

# Using focus group methodology to adapt measurement scales and explore questions of wellbeing and mental health: the case of Sri Lanka

**Eranda Jayawickreme, Nuwan Jayawickreme & Michelle A. Goonasekera**

*Context affects research validity. Therefore, in order to reduce any uncertainty about their findings, cross-cultural researchers should use appropriate methodological techniques. Using focus groups to evaluate the quality of standard measures is one such technique. This paper highlights a study composed of six focus groups that was conducted at the Medical Faculty of the University of Peradeniya, Sri Lanka, with the purpose of assessing equivalence of measures of wellbeing and mental health. Each focus group consisted of three males and three females (age range 35–62). A number of limitations in the measures were highlighted over the course of the sessions, and one questionnaire (measuring positive and negative affects) was subsequently dropped due to lack of cross-cultural equivalence.*

**Keywords:** civil war, equivalence, focus group methodology, refugees, Sri Lanka, wellbeing

This paper describes a methodology for tailoring established measures of psychological health and distress to the cultural specifics of a target population (van Ommeren et al., 1999). This methodology was employed as part of a wider project to develop and validate culturally sensitive measures of *illness* and *wellbeing* (Jayawickreme, Jayawickreme, & Foa, 2012; Jayawickreme, Jayawickreme, & Seligman, 2012). This project was aimed at internally displaced populations, affected

by the recently concluded civil war between the Sri Lankan government and the Liberation Tigers of Tamil Eelam (LTTE) militant group in Sri Lanka, which had troubled the country for more than 20 years (International Crisis Group, 2010; Keenan, 2007; Jayawickreme, Jayawickreme, & Miller, 2010). However, a secondary goal of this project was the evaluation of daily stressors, wellbeing and positive coping strategies (Jayawickreme et al., 2009), using standard measures of wellbeing and mental health, and ensuring that the measures had sufficient equivalence for use in northeast Sri Lanka.

Many have argued that developing measures of mental health that adequately capture local idioms of illness and wellness is extremely important (Betancourt & Williams, 2008; Fernando, 2008; Flaherty et al., 1988; Kohrt et al., 2011). However, it is also acknowledged that mental health researchers frequently use pre-established questionnaires on mental health in their research, in part because of their widespread use, but also because using these measures provides the possibility of cross-cultural comparison. Additionally, many constructs related to mental health, such as post-traumatic growth within a population, have not yet been adequately assessed for equivalence within different cultural contexts.

While standard *etic* measures (descriptions of human behaviours that can also be applied to other cultures) have their limitations (Jayawickreme et al., 2012), they can still provide important information about the target population!. Furthermore, the quality of this information can be augmented by a rigorous process, involving both a careful translation process (Flaherty et al., 1988; Van Ommeren et al., 1999), and the employment of focus groups to assess equivalence. Such methods are important for increasing the validity of field research (van Ommeren, 2003).

While measures have been adapted and translated for transcultural research for many years, the quality of these adaptations have varied (van Ommeren et al., 1999). This is due, in part, to the attention paid to translation related issues, as well as the methodological sophistication of the process employed. Flaherty et al. (1988) highlighted the importance of establishing suitable *equivalence* between the original and translated measures. The five forms of equivalence are highlighted below (van Ommeren et al., 1999).

1. *Content equivalence*: Content of measurement instrument items is relevant to the phenomena of each culture being studied.
2. *Semantic equivalence*: Meaning of measurement instrument items is the same in each culture, after translating measures into the appropriate language and idiom.
3. *Technical equivalence*: Method of assessment used yields comparable data in each culture studied.
4. *Criterion equivalence*: Interpretation of the variables measured remains the same when compared to the norm in each culture assessed.
5. *Conceptual equivalence*: The same theoretical construct is measured with the instrument in each culture.

While some researchers have paid careful attention to the issues of equivalence in adapting measurement instruments, many researchers fail to meet the criteria outlined above when preparing them. The authors of this paper employed a rigorous five-step translation methodology (from English to Tamil and Sinhala, the two main languages in Sri Lanka), as outlined by van Ommeren and colleagues (1999) and focused on step three of this methodology. This step entails translation of the instrument items by a group of bilingual, indigenous translators, reviewing those translations by a bilingual professional (for the quality of the translation and the conceptual structure of the instruments). Then, the translated items were evaluated by a series of focus groups consisting of monolingual, relatively uneducated, local lay people (in line with Manson, 1997). This paper discusses the relevant findings from these focus groups, which highlight the crucial role they play in successfully adapting measures of wellbeing and distress for transcultural research.

## Method

The authors conducted a series of six focus group discussions over items that comprised the measures accessing wellbeing, mental health, and functioning. Nine measures of psychological distress, functioning and wellbeing were translated for use in a study that evaluated the validation, and relative superiority (compared to standard instruments), of measures of wellbeing and distress, incorporating local idioms (Jayawickreme et al., 2012). The assessment study also included the differential functioning of items of standard measures of psychopathology, and assessments of coping strategies and posttraumatic growth within a population (Jayawickreme, Jayawickreme & Seligman, 2012).

In order to ensure that an equivalent Sinhala and Tamil language translation of the measures was obtained, a rigorous translation process was employed. Two translators (recent medical graduates from the University of Peradeniya) worked on the Sinhala/English translations of the measures used in this study. Two other translators (one a recent medical graduate, and the other a medical student, from the University of Peradeniya) worked on the Tamil/English translations. The first author supervised the translation process, and found these sessions invaluable in terms of identifying limitations in the design and presentation of the measures, as well as ambiguities in the translations.

The translators used a translation monitoring form to record the translation (van Ommeren et al., 1999), the literal back translation of terms, and evaluation of each item of the measures. This method allowed translators to systematically identify irrelevant, incomprehensible, unacceptable and incomplete translations (van Ommeren et al., 1999). It also allowed the researchers to identify limitations in the design and presentation of the measures, as well as ambiguities in the translations. The Sinhala and Tamil translations were subsequently used in a series of six focus groups, with separate sessions for the Sinhala and Tamil versions. Each Sinhala focus group consisted of three males and three females, who were support staff employees at the University of Peradeniya, and educated to secondary school level. The Tamil focus group mirrored this, also consisting of three male and three female university support staff employees, also educated to secondary school level.

In order to recruit participants for the focus groups, informal invitations were sent to university employees, whom the authors believed would be suitable candidates. A

number of individuals were interviewed and suitable candidates recruited. The focus groups were scheduled to last two hours each, and held at a classroom of the Medical Faculty at the University of Peradeniya. All participants showed up at the appointed time.

In selecting participants for the focus groups, researchers were careful to ensure they all had the equivalent educational level, reading ability and socioeconomic status as the target population. This was done to ensure a clear sense of the comprehensibility of the language used in the measures, and the concepts contained within them. No individual who had completed school beyond his or her 14th birthday was included in the focus groups, and all participants earned a mean monthly income of around Rs. 5000 (US \$ 45.00) per month. It should be noted that while ideally participants living in the war affected regions of Sri Lanka would have been recruited, the civil war, ongoing at the time of data collection (May–July 2008), made conducting focus groups in the affected regions of the country unfeasible. The focus groups were scheduled to last two hours each at a classroom at the Medical Faculty of the University of Peradeniya. All participants chosen were present at the appointed time.

## **Procedure**

Ethical approval for these meetings was obtained from both the University of Pennsylvania (USA) and the University of Peradeniya (Sri Lanka). Informed written consent was obtained from each of the participants in the focus groups. They were audio recorded and instructed to use only their first names when introducing themselves. Three focus groups were conducted in Sinhala, while the other three were conducted in Tamil.

Each focus group was attended by two researchers, all of whom were raised in Sri Lanka (EJ was born in the UK, but emigrated to Sri Lanka at the age of four; MAG was born and raised in Sri Lanka). EJ was a graduate psychology student, while MAG was a recently graduated medical doctor. One researcher (MAG) served as the group facilitator, and the other (EJ) took notes. Since both researchers were Sinhalese, they were joined for the Tamil focus groups by two Tamil researchers, both of whom were recent graduates from the medical faculty at the University of Peradeniya. The facilitators used a framework comprised of nine steps, including a series of specific questions on each of the measures being used in the research programme. The questions were generated to serve as catalysts for participants to talk about their conceptions of wellbeing, happiness, resilience, and distress. As unexpected topics came up during the focus groups, the facilitators were flexible and pursued themes that were deemed relevant to the research questions (e.g. questions about examples used in the measures for depression). During the focus groups, one of the facilitators took notes on the content of the discussion, frequency of participation, relevant body language and expressions, and other relevant events. The focus groups were audio recorded, and short video clips were also made, with the participants' permission.

The points kept in mind by the researchers during the introduction are given below:

*Clear and simple description* The purpose of the focus groups was clearly explained to the participants. As was the origin of the researchers, the goals of the research project, the importance of asking about wellbeing and happiness, as well as problems, and the proximate goal of the current study.

*Refraining from use of 'disease' idioms* The researchers were mindful not to explicitly discuss questions of 'disease' idioms; that is, the symptoms that were discussed in the measures, in terms of their relationship to major depressive disorder, posttraumatic stress disorder or other forms of mental disorder were not discussed. Instead, the symptoms were discussed in terms of 'problems in life', in both Sinhala and Tamil (e.g. 'jeevatha prashna' in Sinhala). The main reason for this is that the researchers did not want to prompt the participants, but instead allow them to disclose whether the symptoms being discussed matched their experiences (Argenti-Pillen, 2003).

*Importance for mental health assessment* The importance of the present project was highlighted by discussing the need for mental health programmes in Sri Lanka (Fernando, 2008; Fernando, Miller & Berger, 2010) and why it was important to ensure that the measures used to assess mental health were of high quality. The important role the participants were playing in this process was also emphasised.

*Informality and comfort* Social norms about education and status in Sri Lanka dictate that members of the support staff at the Medical Faculty in Sri Lanka maintain a deferential relationship toward those who are educated and work as instructors at the university. The researchers attempted to undermine this norm by stressing the important role the participants were playing in this research. All sessions were conducted in a round table format, and participants were invited to discuss any concerns or thoughts they had on the measures.

#### *Measures*

The following measures were discussed with all focus groups: the World Health

Organization Disability Assessment Schedule II (WHODAS: Janca et al., 1996), the PTSD Symptom Scale-Self-Report (PSS: Foa et al., 1997), the Beck Depression Inventory (BDI: Beck & Steer, 1987), the Centre for Epidemiological Studies-Depression Scale (CES-D: Radloff, 1977), the Satisfaction With Life Scale (SWLS: Diener et al., 1985), the Subjective Happiness Scale (SHS: Lyubomirsky & Lepper, 1999), the Positive and Negative Affect Schedule (PANAS: Watson, Clark, & Tellegen, 1988); and two measures of resilience and post-traumatic growth: a shortened version of the Posttraumatic Growth Inventory (PTGI-SF: Cann et al., 2010), and the Changes in Outlook Questionnaire (CiOQ: Joseph, Williams, & Yule, 1993). The current paper focuses on two of these measures; the PANAS and the SWLS. The PANAS measures current and/or recent levels of positive and negative affect. Twenty words, 10 positive and 10 negative, are presented, and participants rate the extent to which these words corresponds to their mood on a scale of 1 (not at all) to 5 (extremely). The measure has shown adequate internal consistency, as well as convergent and divergent validity in western samples (Watson, Clark, & Tellegen, 1988). The researchers used the Satisfaction With Life Scale as a four-item measure of global life satisfaction that has also demonstrated high internal consistency, and test-retest reliability, in western samples. The following procedure was used:

- Each measure was assessed one at a time. The discussion took place at the item level, with each item on the measure discussed, one by one.
- Feedback was solicited from the participants on each item before the researchers offered questions.
- The following general questions were then discussed:
  - *Word choices*: were the words used in each item sufficiently clear? Were there any other words that could convey the sense of the question more successfully?
  - *Idioms*: did the idioms used to describe a psychological state (i.e. *feeling blue*?) make sense?
  - *Sentence structure*: was the phrasing of the item sufficiently clear?
  - *Active/Passive wording*: did the meaning of the item change significantly when the phrasing was active or passive?
  - *Positive/Negative words*: did emotional words have a stronger impact?
- Questions that were specific to the constructs, assessed by different measures, were also discussed. For example, the items on the Satisfaction With Life Scale were discussed in some detail, in light of previous research showing cultural variation in how different items related to the life satisfaction construct (Oishi, 2006).
- Following the completion of each measure, participants were invited to propose items that they felt could improve the quality of the scale.
- Similarly, participants were invited to select items that they felt could be deleted, without compromising its validity. It should be noted that the final measures utilised were not affected by responses to these questions. Rather, these were exploratory questions intended to stimulate more systematic research into local idioms of distress and wellbeing.
- Participants were asked whether the questions in the measures captured their understanding of a person that was *doing well*. Also, following the discussion of the measures, the researchers led a discussion on the importance of mental health in

Sri Lanka, with a view to ascertain the attitudes of the focus group on the relative importance of mental health in their needs hierarchy.

- While the female and male participants were seated together for the majority of the focus group, they were split into separate groups, based on gender, for questions relating to weight, sex and crying on the BDI (e.g. item 20 on the BDI, which asks about sexual activity). The female focus groups were led by one of the researchers (MAG).
  - In the initial focus groups, attempts were made to recruit members for additional sessions, through snowball sampling (de Jong & van Ommeren, 2002), where participants provided recommendations for other individuals for subsequent progress groups. Recommendations from participants in the initial focus groups were requested at the conclusion of the session.

Following completion of the focus groups, the researchers listened to the audio recordings, in combination with notes from the sessions. The researchers then discussed the main themes that emerged for each of the measures discussed, and systematically listed the recommendations provided by the focus group members for each of the measures. These sessions were invaluable in identifying limitations in the design and presentation of the measures, as well as ambiguities in the translations. Once the translations were altered, they were back translated and compared to the originals, to ensure that the original sense of the items in each measure was still being conveyed. Both the Sinhala and Tamil translations were each back translated by a different set of translators. The measures discussed in the focus groups were

easily understood by the participants, in their final translated forms.

## Results

While the focus groups revealed a number of important insights concerning the equivalence of many of the measures reviewed, the authors focus here on the results from the discussion of two measures of wellbeing (the SWLS and the PANAS), as the most detailed feedback was obtained on these two measures. The other measures discussed in the focus groups were easily understood by the participants, in their final translated forms.

## Discussion of the Satisfaction With Life Scale

One question that the researchers were interested in when discussing the SWLS, was whether participants would be able to understand the purpose of the measure, and feel comfortable answering items on the measure. Therefore, the discussion of this measure began by asking the question; *‘how honest do you think you can be when answering this measure?’* and *‘What does it mean to be asked about “satisfaction?”’* Participants in all the focus groups reported that the measure made sense to them, in that they understood the purpose of the measure, and that they understood the notion of asking about one’s satisfaction with life. One participant reported; *‘many people ask questions about why our lives are a struggle or what our problems are. We have problems, but we also sit down at night and feel happiness with our lives.’* Many of the participants equated satisfaction in life with fulfilling one’s responsibilities with one’s family, and fulfilling one’s life goals and community responsibilities. This interpretation was consistent with the original purpose of the measure (Diener et al., 1985). For example, one participant mentioned in response to the question;

‘when you see your children do well, you feel a sense of satisfaction?’ ‘That is one of your most important life goals, to see your children do well. This is why you work hard.’ We also discussed the questions listed in Table 1 with the group. Overall, the SWLS demonstrated good cross-cultural equivalence.

However, the discussion over item 5 (not changing your life if you got to live it over again) was extended in many of the focus groups. Many participants felt that the question did not fit well with the other items, and some thought the question nonsensical. In one focus group, there was a period of extended confusion as participants tried to wrap their head around the item:

*‘It is not clear what is being asked. Are you saying that if I could be born again and live my life, I would not consider changing decisions I made? Or are talking about a period when I was younger? If it is from when I was born, then yes, of course, I would change many things!’*

This concern over item 5 mirrors previous research on the cross-cultural validity of

the SWLS. Oishi (2006) conducted a structural equation modelling (SEM) and item response theory (IRT) analysis of SWLS data collected from a Chinese sample. They found that item 5 was not strongly related to the latent wellbeing construct in either the SEM or IRT analysis. The researchers intend to corroborate this finding with quantitative analysis of the SWLS data, to examine the performance of item 5 among a Sri Lankan sample.

### Discussion of the Positive and Negative Affect Scale

The discussion of the PANAS in the focus group led to the elimination of the scale from the study. When discussing the PANAS, the instructions of the measure were carefully discussed, along with the clarity of the directions, given that they were asked to report on recently experienced positive and negative emotions. The researchers believed that people would be unaccustomed to being asked about their emotional state, given that many collectivistic cultures downplay the role of affect in assessing their wellbeing (Oishi,

**Table 1. Questions about items on the Satisfaction With Life Scale**

<b>General questions</b>	
<b>Item:</b> <i>In most ways my life is close to my ideal</i>	Do the scale distinctions matter? Are seven options too much? How would they talk about their ideal life? Do you think beyond getting your basic needs fulfilled? Is there a specific way of talking about ideals here?
<b>Item:</b> <i>The conditions of my life are excellent</i>	What is meant by life conditions? Do participants understand how we phrase this in Sinhala/Tamil?
<b>Item:</b> <i>So far I have gotten the important things I want in life</i>	Active or passive phrasing?
<b>Item:</b> <i>If I could live my life over, I would change almost nothing</i>	Notion of living your life over again → do people understand this concept?

Diener et al., 1985.

2006). As a result, the participants' response was of particular interest.

Two main issues were key to the decision to discard the PANAS. One was that participants, in a number of focus groups, reported having problems understanding what it meant to report experiencing a particular emotion, in the absence of any information or context. As one participant noted:

*'Excited? Excited by what? It is odd to be asked about being excited or proud without being asked what one is being excited or proud about. It makes no sense to simply ask about the emotion in the absence of events. It makes no sense.'*

Many participants questioned the utility of the scale in a similar manner. It was interesting that many participants implicitly agreed with Nozick's (1974) argument that pleasure means little when it is not tied to valuable activity.

A second issue concerned the emotions listed in the scale. Many participants thought that some of the emotions listed in the measure were not easily identifiable, and the researchers had to walk a number of them through the items. Some of the items that were problematic included the items presented in Table 2. It was interesting that we frequently

encountered questions of clarification over many of the positive emotions listed on the scale. After reviewing the results of the focus groups, we determined that the PANAS did not have sufficient equivalence in the sample of interest to merit inclusion, and was therefore left out.

## Discussion

Some of the recurring themes of the focus groups included the belief that questions about wellbeing and growth were important, as most people tended to focus on what was wrong with life, without probing into questions of strengths and meaning. However, they also questioned the phrasing of certain items measuring wellbeing. In addition, the significant problems that arose with regards to the PANAS led to the measure being dropped.

Participants also commended the researchers for including measures of wellbeing and growth, alongside those measuring depression and anxiety. Religion was also reported as being important for wellbeing. This fact ties in with prior research, showing that religious people in general report higher levels of wellbeing than nonreligious people (Diener et al., 1999). Many of the participants reported religion as providing both comfort and meaning.

**Table 2** *Questions about some items on the Positive and Negative Affect Schedule (PANAS)*

<b>Item 2</b> ( <i>'Distressed'</i> )	Tamil participants were unclear as to whether the emotion being discussed meant <i>'distressed'</i> or <i>'oppressed'</i>
<b>Item 3</b> ( <i>'Excited'</i> )	Uncertainty of meaning without context
<b>Item 6</b> ( <i>'Guilty'</i> )	Uncertainty of meaning without context
<b>Item 10</b> ( <i>'Proud'</i> )	Equivalence with shame
<b>Item 14</b> ( <i>'Inspired'</i> )	A number of participants were unsure if pride was supposed to be a positive word or not.
	Uncertainty of meaning without context

One limitation of the focus group was the population that was recruited. As noted earlier, the original intention was to conduct these focus groups among a group of war affected Sri Lankans from northeast Sri Lanka, as they would have provided the researchers with the best insight on how the survey instruments should be modified. However, logistical and safety issues prevented such focus groups from taking place, and therefore, a population equivalent in socio-economic status and education was sought among employees of the University of Peradeniya. In regard to many of the issues that concerned the researchers (especially the issue of making the measures sufficiently colloquial for general understanding), it was felt these focus groups served the current project well. Additionally, controls for this limitation were mitigated somewhat by employing Tamil back-translators from the northeast region of Sri Lanka.

However, it was still true that the population from which the focus groups were drawn were not directly traumatised by the civil war in the northeast (although many participants brought up their experience during the insurrections by the JVP (the Janatha Vimukthi Peramuna, a Marxist political party) of 1971 and 1989 during the course of the focus groups (Gunaratna, 1990)). These insurrections had led to the deaths of thousands of civilians. Moreover, participants in the Tamil focus groups made us aware of the fact that the colloquial Tamil, spoken in the east of Sri Lanka, was different from that spoken in the centre of the country. The focus groups helped highlight this difference, and as noted earlier, resulted subsequently in the measures being evaluated by a second group of Tamil translators. However, a subsequent series of focus groups with a group of eastern Sri Lankan Tamils was not conducted.

Another related issue concerned the recruitment of participants through snowball sampling. While snowball sampling has been recommended as a method to draw in similar samples into focus groups (Berg, 2006), this procedure may have led to systematic biases in responses across the focus groups. The researchers acknowledge this possibility, but also note that this procedure enabled recruitment of participants of similar educational and SES background, which was a central aim of the study.

A final issue concerns the possibility that group norms may have influenced the opinions of participants, and prevented them from expressing their true attitudes. As Berg (2006) notes, two disadvantages of focus groups are that group, as opposed to individual, opinions are obtained in the results, and dominant personalities may overpower and steer the group's responses without moderator intervention. It was true that a number of individuals did attempt to dominate the conversation at various points during the focus groups, and the researchers were careful to ensure that such attempts were frustrated. The opinion of all members of each panel, of each item, was solicited before moving on, and steps were taken to ensure that each individual felt that he or she had ample opportunity to participate.

If the researchers were only interested in simply engaging in a detailed content analysis of the measures, using a traditional interviewing approach might have been more appropriate. However, part of the advantage of using a focus group is that the participant's interaction, when discussing instances when items were unclear, was visible. The interactive discussion about the Satisfaction with Life Scale, for example, with the give-and-take nature of opinions about the items, led to spontaneous consensus about the validity of specific items, as

discussed above. It would have been less likely to come to a similar level of consensus as quickly and effectively from a set of individual interviews. As Rubin & Rubin (1995) note:

*'In focus groups, the goal is to let people spark off one another, suggesting dimensions and nuances of the original problem that any one individual might not have thought of. Sometimes a totally different understanding of a problem emerges from the group discussion' (quoted in Berg, 2006).*

In summation, these focus groups served an invaluable function for both improving the quality of the translations and for assessing the equivalence of the measures. Therefore, focus groups should be an integral part of any mental health investigation in cross-cultural contexts, and the authors hope that other researchers will take similar care in their research.

### Acknowledgments

Special thanks go to Uditha Dassanayake and M. Mikram for their work on translating the measures, and organising the focus groups. We also thank Marie Forgeard, Barry Schwartz, Ananda Galappatti, Peter Ventevogel, Martin Seligman, Rick McCauley and Jason Dana for helpful comments. We thank the Asia Foundation, the American Psychological Association, and the Positive Psychology Center at the University of Pennsylvania for funding this research programme. We also thank A. Poovendran, Denis Mariasingam, Imran Hassan, and Charmila Edirisinghe at the Family Rehabilitation Center for facilitating data collection. Jeanine Guthrie at the Asia Foundation and Gameela Samarasinghe at PADHI (University of Colombo) provided valuable advice at the initial stages of this project. Thanks also to Edna B. Foa at the University of Pennsylvania for her support.

### References

- Argenti-Pillen, A. (2003). *Masking terror: how women contain violence in southern Sri Lanka*. Philadelphia: University of Pennsylvania Press.
- Beck, A. T. & Steer, R. A. (1987). *Manual for Revised Beck Depression Inventory*. San Antonio, TX: Psychological Corporation.
- Berg, B.L. (2006). *Qualitative research methods for the social sciences*. New York: Allyn & Bacon.
- Betancourt, T. S. & Williams, T. (2008). Building an evidence base on mental health interventions for children affected by armed conflict. *Intervention, 6*, 39-56.
- Cann, A., Calhoun, L. G., Tedeschi, R. G., Taku, K., Vishnevsky, T., Triplett, K. N. & Danhauer, S. C. (2010). A short form of the Posttraumatic Growth Inventory. *Anxiety, Stress & Coping, 23*, 127-137.
- de Jong, , & van Ommeren, M. (2002). Toward a culture-informed epidemiology: Combining qualitative and quantitative research in trans-cultural contexts. *Transcultural Psychiatry, 39*, 422-433.
- Diener, E., Emmons, R. A., Larsen, R. J. & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*, 71-75.
- Diener, E., Suh, M., Lucas, E. & Smith, H. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125*, 276-302.
- Fernando, G. A. (2008). Assessing mental health and psychosocial status in communities exposed to traumatic events: Sri Lanka as an example. *American Journal of Orthopsychiatry, 78*, 229-239.

- Fernando, G. A., Miller, K. E. & Berger, D. E. (2010). Growing Pains: The Impact of Disaster-related and Daily Stressors on the Psychological and Psychosocial Functioning of Youth in Sri Lanka. *Child Development*, 81(4), 1191-1209.
- Flaherty, J. A., Gaviria, F. M., Pathak, D., Mitchell, T., Wintrob, R., Richman, J. A. & Birz, S. (1988). Developing instruments for cross-cultural psychiatric research. *Journal of Nervous & Mental Disease*, 176(5), 257-263.
- Foa, E. B., Cashman, L., Jaycox, L. & Perry, K. (1997). The validation of a self-report measure of posttraumatic stress disorder: The Posttraumatic Diagnostic Scale. *Psychological Assessment*, 9, 445-451.
- Gunaratna, R. (1990). *Sri Lanka, a lost revolution? The inside story of the JVP*. Colombo, Sri Lanka: Institute of Fundamental Studies.
- International Crisis Group (2010). *Sri Lanka: A Bitter Peace*. Asia Briefing, No 99. 11 January, 2010.
- Janca, A., Kastrup, M., Katschnig, H., Lopez-Ibor, J. J., Jr., Mezzich, J. E. & Sartorius, N. (1996). The World Health Organization Short Disability Assessment Schedule (WHO DAS-S): A tool for the assessment of difficulties in selected areas of functioning of patients with mental disorders. *Social Psychiatry and Psychiatric Epidemiology*, 31, 349-354.
- Jayawickreme, N., Jayawickreme, E., Atanasov, P., Goonasekera, M. A., & Foa, E.B. (2012). *Are Culturally Specific Measures of Trauma-Related Anxiety and Depression Needed? The Case of Sri Lanka*. Psychological Assessment. Advance online publication. doi:10.1037/a0027564
- Jayawickreme, E., Jayawickreme, N., & Seligman, M.E.P. (2012). From victims to survivors: The positive psychology of refugee mental health. In: K. M. Gow and M. J. Celinski (Eds.), *Mass Trauma: Impact and Recovery Issues*. New York: Nova Science Publishers.
- Jayawickreme, E., Jayawickreme, N. & Miller, E. (2010). Triumphalism, fear and humiliation: The psychological legacy of Sri Lanka's civil war. *Dynamics of Asymmetric Conflict*, 3, 208-222.
- Jayawickreme, N., Jayawickreme, E., & Foa, E. B. (2012). Trauma and culture: Using the individualism-collectivism construct to understand cultural differences in posttraumatic stress disorder. In: K. M. Gow and M. J. Celinski (Eds.), *Wayfinding Through Life's Challenges: Coping and Survival*. New York: Nova Science Publishers.
- Jayawickreme, N., Jayawickreme, E., Goonasekera, M. A. & Foa, E. B. (2009). Distress, wellbeing and war: Qualitative analysis of civilian interviews from north-eastern Sri Lanka. *Intervention*, 7, 204-222.
- Joseph, S., Williams, R. & Yule, W. (1993). Changes in outlook following disaster: The preliminary development of a measure to assess positive and negative responses. *Journal of Traumatic Stress*, 6, 271-279.
- Keenan, A. (2007). The Trouble with Evenhandedness: On the Politics of Human Rights and Peace Advocacy in Sri Lanka. In: M. Feher, Y. McKee, and G. Krikorian (Eds.) *Nongovernmental Politics* (88–117). Cambridge: MIT Press.
- Kohrt, B. A., Jordans, M. J., Töl, W. A., Luitel, N. P., Maharjan, S. M., & Upadhaya, N. (2011). Validation of cross-cultural child mental health and psychosocial research instruments:

- adapting the Depression Self-Rating Scale and Child PTSD Symptom Scale in Nepal. *BMC Psychiatry*, 11(1), 127.
- Lyubomirsky, S. & Lepper, H. S. (1999). A measure of subjective happiness: Preliminary reliability and construct validity. *Social Indicators Research*, 46, 137.
- Manson, S.M. (1997). Cross-cultural and multi-ethnic assessment of trauma. In: J.P. Wilson & T.M. Keane (Eds.), *Assessing psychological trauma and PTSD: A handbook for practitioners* (239–266). New York: Guilford.
- Nozick, R. (1974). *Anarchy, State, and Utopia*. New York: Basic Books.
- Oishi, S. (2006). The concept of life satisfaction across cultures: An IRT analysis. *Journal of Research in Personality*, 41, 411-423.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385-401.
- Rubin, H. & Rubin, I. (1995). *Qualitative interviewing: The art of hearing data*. Thousand Oaks, CA: Sage.
- van Ommeren, M. (2003). Validity issues in transcultural epidemiology. *British Journal of Psychiatry*, 183, 376-378.
- van Ommeren, M., Sharma, B., Thapa, S., Makaju, R., Prasain, D. & Bhattari, R. (1999). Preparing instruments for transcultural research: Use of the translation monitoring form with Nepali-speaking Bhutanese refugees. *Transcultural Psychiatry*, 36, 285-301.
- Watson, D., Clark, L. A. & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*, 54(6), 1063-1070.

---

<sup>1</sup> These measures have since been provided to the Family Rehabilitation Center (FRC), a non-profit organisation that provides psychosocial counseling services to war affected populations in north-east Sri Lanka, and have been used by the authors in subsequent studies.

*Eranda Jayawickreme is an assistant professor of psychology at Wake Forest University, Winston-Salem, NC, USA.*

*email: jayawide@wfu.edu/jayawick@sas.upenn.edu*

*Nuwun Jayawickreme is a post-doctoral fellow at the Center for the Treatment and Study of Anxiety in the Perelman School of Medicine at the University of Pennsylvania, USA.*

*Michelle A. Goonasekera is at the Acute Medicine Unit, St. George's Healthcare NHS Trust, London, UK.*