live their life. However, there may be contexts where aspects of one's culture are oppressed, such as countries which are experiencing ethnic tension. In such settings, it may be difficult or risky to engage in activities related to cultural traditions, which may lead to problems answering the first item in this domain. Therefore, it may be better to replace or appropriately reword this item.
- There may be other wording issues of particular items too, which are similarly problematic in some contexts. For instance, if there are governments or authorities in transition, then the items addressing Linking Capital may need to be rewritten to clarify their targets.
- Also, in some contexts, there may be additional protective or risk factors that may be worthy of consideration. For instance, Grossman et al. (2014) theorised that resilience to violent extremism would also consist of bonding capital, an ability to cope with adversity, and resources for problem solving. While these were not found to be important for *both* settings in the studies that helped to form the BRAVE measure, they may be important for certain individual settings. Novel items may be developed that help to address further factors like this.

In sum, there may be additional supportive resources or risk factors that you believe are important to the resilience of your participants in your setting which are not covered by the measure, or that there are ways of phrasing or re-wording the items that make them more appropriate to your participants. If so, this means contextualising could be an important step prior to administering the measure.

Adapting a measure may seem a little unusual. Many scientific tools clearly state that they should not be modified or altered in any way, as this can risk altering their psychometric properties. For those used to using survey tools, adjusting a measure may therefore seem like something to avoid. However, the BRAVE is a social-ecological measure, and we know that social-ecological risks and resources can vary between contexts (such as the examples above). Therefore, adjusting the BRAVE can actually lead to a more appropriate measure.

We provide guidance below to support this process to ensure the measure retains its robustness.

We also understand that not everyone has the time to contextualise a measure and remind users that the measure has been validated in many settings. There is therefore nothing wrong with using it as originally prescribed.

We recommend you review the steps of contextualising the measure below even if you do not adopt them.

How to contextualise the measure

Contextualising the BRAVE involves reflecting on the content of the measure so that the items appropriately measure what they are intended to measure, and any important additional risks and resources are also included.

This involves understanding what is important for the resilience of individuals in your setting in the context of violent extremism, comparing this understanding to the measure and making appropriate changes, and finally assessing these changes. We have broken this process down into a series of general steps, which are discussed in detail below.

However, it is important to perform this process in conjunction with others, especially those who know your target context well, such as those who may ultimately complete the measure. Therefore, where possible, we recommend convening a local advisory committee (LAC) to support this process. *Continued...*

A local advisory committee (LAC) can provide valuable input on the research implementation, such as suggesting contextually relevant ways of conducting the study. They can also comment on findings and help ensure that interpretations of the data are locally relevant. In addition, they can also help improve the measure itself by helping to identify additional important resilience resources or alternative ways to phrase items.

We have found that it works well to consult with a group of about five people who have something important to say about their community and the local context. Depending on whether measure is to be used, the group could include youth, parents, professionals, caregivers, or elders who themselves may have overcome challenges while growing up. This group can also help decide whether it would be useful to collect data from PMKs about the participants' lives and can suggest feasible ways to do so.

Step 1: Explore resilience in the local context.

We recommend that focus group-style discussions are held with members of the LAC and others in the context where the measure is to be used. This will help you gain a deeper understanding of how resilience is understood in a specific setting.

The following prompts may help generate discussion:

- “What do I need to know to grow up or be well here?”
- “How do you describe people who grow up well here despite the many problems they face?”
- “What does it mean to you, your family and your community when bad things happen?”
- “What kinds of things are most challenging for you growing up here?”
- “What do you do when you face difficulties in your life?”
- “What does being healthy mean to you and others in your family and community?”
- “What do you and others you know do to keep healthy? (Mentally, physically, emotionally, or spiritually)”

The outcome of these focus groups will provide insights into local conceptualisations of resilience. It can also provide insightful qualitative data for mixed methods investigations.

Step 2: Consider additional factors.

Determine whether unique protective or risk factors can be conceptualised from content from your discussions or answers to the questions above. For instance, if it transpires that social media may have a strong influence in your sample, and that misinformation or propaganda may be important to address, then confidence in one's critical thinking or ability to appraise information may form a protective factor that could be added to the measure.

Step 3: Check the items in the measure.

Look at the current items in the measure. You may also wish to consult Appendix B, which describes the factors of the measure. Reflect on the intention of the factor and the specific items that target each.

Do members of the LAC believe there are better ways of phrasing some of the items to make them clearer or to avoid misunderstanding or other issues? Are there additional items that might address the factor in a different way?

Step 4: Review the adapted measure.

Review the measure with your local advisory group, including any new factors and items, to ensure it is appropriate to the local context and that each item would make sense to the target group. For example, it may be important to simplify some terms for individuals with comprehension difficulties or it may be important to provide specific examples to accompany each item.

You should also consider piloting your measure with individuals who are similar to the population that will be included in the full study to ensure that participants understand the items as you intend them to be understood. For further guidance on this process of 'cognitive interviewing', see the guides by [Willis and Artino \(2013\)](#) and [Latcheva \(2011\)](#).

Step 5: Evaluate the adapted measure.

After you have collected your data, it is important to explore your data prior to any proper analyses. First, even the best of suggestions from a suitable LAC may sometimes not work out. Perhaps some of your participants misunderstood one or more items or perhaps they were not as appropriate or important as you had assumed. Initial exploratory analyses can help to check issues like these.

For instance, basic checks of internal consistency/reliability such as Cronbach's alpha or McDonald's omega can help indicate whether the items in the measure work well together, or whether one or more items in particular do not.

If you discover that one or more items do not work well with others in a subscale or overall scale, and that consistency/reliability values would be significantly improved by their removal, you should consider excluding these items prior to proper analyses. Most statistical software packages offer these tests. We do not recommend a specific cut-off for sufficient consistency/reliability, nor thresholds for improvement, since these will vary depending on the number and nature of items in your measure. There are also many good guides available online for conducting these tests in your chosen software package. We would recommend this kind of analysis as the minimum for checking the impact of alterations to the measure.

Further in-depth assessments of the measure can involve confirming or exploring the overall fit of your adapted measure to your group. This may be dependent on your quantitative skills. For instance, you may perform a Confirmatory Factor Analysis (CFA) to check whether a model using an overall resilience factor (consisting of all the items) or a model comprising subscales (see later) fits your data. There are many good guides for CFA available online. Many consider CFA a good standard for evaluating the validity of a measure.

If your CFA results in a model with poor fit and that minor model modifications do not improve its fit (i.e., freeing parameters per modification indices), then you may consider conducting an Exploratory Factor Analysis (EFA). An EFA will help you determine the number of factors/subscales in your adapted measure (if more than one) and also if any items should be excluded (i.e., if they do not appear to work well with other items – similar to the internal consistency/reliability analyses). If you perform an EFA with a random half of your dataset, you can conduct a new CFA with the second half to confirm the fit of your new model.

Contextualisation and analysis service

We understand that not everyone has the time or skills to conduct all or part of this process of contextualising and analysis. We can therefore offer support through the RRC for researchers requiring assistance with different phases of their research and evaluation work. If you would like to know more about the support that is available, please contact the Resilience Research Centre through email at RRC@dal.ca or phone at +1 (902) 494-8482.

Tips for contextualising

- We recommend that no more than ten site-specific items are added to the BRAVE, as long surveys can lead to fatigue or boredom and may compromise the integrity of your data.
- Try to avoid including new elements ‘just in case’, and only include those that you (and ideally your LAC) strongly believe are important.
- Try to avoid including statements with multiple conditions as responses may vary depending on interpretation, which may be undesirable – e.g., “I can trust my neighbours and the government”.
- Document any steps that you take and report these as appropriate in any publications so that readers may follow and understand your approach.

Our guide to contextualising is just one recommended approach. Another good example of this (minus the production and evaluation of new items) can be found in [Panter-Brick’s \(2018\) work with Syrian and Jordanian youth](#) on pages 1809-1810 in the section titled ‘*Qualitative Work and Pilot Surveys*’.

7. Translating the BRAVE

The BRAVE was developed in English, but some translations of the base measure are available from our website. We add new translations as we receive them.

These translations have been created by researchers who have worked with the RRC. However, each translation was done independently and, therefore, we cannot guarantee their accuracy.

If you would like to create your own translation, no special authorisation is required. We just ask that you share your translation with us (via email at rrc@dal.ca) so we can share it with others.

We also recommend a translation and back translation process to enhance the validity of the translated measure. For information on back translation, see guides by [Brislin \(1970\)](#) and [van Ommeren and colleagues \(1999\)](#).

8. Administering the BRAVE measure

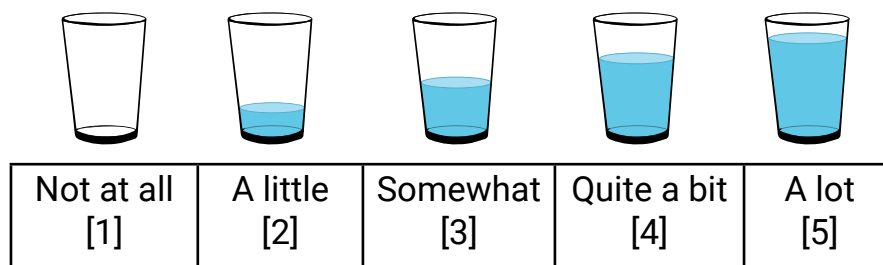
The BRAVE can be administered to participants in groups or individually. In groups, the measure can be read aloud but participants should respond privately to encourage truthfulness.

The measure takes 5-10 minutes to complete, depending on whether it is administered in the participant's native language, the age of the participant, their level of comprehension, and the addition of any new items.

Visual scoring assistance

For those with literacy or comprehension difficulties, it may be useful to provide a pictorial scale to aid responding. You can print these and share them with participants. For instance:

- Panter-Brick and colleagues' (2018) glasses of water:



9. Scoring and interpreting

The items within the measure can be directly summed to gain a total score of an individual's resilience to violent extremism. In the unmodified base measure, there are three reverse-coded items (so scores must be flipped first), which are items 2, 4, and 8. All items and factors are weighted equally.

If you are using an unmodified 5-point measure (with response options from 1-5), the minimum score is 14 and the maximum score is 70.

The minimum and maximum scores of modified measures may vary.

In addition to an overall score, on the base measure, five subscale scores can also be calculated. These are calculated by summing the point values of the responses from a participant. Each subscale ranges from 3-15 except for the violence-related behaviours subscale, which ranges from 2-10.

- *cultural identity and connectedness* (items 1, 3, 5)
- *bridging capital* (items 7, 10, 11)
- *linking capital* (items 6, 13, 14)
- *violence-related behaviours* (items 9, 12)
- *and violent-related beliefs* (items 2, 4, 8; reverse scored)

If a person skips or misses an item, their scores should not be automatically computed, as their overall score will be artificially lower than others who complete the measure. If this happens, you can discard the incomplete result or consider methods of managing missing data (e.g., <http://www.stat.columbia.edu/~gelman/arm/missing.pdf>).

We do not currently provide scoring syntax for software or a scoring tool.

At present, we do not prescribe cut-offs/thresholds for what constitutes high or low resilience to violent extremism, as this is likely to vary between contexts. It may instead be more useful to consider individuals who score high vs. low on the measure.

Understanding and interpreting scores

For the overall measure and subscales, higher scores indicate characteristics associated with stronger resilience to violent extremism.

In any given context, there will be individuals with higher and lower levels of resilience. For this reason, we recommend comparing high scorers to low scorers and investigating potential reasons for these differences. You may wish to rank your sample by score and contrast the top half of scorers against the lower half to determine what might account for these differences.

Thresholds and cut-offs

We have received requests for cut-offs or thresholds to help users understand their scores and what score is necessary to have a “good” or “normal” level of resilience. However, as resilience tends to vary between contexts, any threshold would similarly vary. For this reason, our recommendation is to instead to contrast high and low scorers within your sample.

Alternatively, you could consider that individuals scoring greater than one standard deviation above your sample average have ‘higher resilience’, those between one standard deviation above and below the average have ‘moderate resilience’, and those below one standard deviation have ‘low resilience’. This is based on assumptions that your sample is ordinary in the sense that only a smaller amount of individuals will have lower or higher levels of resilience.

We currently do not have good information on ‘norms’ related to the measure, as again, these are likely to vary by context. However, you may wish to consult the website, as average scores of groups using the measure from various studies around the world are listed as the information becomes available to us. These may help you to understand how your scores compare to those listed.

Data analysis service

Not everyone has the time or skills to clean, explore, and analyse the data they collect. We offer a service for the management of your data. This can involve just particular tasks (e.g., data cleaning, just particular analyses, etc) or a comprehensive data analysis, leading to a finalised report of findings and recommendations.

Please get in touch with us to enquire about this. Contact the Resilience Research Centre through email at RRC@dal.ca or phone at +1 (902) 494-8482.

10. Validity and reliability of the BRAVE measure

We are in the process of gathering information about the psychometric properties of the BRAVE. The following information has been gathered from early studies using the measure.

Internal reliability/consistency

Cronbach's alpha (α) = .67 (overall measure). [Grossman et al., 2020]

Content and face validity

[see Grossman et al., 2020]

Construct and criterion validity

A multigroup CFA indicated a good fit to the data of the sample (CFI = .90-.92; RMSEA = .07; SRMR = .06), working well for males and females and in both Australia and Canada. [Grossman et al., 2020]

Convergent and discriminant validity

"the [BRAVE] was significantly positively correlated with the ARM-28 ($p < .001$) [a measure of social-ecological resilience], and with family functioning ($p < .001$), neighbourhood collective efficacy ($p < .001$), and prosocial behaviours ($p < .001$) in the full sample. It was negatively correlated with acceptance of violence scores ($p < .001$), delinquency scores ($p < .001$), in-group ($p < .001$) and out-group discrimination ($p < .001$), as well as the emotional difficulties, conduct problems, hyperactivity, and peer problems subscales of the SDQ ($p < .001$ for all subscales). These analyses were repeated by gender and by country, with similar patterns of findings." [Grossman et al., 2020]

Test-retest reliability

Not available yet.

Other statistics and information

Will be shared as this information is produced or shared with us.

11. Sharing your research

We like to know how our measures are being used around the world. If you are able to share details of your study with us, please send us the following information. It will be kept confidential unless otherwise stated.

1. **Site details:** Provide the location of your research site, as well as contact information for your project leader. Please include a contact name, telephone number, and e-mail address.
2. **Context:** Outline the context (geographic, political, economic, etc.) within which your participants live, and describe the risk factors they may face.
3. **Participants:** Describe your research participants: breakdown numbers by sex/gender, the range and mean of age and education level, as well as the way they are perceived as a group by their community (if applicable).
4. **Local resilience:** Describe what resilience means in your particular site. Explain how this is demonstrated and consider including a quote from an individual that expresses what resilience means in your site's particular context.
5. **Scores:** Provide the mean scores and standard deviation of the measure. If you have any important demographic variables, include the mean and standard deviation of scores for these groups too (e.g., refugees, non-refugees).
6. **Adaptations:** Describe any alterations you have made to the measure and why you made the changes.
7. **Quotes:** If possible, provide one or two quotes from participants that are relevant to, and descriptive of, your research and/or its findings. Alternatively, you could include a summary statement that does the same.
8. **Photo:** If possible, please also include one or two photographs relevant to your site and research. Please make sure you have permission to share any photographs, including release forms for any people that appear in the photographs.
9. **Data:** If you are able to share your entire dataset with us, this will help us to develop our understanding of norms. Make sure any identifying information is removed prior to sending it. From time to time we use datasets in analyses that result in publications, but would contact you first about this to discuss further.

12. Services and products we offer

The BRAVE is free to use for research and education purposes.

However, the Resilience Research Centre also offers the following products and services, which are priced according to offset costs.

- Commercial users: We offer volume and site licenses.
- Measure preparation: We can conduct or advise on the process of modifying the BRAVE to suit your particular setting.
- Data analysis and reporting: Once your data has been collected, we offer services including full data analysis and reporting to help understand the scores of your sample.

To enquire about any of the products or services offered, please contact the Resilience Research Centre through email at rrc@dal.ca or phone at +1 (902) 494-8482.



References

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Appendix A – Ethical protocol

The following is a brief guide to ethical considerations required when using the measure and strategies to mitigate risk. We strongly recommend that all research and evaluations that use the measure go through a review process by a Research Ethics Board, or equivalent community consultation process with a local advisory committee (where no REB exists).

The BRAVE can be administered to individuals or groups similar to any other survey. However, some participants may experience mild discomfort or distress when answering survey questions. Participants may also recall stressful situations, which may trigger uncomfortable memories. In some settings, participants may have heightened concerns relating to confidentiality, anonymity or personal safety regarding their responses to the survey. To mitigate these risks, participants should be made aware of these possibilities prior to administering the measure, and that they can pause or terminate their involvement at any time. This should be made clear in an information or introductory letter/statement as part of a process of gaining informed consent.

If administering the measure as part of a longer survey, be mindful of how long the total survey will take to complete as some participants may experience fatigue when completing lengthy surveys. This can lead to premature termination, lack of focus when answering questions, and other issues such as participants tending to select the same response option to proceed faster.

If you are providing the measure for participants to complete themselves, ensure literacy skills and comprehension ability are sufficient. If you suspect participants may struggle to complete the measure themselves, read it aloud to them. However, if you need to ask participants whether they feel confident and comfortable completing the measure, be mindful that this may cause embarrassment to some participants who have lower levels of literacy.

You should ensure that participants are able to submit their responses anonymously, even if the measure is being read aloud. No identifying information should accompany responses. Consent forms are typically numbered and that number recorded on the participant's copy of the survey.

Confidentiality should be assured and if responses are stored – electronically or as a hard-copy – this should be done securely (e.g., a locked filing cabinet or using encryption), without identifying information, and only accessible to authorised individuals. The individuals authorised to access participants' data should be clearly identified as part of the informed consent process. You should also dispose of the data within a reasonable amount of time (the time frame may be specified by your country or organisation).

For further in-depth advice on ethical protocol related to survey administration we recommend the Ethical Considerations page from the Cross-Cultural Survey Guidelines group: <https://ccsg.isr.umich.edu/chapters/ethical-considerations/>.

Appendix B – Item/factor guide

For some individuals and organisations, it is important to know the purpose of each item in the measure. This can be useful for those contextualising or administering the measure, who may want to accompany items with contextually-relevant examples to help participants understand what is being asked. It may also be useful for those translating the measure to ensure the meaning of the item is preserved.

In general, the intention of every item in the BRAVE is to measure resilience. However, the items are meant to tap one of five factors. You may determine more appropriate items or wording to tap these factors.

Cultural identity and connectedness (items 1, 3, 5)

‘Cultural identity and connectedness’ is about how people relate to and negotiate both their own and others’ cultural identity and heritage. This includes familiarity with one’s own cultural practices, beliefs, traditions, values and norms, and can involve more than one culture; knowledge of ‘mainstream’ cultural practices, beliefs, traditions, values and norms if these differ from one’s own cultural heritage; having a sense of cultural pride; feeling anchored in one’s own cultural beliefs and practices; feeling that one’s culture is accepted by the wider community, and feeling able to share one’s culture with others.

- It’s important to me to maintain cultural traditions
- I am familiar with my cultural traditions, beliefs, practices, and values.
- My cultural identity guides the way I live my life.

Bridging capital (items 7, 10, 11)

‘Bridging capital’ is about the capacity to interact effectively and empathetically with people from different socio-cultural groups to one’s own. This includes trust and confidence in people from other groups; support for and from people from other groups; strength of ties to people outside one’s group; having the skills, knowledge and confidence to connect with other groups; valuing inter-group harmony, and active engagement or interaction with people from other groups.

- In general, I trust people from other communities.
- I feel supported by people from other communities.
- I regularly engage in conversations with people of multiple religions/cultures and beliefs.

Linking capital (items 6, 13, 14)

‘Linking capital’ is about the levels of trust, confidence and familiarity people have in relation to authorities, institutions and other forms of organisational or governmental power and resources. This includes trust and confidence in government and authority figures; trust in community organisations; having the skills, knowledge and resources to make use of institutions and organisations outside one’s local community, and the ability to contribute to or influence policy and decision making relating to one’s own community.

- I trust authorities/law enforcement agencies.
- I feel confident when dealing with government and authorities.
- I feel that my voice is heard when dealing with government and authorities.

Violence-related behaviours (items 9, 12)

‘Violence-related behaviours’ are about the extent to which people do or don’t support the use of interpersonal or group violence to solve problems or address conflicts. This includes willingness to speak out publicly against violence; willingness to challenge the use of violence by others, and acceptance of violence as a legitimate means of resolving conflicts.

- I am willing to speak out publicly against violence in my community.
- I am willing to challenge the violent behaviour of others in my community.

Violence-related beliefs (items 2, 4, 8; reverse scored)

‘Violence-related beliefs’ are about people’s attitudes toward and feelings about the use of violence in relation to identity and social norms. This includes the degree to which violence is seen to confer status and respect, and the degree to which violence is legitimated by being positively valued, normalised or well tolerated for any age group in the community.

- Being violent helps me earn the respect of others.
- Being violent helps show how strong I am.
- My community accepts that young people may use violence to solve problems.