

Running the Subjectively-Evaluated Resilience Score (SERS)

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2019

Below I layout the questions and methods used in calculating the SERS score (including English and French versions).

Running SERS is straightforward. It is a small survey module that can be placed in any household survey and typically takes three to five minutes to administer. To date, SERS has been run in a number of different countries across Asia and Africa, providing a quick, easily-to-implement and robust means of measuring household resilience (often in conditions where traditional resilience assessments are too difficult to coordinate or time-consuming).

Before starting the module, a survey enumerator reads out a short statement (see the preamble in the tables below). A series of short questions are then asked, with respondents rating the extent to which they agree or disagree with each (ranging from Strongly agree to Strongly disagree).

Where possible, the order of questions should be randomised. Enumerators may also wish to reverse code a small number of questions, though care should be taken in doing so (see the [How-to Guide](#) for more on the implications).

Once answers to each of the questions have been gathered, they are numerically converted (Strongly disagree = 1, Strongly agree = 5). An individual's answers are then tallied up and used to compute an overall resilience score for each household.

There are a number of ways to compute the final score. However, the simplest (and perhaps most relevant) option is to generate an equally weighted average of each of the resilience capacity questions. Lastly, the resilience score is standardised using a minmax normalisation, transforming the results in a score that ranges from 0 (not at all resilient) to 1 (fully resilient).

General comments and options:

- i. SERS comes in a number of different formats. The default module measures overall resilience (i.e. a household's ability to respond to a range of threats and disturbances). For those interested in a specific threat, a hazard-specific variant can also be used (as outlined below).
- ii. In addition to the nature of the threat, SERS is designed to accommodate a large number of different resilience frameworks (each with their own set of resilience capacities). While evaluators may wish to use all nine capacity questions, different capacities can be dropped (or added) to suit the relevant framework. For example, BRACED's 3A's framework only requires Absorptive, Adaptive and Anticipatory capacities to be used; many other resilience frameworks rely on Absorptive, Adaptive and Transformative capacities. SERS can be tailored to any user need accordingly.
- iii. SERS questions can be framed in a few different ways. For example, they can be posed indirectly: i.e. 'Your household can bounce back from any challenge that life throws at it'; or directly: i.e. 'My household can bounce back from any challenge that life throws at it'. Choice of framing should be done on the basis of how best individuals understand the questions, and any cultural preferences of structuring self-assessed questions. Extensive piloting is useful in this regard, though our default preference is for the indirect variant.
- iv. Choice of the preamble prior to delivering the SERS module is important (as individuals are likely to experience some degree of priming – see [Jones 2018](#) for more). With the overall resilience module evaluators may choose a short opening statement. However, the hazard specific variants might need a simple definition of the hazard in order to fully explain to respondents. Again, choices should be made on the basis of conceptual grounding and extensive piloting.
- v. Consistency is key. If you are looking to use SERS to collect panel data (repeatedly interviewing households over time) then it is very important that questions remain constant and are asked in much the same way each time surveys are carried out.

For further information on each of these design options and further considerations in running SERS, please refer to the [How-to Guide on Subjective Evaluations of Resilience](#).

Full list of questions used in the SERS module for overall resilience:

Preamble: I am going to read out a series of statements. Please tell me the extent to which you agree or disagree with them. [Read out each statement and ask] *Would you say that you strongly agree, agree, disagree, strongly disagree or neither agree nor disagree that:*

Resilience-related capacity	Question
Absorptive capacity	Your household can bounce back from any challenge that life throws at it
Transformative capacity¹	During times of hardship, your household can change its primary income or source of livelihood if needed
Adaptive capacity	If threats to your household became more frequent and intense, you would still find a way to get by
Financial capital	During times of hardship, your household can access the financial support you need
Social capital	Your household can rely on the support of family and friends when you need help
Political capital	Your household can rely on the support politicians and government when you need help
Learning	Your household has learned important lessons from past hardships that will help you better prepare for future threats
Anticipatory capacity²	Your household is fully prepared for any future threats that may occur in your area
Early warning	Your household receives useful information warning you about future risks in advance

For examples refer to [Jones and D’Errico \(2019\)](#); [Jones et al. 2018](#); and [Jones 2018](#)

¹ The definition of transformation used here is largely based around the ability of a household to modify livelihood activities when and if required – see Bene et al (2012) and Kates et al. (2012) for more.

² In some cases, evaluators have found it easier to refer to ‘natural hazards’ or ‘disasters’ instead of threats, to help clarify to respondents. Choices should be made on the basis of piloting.

Questions used in the SERS module for hazard-specific resilience (BRACED 3A variant)

Resilience-related capacity	Question
<i>Preamble: 'I am going to read out a series of statements and your household's ability to deal with severe flooding. By severe floods, I mean those that are likely to disrupt your way of life, or damage your household or possessions. Please tell me the extent to which you agree or disagree with each statement.' [Read out each statement and ask] 'Would you say that you strongly agree, agree, disagree, strongly disagree or neither agree nor disagree that:</i>	
Absorptive capacity	If a severe flood occurred tomorrow, your household would be well prepared in advance.
Adaptive capacity	If a severe flood occurred tomorrow, my household could recover fully within six months.
Anticipatory capacity	If severe flooding were to become more frequent and intense, my household would still find a way to get by.

Note the example here uses flood hazards, though this can be replaced and tailored depending on the hazard of interest.

For examples refer to [Jones et al. 2018](#)

Questions used in French SERS module for overall resilience

Resilience-related capacity	Question
<p><i>Preamble: 'Nous voulons vous poser des questions sur la capacité de votre ménage à faire face aux moments d'épreuves et aux désastres qui ont impacté votre communauté. Par exemple, un choc grave financier, une période d'une manque extrême de nourriture, ou des événements climatiques extrêmes qui pourraient être défini comme moments des épreuves ou des désastres. Veuillez indiquer le degré avec lequel vous êtes ou non d'accord avec les déclarations suivantes.'</i></p>	
Capacité d'absorption	Mon ménage peut rebondir à tout défi que la vie pourrait nous lancer.
Capacité d'absorption	Mon ménage est plus en mesure de faire face aux difficultés que les autres membres de notre communauté.
Capacité d'adaptation	Si les menaces pesant sur mon ménage devenaient plus fréquentes et intenses, nous trouverions toujours un moyen de nous en sortir.
Capacité de transformation	Pendant les moments d'épreuves, notre ménage peut changer ses sources de revenus et / ou moyens de subsistance, si nécessaire.
Capital financier	Mon ménage peut s'offrir tout ce dont il a besoin pour survivre et prospérer.
Capital social	Mon ménage peut compter sur le soutien de la famille et des amis lorsque nous avons besoin d'aide.
capital political/social	Mon ménage peut compter sur le soutien des politiciens et du gouvernement lorsque nous avons besoin d'aide.
Capacité d'apprentissage	Mon ménage a tiré d'importantes leçons des difficultés passées pour nous aider à mieux préparer l'avenir.
Capacité d'anticipation	Mon ménage est parfaitement préparé à toutes les menaces et à tous les défis futurs que la vie pourrait nous lancer.
Connaissance et information	Mon ménage reçoit fréquemment des informations nous avertissant à l'avance des événements météorologiques extrêmes.

Notes: Response items include 5) fortement d'accord; 4) d'accord; 3) ni d'accord ni en désaccord; 2) pas d'accord 1) pas du tout d'accord'.

Questions used in French SERS module for hazard-specific resilience (BRACED-3A variant)

Resilience-related capacity	Question
<i>Preamble: Nous voulons vous poser des questions liées à la capacité de votre ménage à répondre à une sécheresse extrême (Insérer ici et dans les questions ci-dessous le type de choc extrême en fonction du contexte) si une affectait votre communauté dans un avenir proche. Veuillez indiquer le degré avec lequel vous êtes ou non d'accord avec les déclarations suivantes'</i>	
Capacité d'anticipation	Si une grave sécheresse se produisait demain, mon ménage serait bien préparé à l'avance.
Capacité d'adaptation	Si les sécheresses graves devenaient plus fréquentes et plus intenses, mon ménage trouverait toujours un moyen de s'en sortir.
Capacité d'absorption	Si une grave sécheresse se produisait demain, mon ménage pourrait se rétablir complètement en six mois.
