

Outcome Measure	Warwick-Edinburgh Mental Well-Being Scale (WEMWBS)
Sensitivity to Change	Yes
Population	Adolescent and Adult
Domain	Psychological Status
Type of Measure	Self-report scale
ICF-Code/s	B1
Description	<p>The Warwick-Edinburgh Mental Well-Being Scale - WEMWBS (Tennant et al., 2007) aims to build on previous scales and capture a wide conception of well-being, including affective-emotional aspects, cognitive-evaluative dimensions and psychological functioning, in a form which is short enough to be used in population-level surveys. By focusing wholly on the positive, the scale is intended to support mental health promotion initiatives and be free of ceiling effects in population samples.</p> <p>The scale consists of 14 items covering both hedonic and eudaimonic aspects of mental health including positive affect (feelings of optimism, cheerfulness, relaxation), satisfying interpersonal relationships and positive functioning (energy, clear thinking, self acceptance, personal development, competence and autonomy).</p> <p>Individuals completing the scale are required to tick the box that best describes their experience of each statement over the past two weeks using a 5-point Likert scale (none of the time, rarely, some of the time, often, all of the time). The Likert scale represents a score for each item from 1 to 5 respectively, giving a minimum score of 14 and maximum score of 70. All items are scored positively. The overall score for the WEMWBS is calculated by totalling the scores for each item, with equal weights. A higher WEMWBS score therefore indicates a higher level of mental well-being.</p> <p>What WEMWBS Is Used For:</p> <ol style="list-style-type: none"> 1) Monitoring wellbeing both nationally and locally (England Scotland and Iceland are currently using the scale for these purposes). 2) Evaluating projects and programme which could have an influence on mental wellbeing.

- 3) Investigating the determinants of mental wellbeing.
- 4) WEMWBS is also used in the context of projects and programmes to enable self-reflection as a prelude to involvement with health enhancing activities.
- 5) Whilst it is not designed as a clinical tool, it does seem to be sensitive to changes in mental wellbeing at the individual level. WEMWBS is available for this purpose on NHS Direct and other public access databases where scores are interpreted to offer clinical advice.

What WEMWBS IS Not Used For:

WEMWBS was not designed as a screening instrument to detect mental illness and is Others considered for use in this context. However, very low scores may be indicative of the need for clinical support.

WEMWBS scores have been benchmarked against [Centre for Epidemiological Studies Depression Scale](#) (1) [Edinburgh Postnatal Depression Scale](#) (2), the [Patient Health Questionnaire](#) (3) and against the Association of University and College Counselling Scale (4). Correlations with all these scales are high, but precise equivalent cut points are difficult to define.

WEMWBS does not provide a cut point to signify mental wellbeing. The present state of knowledge and understanding of mental wellbeing is not sufficient to enable this at present. It is both desirable and expected that mental wellbeing will improve across the entire spectrum of the population, both the top and bottom end. It is therefore inappropriate to develop a cut point which represents the optimum. In due course as public understanding of mental wellbeing develops the scale is likely to need updating extending the range of optimum scores.

See:

- 1) Radloff, L. (1997). "The CES-D scale A self-report depression scale for research in the general population." *Applied Psychological Measurement* 1: 385-401.
- 2) Cox J, H. J., Sagovsky R (1987). "Detection of post natal depression. Development of the 10 items EPDS " *Br. J. Psychiatry* 150: 782-786.
- 3) Kroenke, K., et al. (2001). "The PHQ-9." *Journal of General Internal*

	<p>Medicine 16(9): 606-613.</p> <p>4) Association of University and College Counselling Scale (2009).</p>
Properties	<p>OVERVIEW</p> <p>WEMWBS is a measure of mental well-being focusing entirely on positive aspects of mental health. As a short and psychometrically robust scale, with no ceiling effects in a population sample, it offers promise as a tool for monitoring mental well-being at a population level.</p> <p>Whilst WEMWBS should appeal to those evaluating mental health promotion initiatives, it is important that the scale's sensitivity to change is established before it is recommended in this context.</p> <p>SCORING</p> <p>WEMWBS is very simple to score. The total score is obtained by summing the score for each of the 14 items. The latter ranges from 1 – 5 and the total score from 14-70.</p> <p>0-32 points</p> <p>Your wellbeing score is <u>very low</u>.</p> <p>32-40 points</p> <p>Your wellbeing score is <u>below average</u>.</p> <p>40-59 points</p> <p>Your wellbeing score is <u>average</u>.</p> <p>59-70 points</p> <p>Good news, your wellbeing score is <u>above average</u>.</p> <p>Most people have a score between 41 and 59.</p> <p>PSYCHOMETRIC PROPERTIES</p> <p><u>Population Norms</u></p> <p>National survey reports have been published and they show population norms for Scotland 2008 and England 2011. These reports show WEMWBS scores by age, gender and various other demographic groups and the English report also has some longitudinal data from various population studies. For quick reference the population means and distribution for the WEMWBS and transformed SWEMWBS are summarised for the 2011 Health Survey for England.</p>

The Warwick-Edinburgh Mental Well-being scale was developed to enable the monitoring of mental wellbeing in the general population and the evaluation of projects, programmes and policies which aim to improve mental wellbeing. WEMWBS was developed on funding provided by NHS Health Scotland in 2005. Development involved a review of concepts of mental wellbeing and existing scales, a UK validation of a promising candidate scale the Affectometer 2, and discussion with a panel of experts. Taking the Affectometer2 as a starting point, new items were developed, discussed and iterated until the 14 item scale was resolved for testing.

[The original validation](#) involved students in England and Scotland and a large representative sample of the general population in Scotland. The development was led by a team from the University of Warwick (Stewart-Brown, Weich, Clarke and others) working with the University of Edinburgh (Platt) and NHS Health Scotland (Parkinson).

A 7 item scale (the Shorter Warwick-Edinburgh Mental Well-being Scale SWEMWBS) which is RASCH compatible has been derived. This scale has been validated in the UK and Italy.

WEMWBS has been tested with [young people](#) (13-15yrs), [minority populations](#) (Chinese and Pakistani) and users of mental health services and their carers. All these groups have found WEMWBS easy to complete and reported that it provides a credible picture of mental wellbeing. Users of mental health services and their carers have reported their preference for WEMWBS over other mental health scales.

Crawford MJ, Robotham D, Thana L, Patterson S, Weaver T, Barber R, Wykes T, Rose D: Selecting outcome measures in mental health: the views of service users. Journal of Mental Health 2011, 20(4):336–346.

Panel of experts who developed the WEMWBS Scale in 2007

- 1) Stephen Platt, Research Unit in Health, Behaviour and Change, School of Clinical Sciences & Community Health, University of Edinburgh, Edinburgh, UK,
- 2) Stephen Joseph, School of Sociology & Social Policy, University of Nottingham, Nottingham, UK,
- 3) Scott Weich, Warwick Medical School, University of Warwick, Coventry, UK,
- 4) Jane Parkinson, NHS Health Scotland, Glasgow, UK and Faculty of Health and Social Care, Anglia Ruskin University, Cambridge,

	<p>Jenny Secker, UKAnglia Ruskin University & South Essex Partnership University NHS Foundation Trust.</p> <p>5) Sarah Stewart-Brown, Warwick Medical School, University of Warwick, Coventry, UK,</p> <p>6) Glyn Lewis, Professor of Psychiatric Epidemiology, Academic Unit of Psychiatry Oakfield House Oakfield Grove Bristol BS8 2BN</p> <p>7) Stephen Stansfield, Professor of Psychiatry and Head of the Centre for Psychiatry at Barts and the London, Queen Mary University of London</p> <p>Reliability and Validity</p> <p><u>Internal Consistency</u> Cronbach's alpha was 0.89 for the student sample and 0.91 for the population sample. Item-total correlations, corrected for overlap, for all items ranged between $r = 0.52$ and 0.80 (student sample) and $r = 0.51$ and 0.75 (population sample) – within desired limits.</p> <p><u>Test-retest Reliability</u> Test-retest reliability at one week in the student sample was 0.83.</p> <p><u>Construct validity</u> Confirmatory factor analysis from the 348 respondent student sample showed adequate GFI, AGFI and RMSEA value (GFI = 0.93, AGFI = 0.89, RMSEA = 0.0551). A significant chi-squared statistic was again obtained (chi squared = 141.6, df = 69, $p < 0.0001$). From these results, both samples showed verification of the pre-hypothesised one-factor scale structure. For each sample, all items loaded > 0.5 onto the single factor.</p> <p>Overall health, as represented by the EQ-5D VAS, showed a low to moderate significant correlation ($r = 0.43$) with the scale. Scales measuring components of affect or well-being all showed significant high correlations with WEMWBS: (PANAS-PA $r = 0.71$, SPWB $r = 0.74$, SDHS $r = 0.73$, WHO-5 0.77). A moderate negative correlation was observed between WEMWBS and the PANAS-NA ($r = -0.54$). The two life satisfaction scales showed higher than anticipated correlations with WEMWBS (SWLS $r = 0.73$, GLS 0.53). The EIS showed a low to moderate correlation with WEMWBS ($r = 0.48$).</p>
Advantages	<p>Positive focus</p> <p>The WEMWBS is a scale that measures mental wellbeing (as opposed to mental illness or disorder) and is suitable for use in the general population. Its strengths are that it is positively worded, represents positive attributes</p>

	<p>of wellbeing and covers both feeling and functioning.</p> <p>Evidence from a recent study suggests that users of mental health services and their carers prefer the WEMWBS to other mental health outcome measures.</p> <p>Robust psychometric properties</p> <p>Its psychometric properties are robust and it is sensitive to the changes that occur in wellbeing promotion projects.</p> <p>Various studies have shown that WEMWBS is normally distributed in the general population (although there is often a slight tail at the lower end) and hence can be used in parametric analyses. All the validation studies have shown WEMWBS to be easy to complete, and to capture concepts of wellbeing familiar to general and minority populations.</p> <p>Others</p> <p>Used as a core module in Scottish Health Survey and as a government national indicator.</p>
Disadvantages	Low usage by CRE members and low usage in paediatric TBI research.
Additional Information	<p>How to use WEMWBS</p> <p>A user guide for WEMWBS is available to help you. This is currently being updated. Please note that the instructions for seeking to use WEMWBS are now out of date in this guide, please follow the instructions below. To further assist, answers to some common requests for clarification are contained in a frequently asked questions document.</p> <p>For those wanting to evaluate the impact of their work on participants' mental well-being, a WEMWBS practitioner-based user guide is available. It is free to use but is copyrighted to NHS Health Scotland and the Universities of Warwick and Edinburgh. Permission and registration are required for use. To use WEMWBS (or SWEMWBS), you will need to register your use by completing an online registration form on the Warwick University site for WEMWBS (external link). Once submitted you will receive an email granting permission to use the scale.</p> <p>If the scale is reproduced, it must include the copyright statement which appears with it and no changes to its wording, response categories or layout must be made. Any report regarding use of WEMWBS (or SWEMWBS) also needs to include the following text:</p>

	<p>"The Warwick-Edinburgh Mental Well-being Scale was funded by the Scottish Executive National Programme for improving mental health and well-being, commissioned by NHS Health Scotland, developed by the University of Warwick and the University of Edinburgh, and is jointly owned by NHS Health Scotland, the University of Warwick and the University of Edinburgh."</p>
Reviewers	<p>Vicki Anderson (paediatrics) Cathy Catroppa (paediatrics) Jennie Ponsford (adults)</p>

References

Validation Papers By the Warwick Team:

- 1) Clarke, A., Friede, T., Putz, R., Ashdown, J., Martin, S., Blake, A., ... & Stewart-Brown, S. (2011). Warwick-Edinburgh Mental Well-being Scale (WEMWBS): validated for teenage school students in England and Scotland. A mixed methods assessment. *BMC Public Health*, 11(1), 487.
- 2) Maheswaran, H., Weich, S., Powell, J., & Stewart-Brown, S. (2012). Evaluating the responsiveness of the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS): Group and individual level analysis. *Health and Quality of Life Outcomes*, 10(1), 156.
- 3) Stewart-Brown, S. (2013). The Warwick-Edinburgh Mental Well-Being Scale (WEMWBS): Performance in Different Cultural and Geographical Groups. In C.L.M. Keyes (2013), *Mental Well-Being: International Contributions to the Study of Positive Mental Health*. (pp. 133-150). Dordrecht, Netherlands: Springer.
- 4) Stewart-Brown, S. L., Platt, S., Tennant, A., Maheswaran, H., Parkinson, J., Weich, S., ... & Clarke, A. (2011). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): a valid and reliable tool for measuring mental well-being in diverse populations and projects. *Journal of Epidemiology and Community Health*, 65(Suppl 2), A38-A39.
- 5) Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J. & Weich, S. (2009) Internal Construct Validity of the Warwick-Edinburgh Mental Well-being Scale (WEMWBS): A Rasch analysis using data from the Scottish Health Education Population Survey. *Health and quality of life outcomes*, 7:15
- 6) Taggart, F., Friede, T., Weich, S., Clarke, A., Johnson, M., & Stewart-Brown, S. (2013). Cross cultural evaluation of the Warwick-Edinburgh mental well-being scale (WEMWBS)- a mixed methods study. *Health and Quality of Life Outcomes*, 11:27.
- 7) Tennant, R., Hillier, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., ... & Stewart-Brown, S. (2007a). The Warwick-Edinburgh mental well-being scale (WEMWBS): development and UK validation. *Health and Quality of Life Outcomes*, 5(1), 63.
- 8) Tennant, R., Fishwick, R., Platt, S., Joseph, S., & Stewart-Brown, S. (2006). Monitoring positive mental health in Scotland: validating the Affectometer 2 scale and developing the Warwick-Edinburgh Mental Well-being Scale for the UK, Edinburgh, NHS Health Scotland.

By Other Groups:

- 1) Bartram, D. J., Yadegarfar, G., Sinclair, J., & Baldwin, D. S. (2011). Validation of the Warwick-Edinburgh Mental Well-being Scale (WEMWBS) as an overall indicator of population mental health and well-being in the UK veterinary profession. *The Veterinary Journal*, 187(3), 397-398.

- 2) Bellwood, M., & Busuttil, W. (2009). Exit satisfaction surveys and Warwick-Edinburgh Mental Well-being Scale (WEMWBS) outcome study. Internal publication. Leatherhead: Combat Stress.
- 3) Castellví, P., Forero, C. G., Codony, M., Vilagut, G., Brugulat, P., Medina, A., Gabilondo, A., Mompart, A., Colom, J., Tresserras, R., Montserrat F., Stewart-Brown, S. & Alonso, J. (2013). The Spanish version of the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS) is valid for use in the general population. *Quality of Life Research*, 1-12.
- 4) Crawford, M. J., Robotham, D., Thana, L., Patterson, S., Weaver, T., Barber, R., Wykes T. & Rose, D. (2011). Selecting outcome measures in mental health: the views of service users. *Journal of Mental Health*, 20(4), 336-346.
- 5) Deary, I. J., Watson, R., Booth, T., & Gale, C. R. (2012). Does Cognitive Ability Influence Responses to the Warwick-Edinburgh Mental Well-Being Scale?. Retrieved from <http://psicnet.apa.org>.
- 6) Gremigni, P., & Stewart-Brown, S. (2011). Measuring mental well-being: Italian validation of the Warwick-Edinburgh Mental Well-Being Scale (WEMWBS). *Giornale italiano di psicologia*, 38(2), 485-508.
- 7) Ikink, J. G., Lamers, S. M., & Bolier, J. M. (2012). De Warwick-Edinburgh Mental Well-being Scale (WEMWBS) als meetinstrument voor mentaal welbevinden in Nederland.
- 8) Lloyd, K., & Devine, P. (2012). Psychometric properties of the Warwick-Edinburgh mental well-being scale (WEMWBS) in Northern Ireland. *Journal of Mental Health*, 21(3), 257-263.
- 9) López, M. A., Gabilondo, A., Codony, M., García-Forero, C., Vilagut, G., Castellví, P., Ferrer, M. & Alonso, J. (2012). Adaptation into Spanish of the Warwick–Edinburgh Mental Well-being Scale (WEMWBS) and preliminary validation in a student sample. *Quality of Life Research*, 1-6.
- 10) Orgeta, V., Lo Sterzo, E., & Orrell, M. (2013). Assessing mental well-being in family carers of people with dementia using the Warwick–Edinburgh Mental Well-Being Scale. *International Psychogeriatrics*, 1-9.
- 11) SSW Ng, AWY Lo, TKS Leung, FSM Chan, ATY Wong, RWT Lam, DKY Tsang. Translation and Validation of the Chinese Version of the Short Warwick-Edinburgh Mental Well-being Scale for Patients with Mental Illness in Hong Kong. *East Asian Arch Psychiatry* 2014;24:3-9
- 12) Trousselard M., Stewart-Brown S., Franck N. (submitted). Investigating well-being in France with the WEMWBS: healthy populations and schizophrenia.

Some Papers that have used the WEMWBS:

Vasiliki Orgeta, Elena Lo Sterzo and Martin Orrell (2013). Assessing mental well-being in family carers of people with dementia using the Warwick–Edinburgh Mental Well-

Being Scale. *International Psychogeriatrics*, 25, pp 1443-1451.
doi:10.1017/S1041610213000835.

Powell J, Hamborg T, Stallard N, Burls A, McSorley J, Bennett K, Griffiths KM, Christensen H
Effectiveness of a Web-Based Cognitive-Behavioral Tool to Improve Mental Well-Being in the General Population: Randomized Controlled Trial. *J Med Internet Res* 2013;15(1):e2

Stewart-Brown S, Samaraweera PC, Taggart F, Kandala NB, Stranges S. Socioeconomic gradients and mental health: implications for public health. *The British Journal of Psychiatry* 2015. Published online 2015-03-19T00:05:19-07:00 in advance of the print journal.

Stranges S, Samaraweera PC, Taggart F, Kandala NB, Stewart-Brown S. Major health-related behaviours and mental wellbeing in the general population. the Health Survey for England. *BMJ Open*. 2014;4(e005878).