



Arts & Humanities
Research Council



UCL Museum Wellbeing Measures Toolkit



Authors

Dr Linda J Thomson & Dr Helen J Chatterjee



UCL Museum Wellbeing Measures Toolkit Contents

Page

3	Introduction
4-6	Further Information
7	Generic Wellbeing Questionnaire - Short 6-item version (A4 sheet)
8-9	Generic Wellbeing Questionnaire - Full 12-item version (2 x A4 sheets)
10	Positive Wellbeing Umbrella - Generic (A4 sheet)
11	Negative Wellbeing Umbrella - Generic (A4 sheet)
12	Positive Wellbeing Umbrella - Older adult (A4 sheet)
13	Positive Wellbeing Umbrella - Younger adult (A4 sheet)
14	Thoughts & Comments (A4 sheet)
15-16	Positive Wellbeing Umbrella - Generic (2 cut-outs, front and back)
17-18	Negative Wellbeing Umbrella - Generic (2 cut-outs, front and back)
19-20	Positive Wellbeing Umbrella - Older adult (2 cut-outs, front and back)
21-22	Positive Wellbeing Umbrella - Younger adult (2 cut-outs, front and back)
23-25	What to do with the data
26	How the Toolkit was developed
27	Background to the research
27	References
28	Acknowledgements
28	Contacts



UCL Museum Wellbeing Measures Toolkit

Introduction

What is the UCL Museum Wellbeing Measures Toolkit?

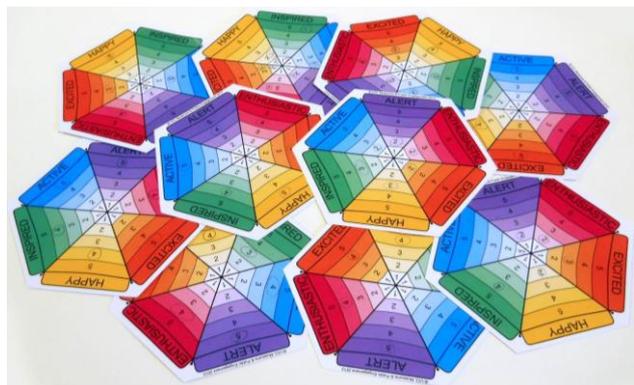
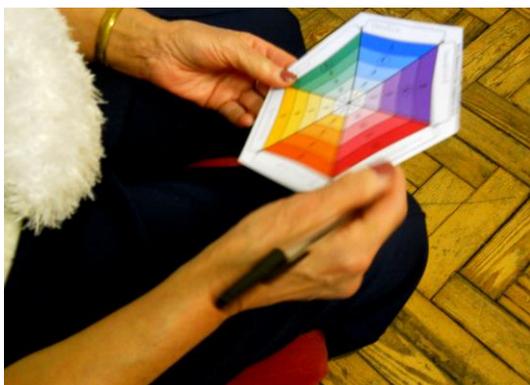
The UCL Museum Wellbeing Measures Toolkit is a set of scales of measurement used to assess levels of wellbeing arising from participation in museum and gallery activities that has been trialled across the UK. The Toolkit has been designed to help people involved in running in-house or outreach museum projects, evaluate the impact of this work on the psychological wellbeing of their audiences. The Toolkit is flexible in its application and supports a 'pick and mix' approach. It can be used to evaluate the impact of a one-off activity or programme of events. The Toolkit was produced by researchers from University College London (UCL) Museums & Public Engagement and funded by the Arts & Humanities Research Council (AHRC).

What does the Toolkit Measure?

The Toolkit measures psychological wellbeing as an indicator of the mental state of the individual. Although there are other aspects of wellbeing such as physical and social wellbeing, the Toolkit focuses on levels of self-reported changes in mood and emotion as these aspects of wellbeing are the ones that are more likely to change as a result of a short intervention, such as participating in a museum or gallery activity.

What does the Toolkit consist of?

The Toolkit consists of two Generic Wellbeing Questionnaire (short and full versions), four Wellbeing Measures Umbrellas (positive, negative, older adult and younger adult) with instructions on the same page and a separate sheet for comments. All of these measures are printed single-sided onto A4 sheets or reduced to A5, in either full colour or black ink. Additional artwork has been provided for cut-out, six-sided versions of the Measures Umbrellas that are printed on both sides of thin card, two per A4 sheet, with the umbrella measure on one side and the instructions and comment space on the other.





UCL Museum Wellbeing Measures Toolkit

Further information

None of the time	Not very often	Some of the time	Very often	All of the time
1	2	3	4	5

None of the time	Not very often	Some of the time	Very often	All of the time
1	2	3	4	5

Generic Wellbeing Questionnaire

There are two versions of this questionnaire, a short 6-item version (one page) and a full 12-item version (2 pages). All statements are phrased in the past tense and refer to an aspect of emotion or quality of life experienced by a participant while taking part in an activity, e.g. 'I felt happy'. Each statement is rated out of five depending on the extent of agreement with it (1 = None of the time; 2 = Not very often; 3 = Some of the time; 4 = Very often; 5 = All of the time).

Depending on the situation, questionnaires can be given to participants to complete by themselves after an activity or the statements can be read out by a facilitator. Since the first six statements of the full version are the same as all six statements of the short version, it is possible for participants who have completed the short version to carry on to the longer version if they wish or, conversely, for participants who have started the full version not to complete any more than the first six statements.

Background to development

The 12-item questionnaire was tested with around 20 older adults with moderate to severe dementia taking part in weekly museum-related outreach activities. Examination of their responses led to the development of the short 6-item version to capture essential elements of wellbeing in participants for whom the longer scale might be challenging. These participants found the wellbeing statement format easier to understand and rate than single wellbeing words also trialled.

Facilitators of these sessions commented that presenting statements in the form of short sentences was a more concrete, less abstract task than responding to single words that seemed challenging for participants with severe dementia. Analysis of responses to the 12-item version led to the production of the 6-item version with the statements arranged in order of priority, i.e. statements nearer to the top of the questionnaire tend to produce higher response ratings.



Wellbeing Measures Umbrellas

There are currently four versions of the Wellbeing Measures Umbrella available to use comprising the ‘Positive Wellbeing Umbrella – Generic’; ‘Negative Wellbeing Umbrella – Generic’; ‘Positive Wellbeing Umbrella - Older Adult’ and ‘Positive Wellbeing Umbrella - Younger Adult’. All Wellbeing Umbrellas consist of a hexagonal shape with six sections of different colours. A variety of colour schemes were trialled for the Wellbeing Measures Umbrellas resulting in warm colours for the Positive Wellbeing Umbrella, cool colours for the Negative Wellbeing Umbrella, richer colours for the Older Adult Umbrella and fluorescent colours for the Younger Adult Umbrella. Each of the six sections has a word next to it related to a wellbeing mood or emotion and numbers from one to five. Participants are required to rate the extent they feel the wellbeing word at that moment in time by circling the appropriate number, following the instructions provided.

The Wellbeing Measures Umbrella is both highly visual and intuitive to complete in that the greater the number, the more intense the colour and the bigger the area it occupies. As with the Generic Wellbeing Questionnaire, the Wellbeing Umbrellas can be used after an activity but ideally two measures should be taken, the first before the activity to act as a baseline measure and the second after the activity so that any changes in participant wellbeing can be compared. The ‘before’ and ‘after’ measures can also be taken over time, for example, at the start of a programme of activities, after several weeks and at the end.

Background to development

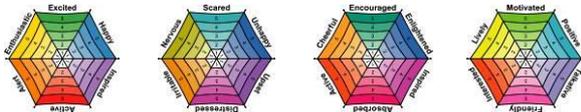
The Positive Wellbeing Umbrella, with words ‘enthusiastic’, ‘excited’, ‘happy’, ‘inspired’, ‘active’ and ‘alert’, and the Negative Wellbeing Umbrella with words ‘distressed’, ‘irritable’, ‘nervous’, ‘scared’, ‘unhappy’ and ‘upset’, were validated as reliable measures of generic wellbeing with around 150 adult and older adult participants. Analysis of the ‘Fill in your own’ wellbeing words generated by around 40 younger adults, and over 120 older adults led to the development of age group specific, Positive Wellbeing Umbrellas (see ‘Background to the research’ below).

Younger adults responded better to the words ‘friendly’, ‘interested’, ‘lively’, ‘motivated’, ‘positive’ and ‘talkative’, whereas older adults preferred ‘absorbed’, ‘active’, ‘cheerful’, ‘encouraged’, ‘enlightened’ and ‘inspired’. For older adults with mild to moderate dementia, the wellbeing umbrellas were completed successfully but for those with moderate to severe dementia, the Generic Wellbeing Questionnaire was preferred (see above).



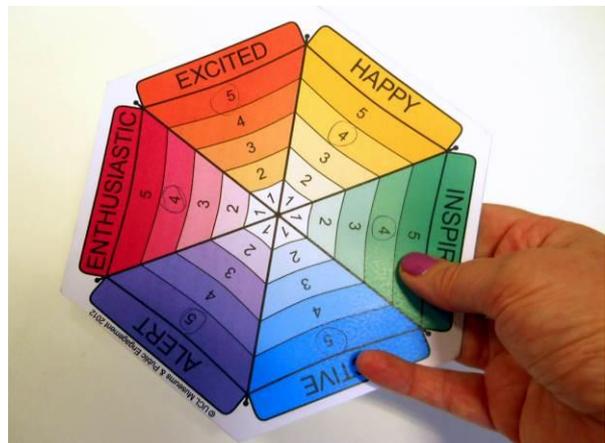
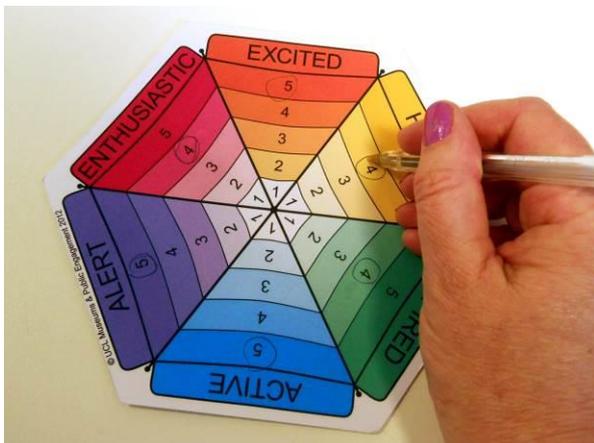
Thoughts & Comments sheet

The questions on this sheet were developed as a result of a survey which asked participating museums and galleries across the UK to send in the questions that they regularly used to evaluate their audience outcomes. Since the toolkit that was being developed at UCL was specifically a measure of individual wellbeing, questions which asked about the qualities of the location, session or facilitator were omitted in favour of those which asked about the participant. Analysis of these questions and several trials with museum audience led to those represented here. The questions are shown in thought bubbles rather than rectangular boxes as it was felt these were visually more attractive.



Cut-out Umbrellas

Participants liked the cut-out Museum Wellbeing Measures Umbrellas as they were colourful and intriguing, they felt that they wanted to pick them up to look more closely at them and most people understood easily how to use them as a result of reading the instructions on the reverse. The general feeling among facilitators was that if time was taken to prepare the means of evaluation, in this case the Wellbeing Umbrella, then time would be taken to fill it in. A slight downside of using cut-out umbrellas, as opposed to those on A4 sheets other than the fact they need to be printed double-sided and cut out, is that in order to fit on the instructions the text has been printed a little smaller and there is only room for one comments' bubble.



Generic Wellbeing Questionnaire

Short 6-item version

Please circle a number for each statement to indicate how much you agree with it.

1) I felt happy

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

2) I felt engaged

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

3) I felt comfortable

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

4) I felt safe and secure

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

5) I enjoyed the company of other people

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

6) I talked to other people

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

Generic Wellbeing Questionnaire

Full 12-item version

Please circle a number for each statement to indicate how much you agree with it.

1) I felt happy

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

2) I felt engaged

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

3) I felt comfortable

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

4) I felt safe and secure

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

5) I enjoyed the company of other people

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

6) I talked to other people

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

Generic Wellbeing Questionnaire

Full 12-item version (continued)

Please continue to circle a number for each statement to indicate how much you agree with it.

7) I was interested

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

8) I enjoyed it

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

9) I was amazed

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

10) I was entertained

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

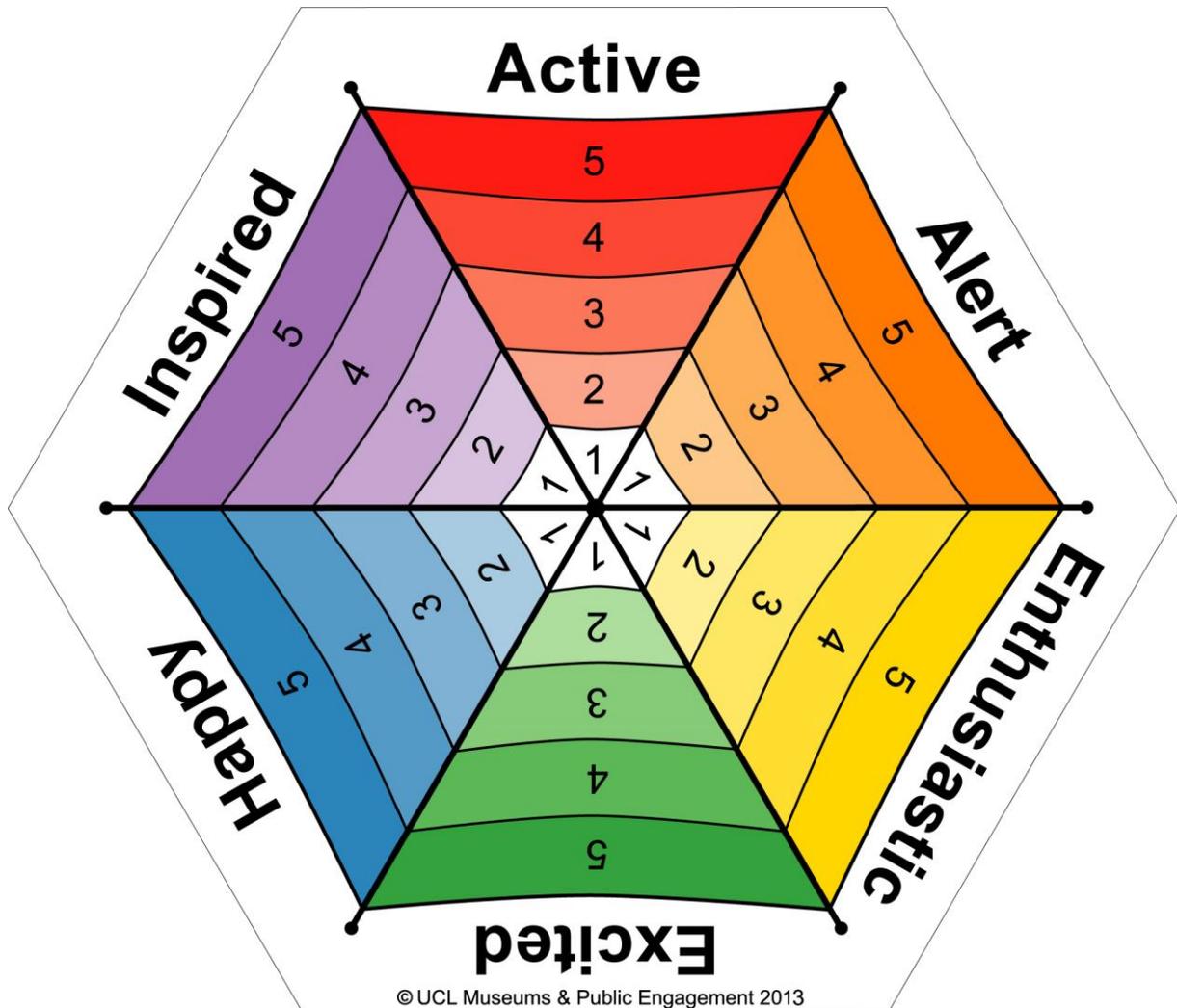
11) I felt confident

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
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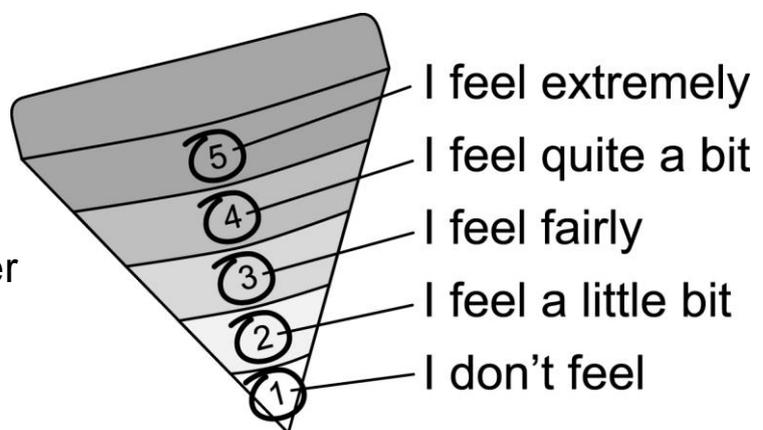
12) I felt healthy

None of the time 1	Not very often 2	Some of the time 3	Very often 4	All of the time 5
-----------------------	---------------------	-----------------------	-----------------	----------------------

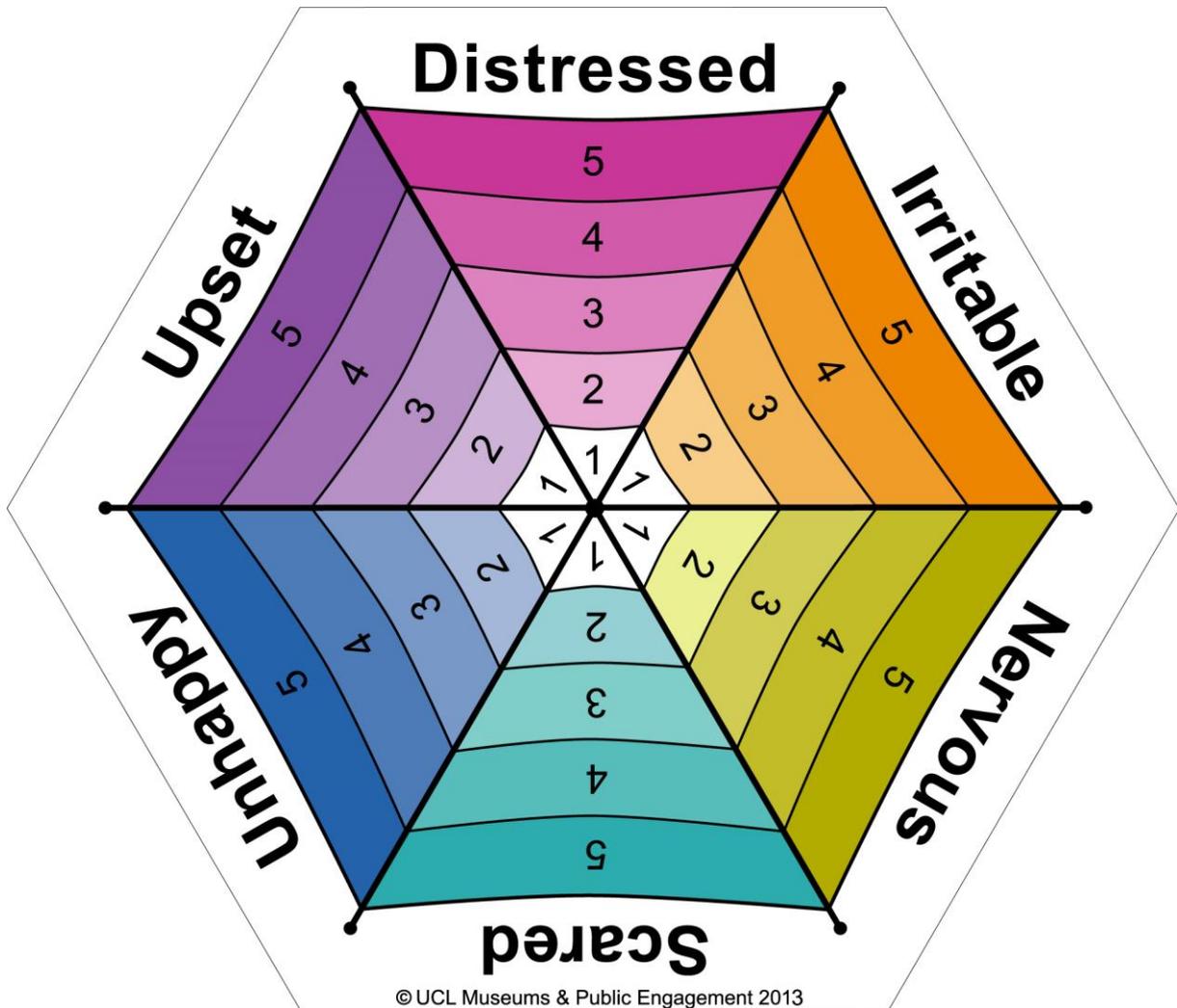
Positive Wellbeing Umbrella Generic



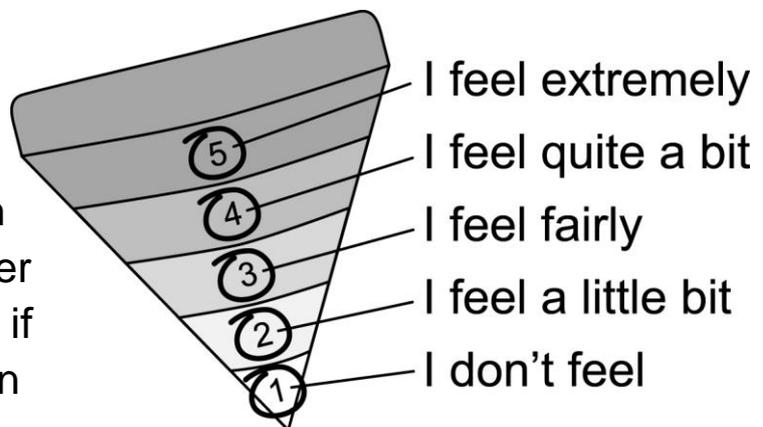
Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Alert', if you feel *fairly* alert, then you should circle 3.



Negative Wellbeing Umbrella Generic

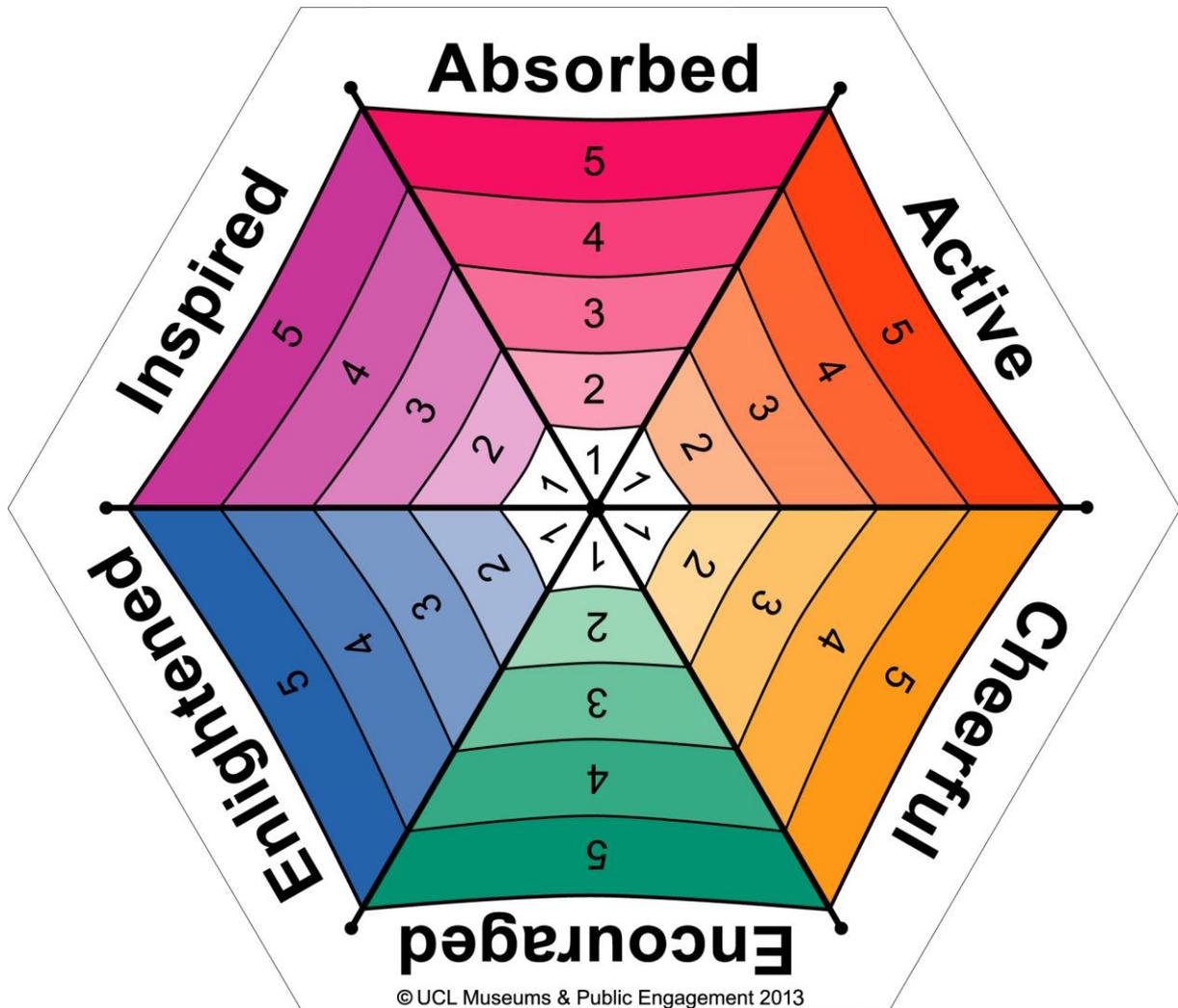


Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Upset', if you feel *fairly* upset, then you should circle 3.

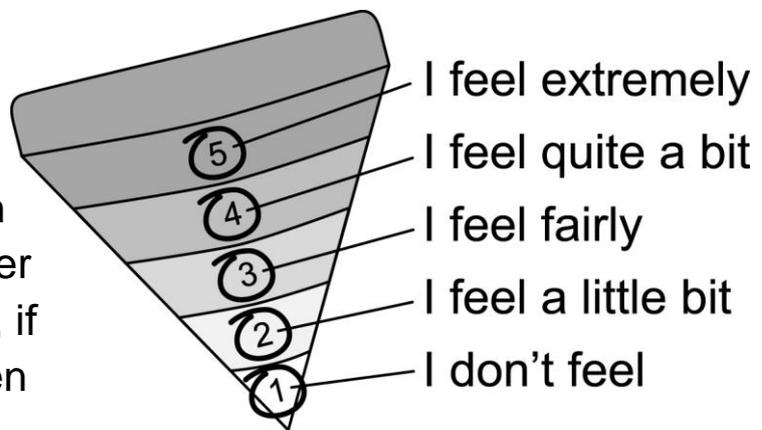


Positive Wellbeing Umbrella

Older Adult

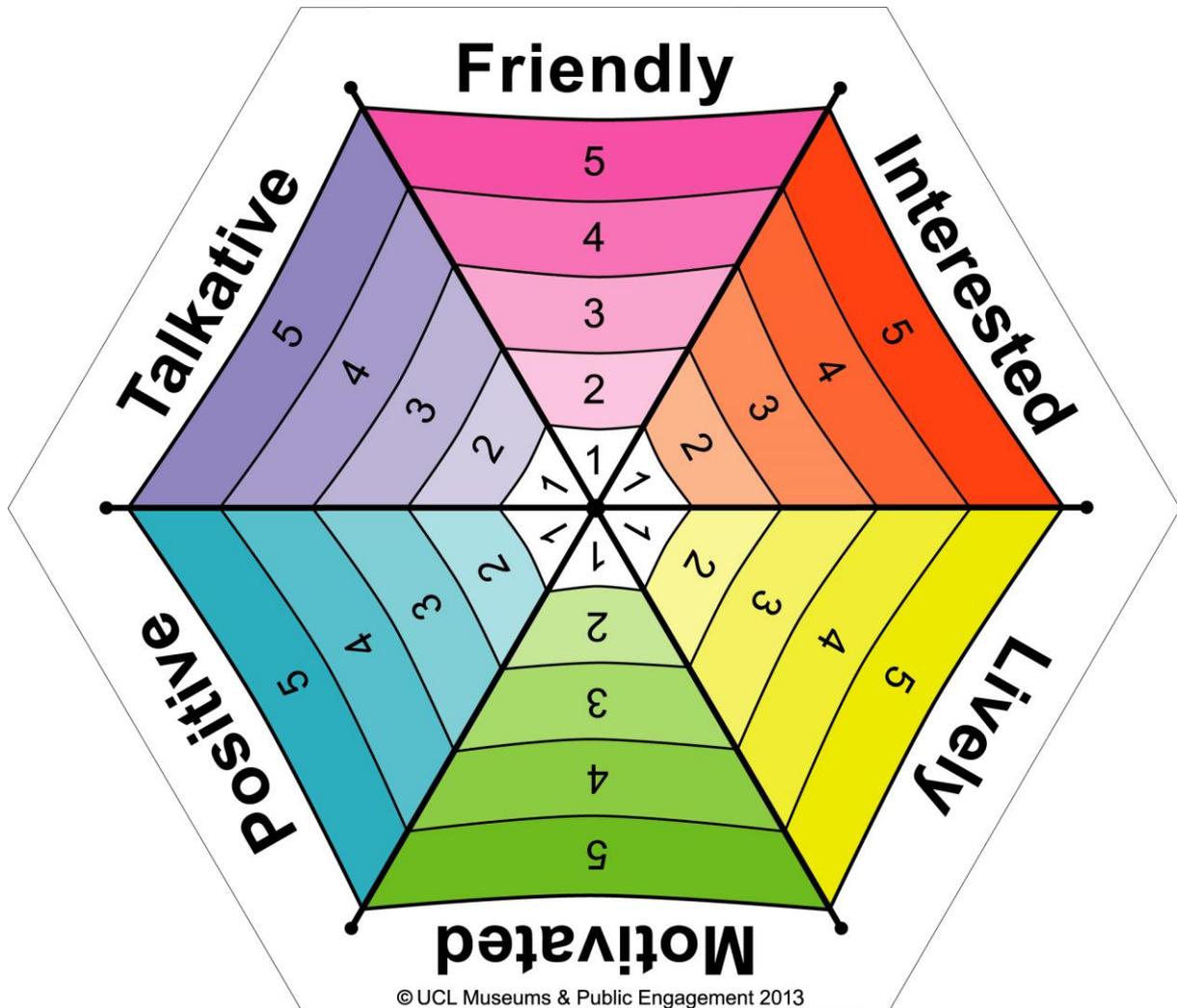


Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Active', if you feel *fairly* active, then you should circle 3.

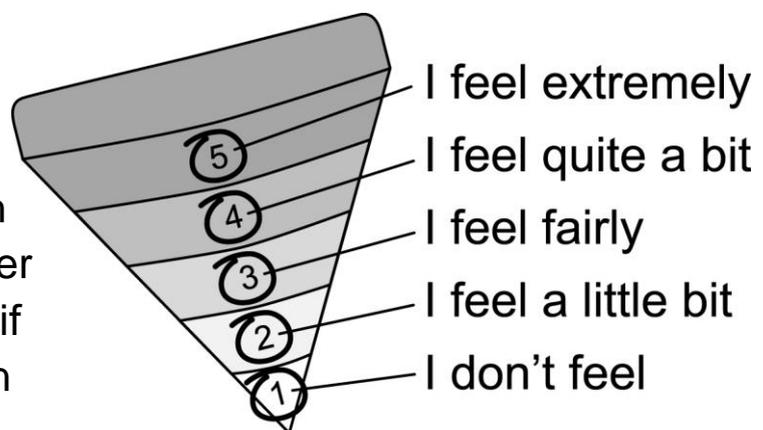


Positive Wellbeing Umbrella

Younger Adult



Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Lively, if you feel *fairly* lively, then you should circle 3.



Thoughts & Comments

What went well for you?

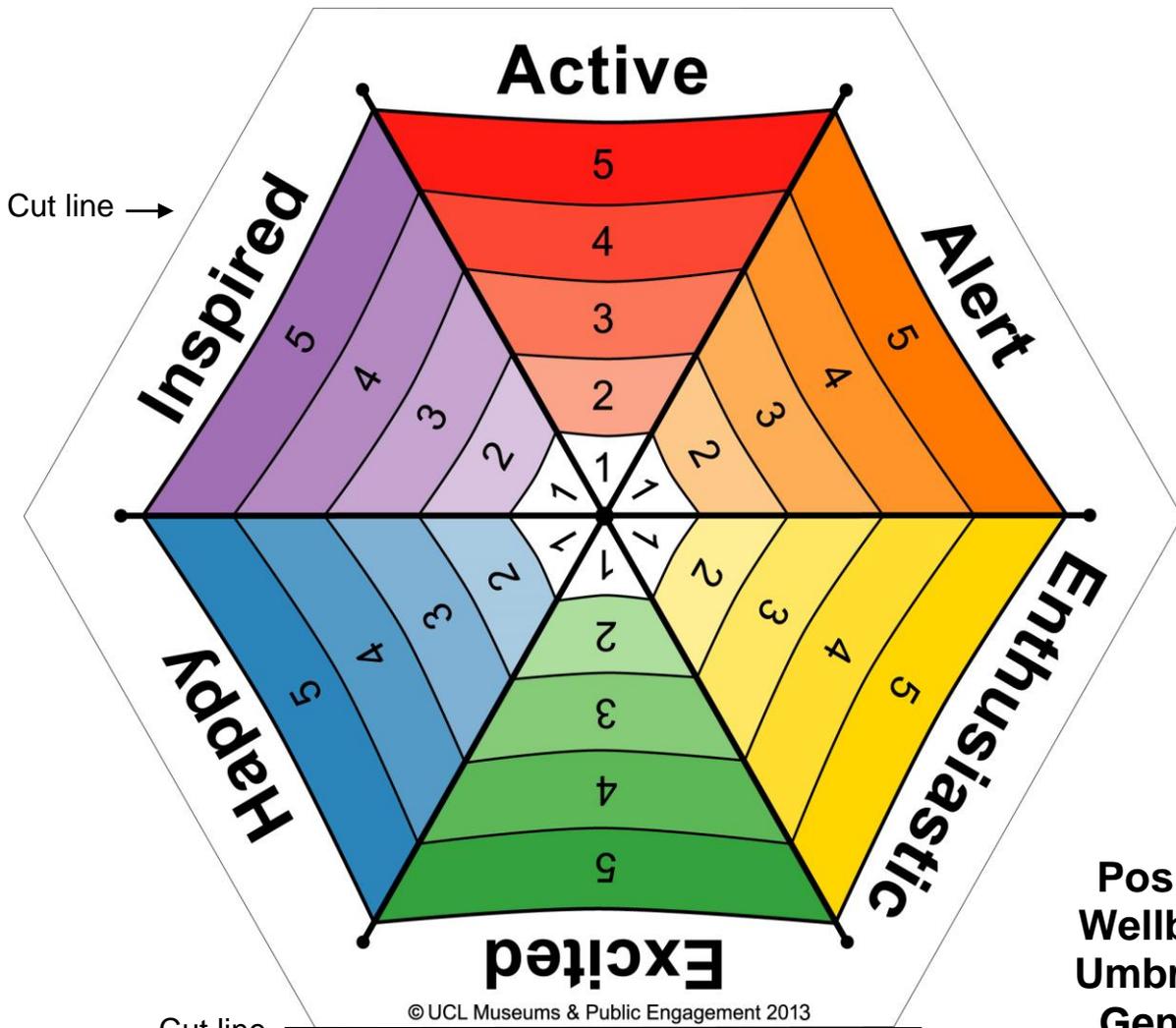


What do you feel you achieved?

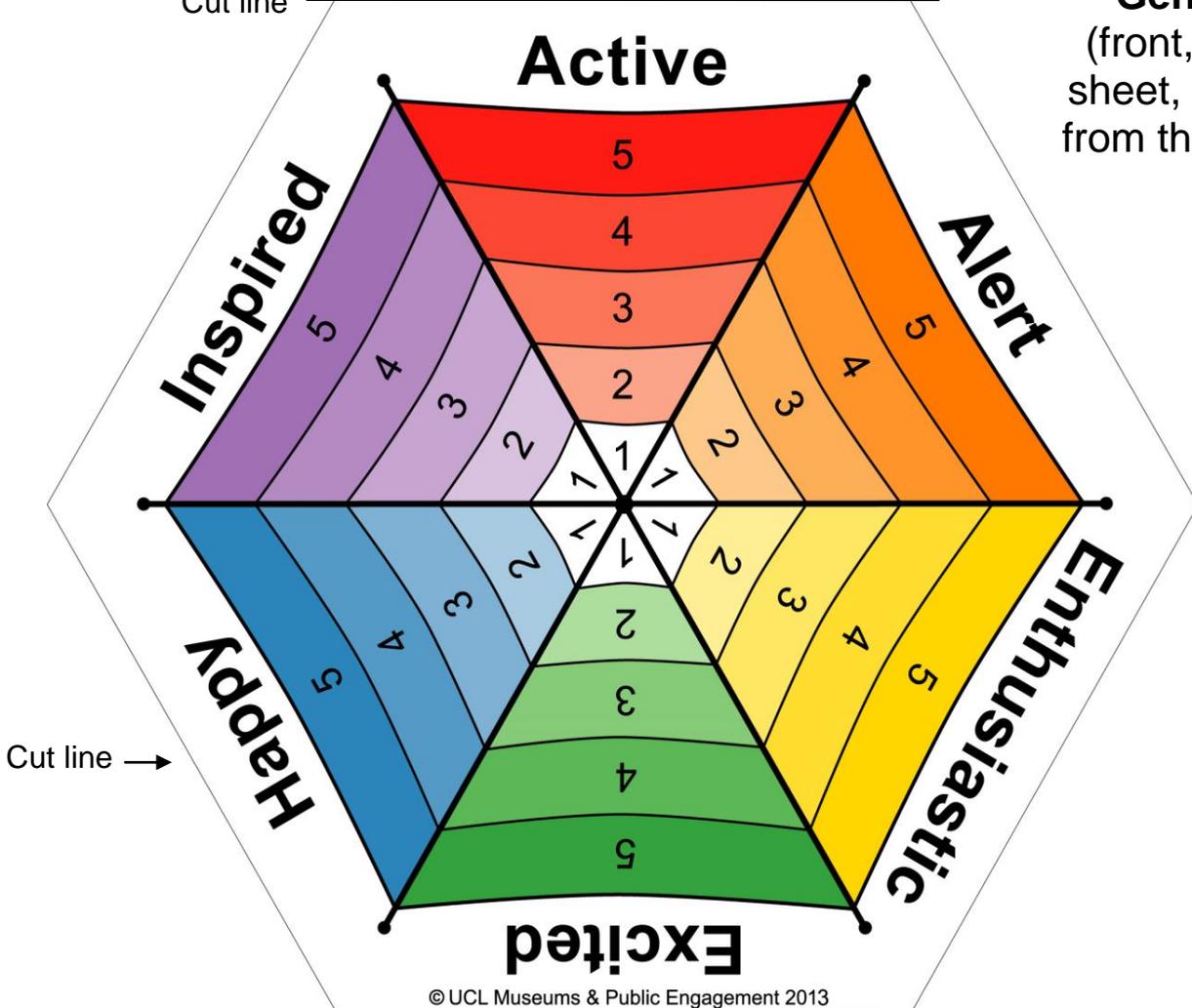
What could have been better?

Any other comments?



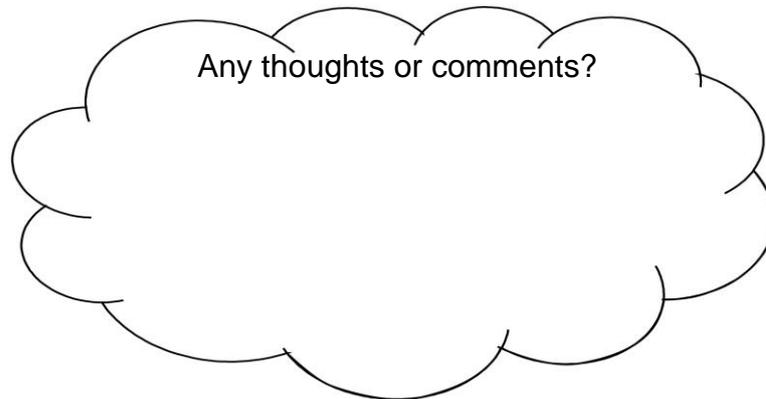
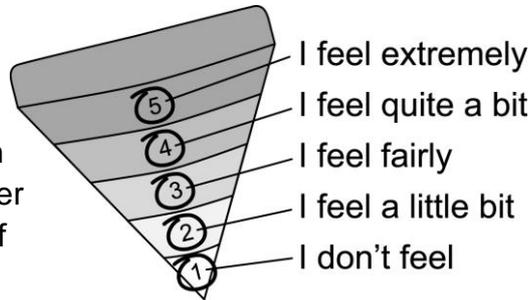


Positive Wellbeing Umbrella - Generic
 (front, 2 per sheet, cut out from this side)



Positive Wellbeing Umbrella Generic

Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Alert', if you feel *fairly* alert, then you should circle 3.

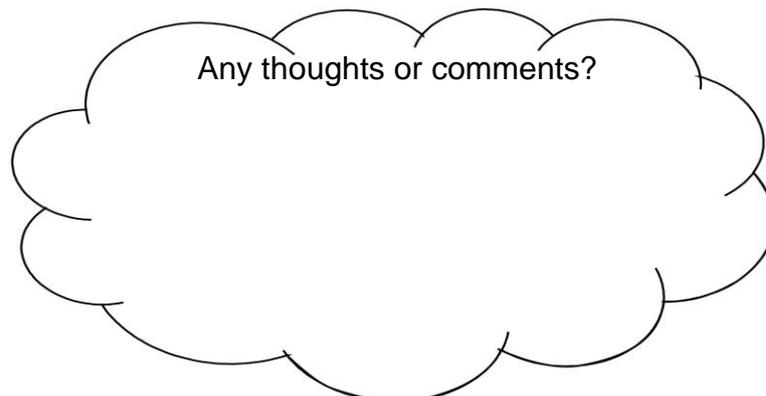
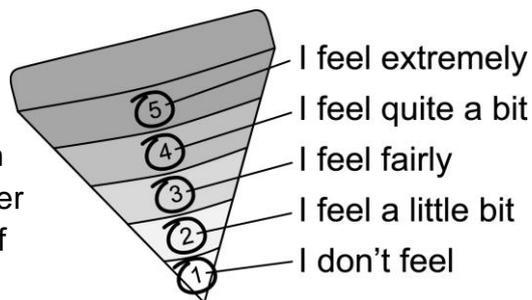


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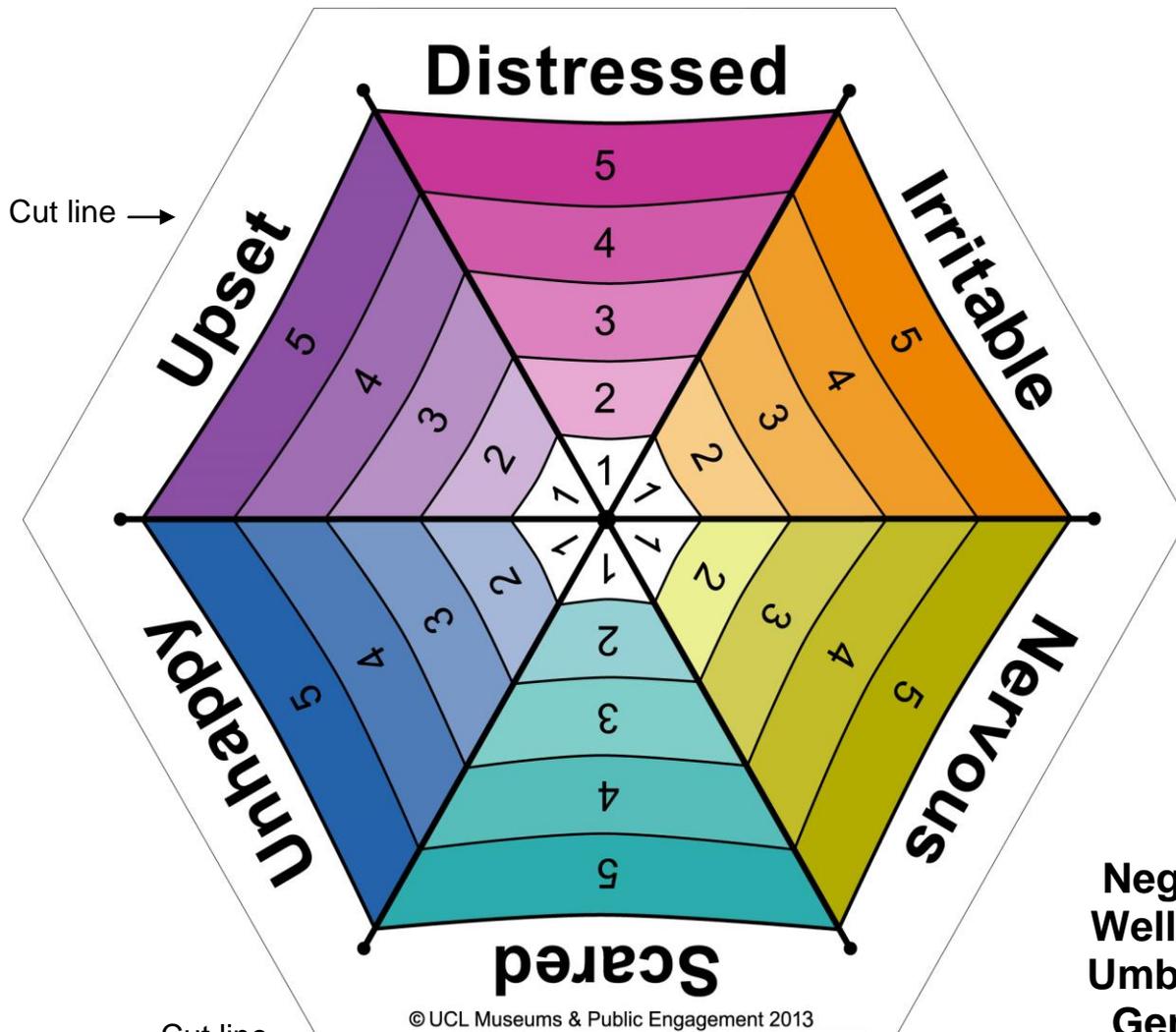
Positive Wellbeing Umbrella - Generic
(back, 2 per sheet, cut out from other side)

Positive Wellbeing Umbrella Generic

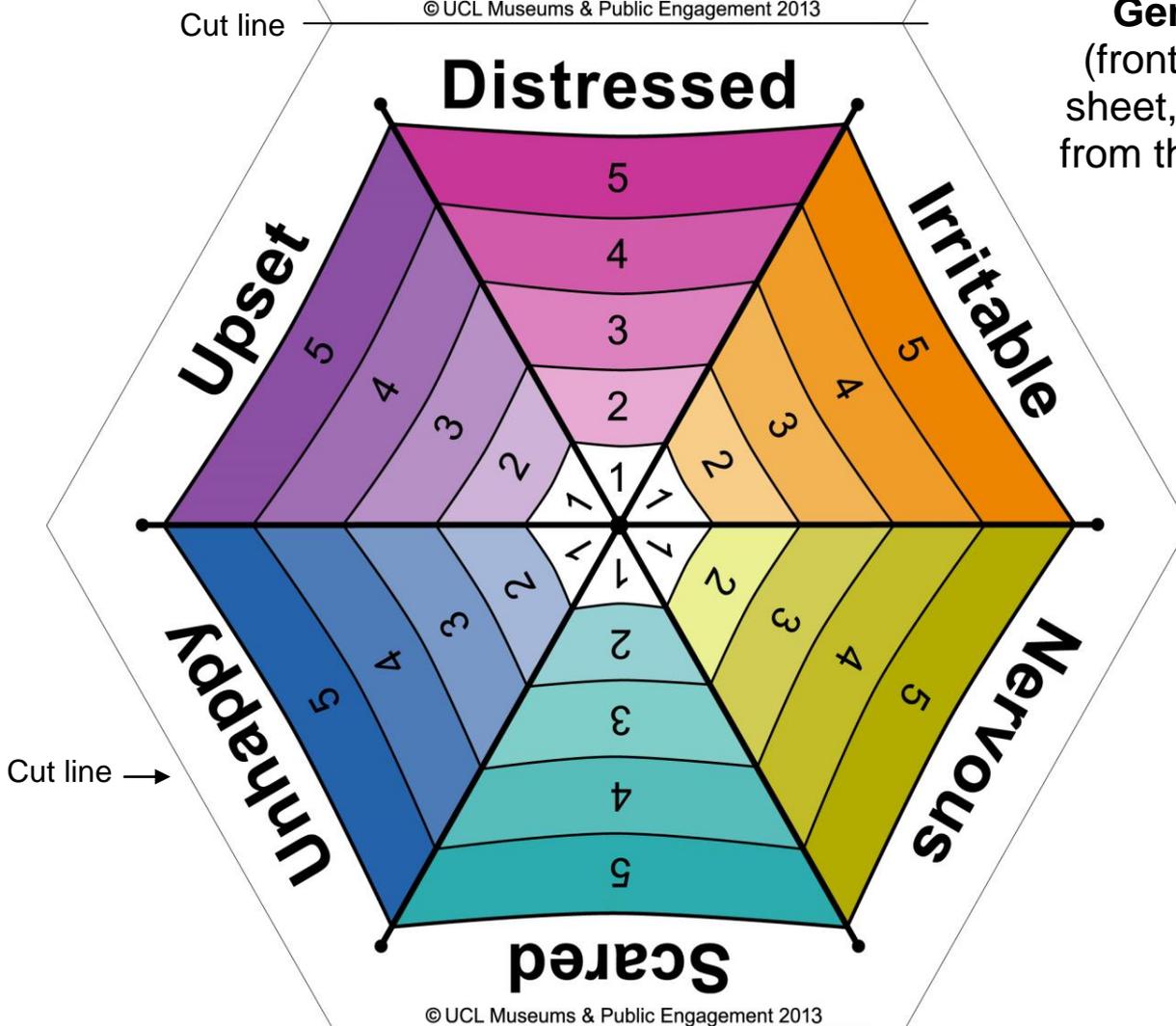
Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Alert', if you feel *fairly* alert, then you should circle 3.



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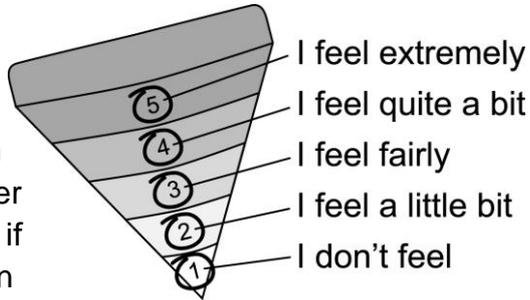
Negative Wellbeing Umbrella - Generic
 (front, 2 per sheet, cut out from this side)



Negative Wellbeing Umbrella

Generic

Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Upset', if you feel *fairly* upset, then you should circle 3.



Any thoughts or comments?

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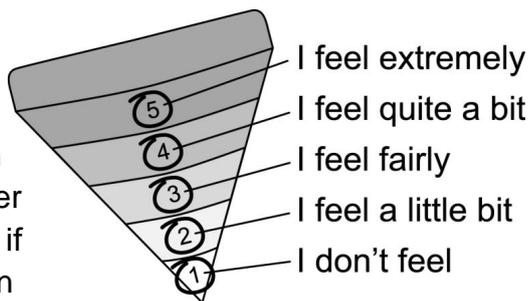
Negative Wellbeing Umbrella - Generic

(back, 2 per sheet, cut out from other side)

Negative Wellbeing Umbrella

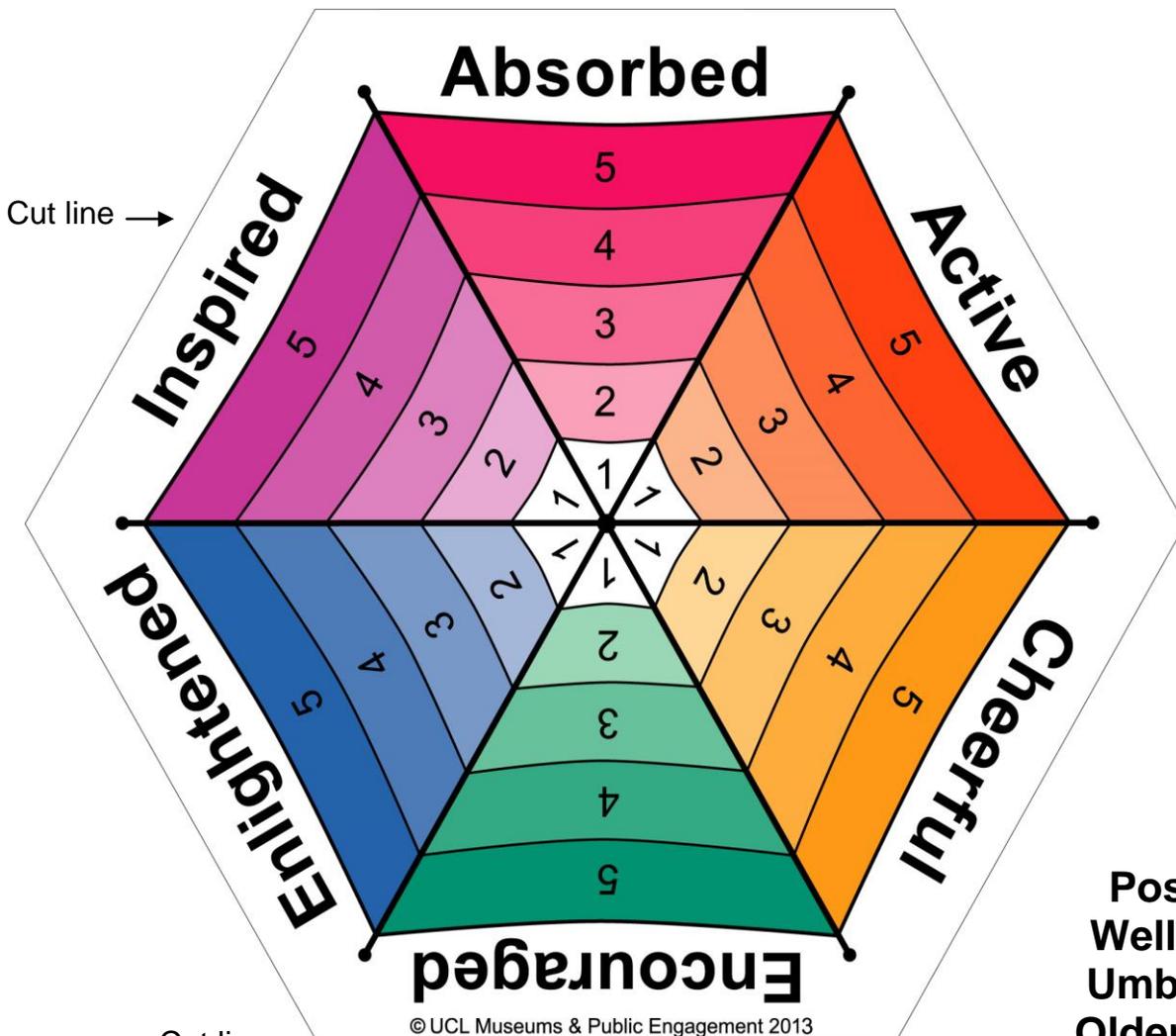
Generic

Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Upset', if you feel *fairly* upset, then you should circle 3.



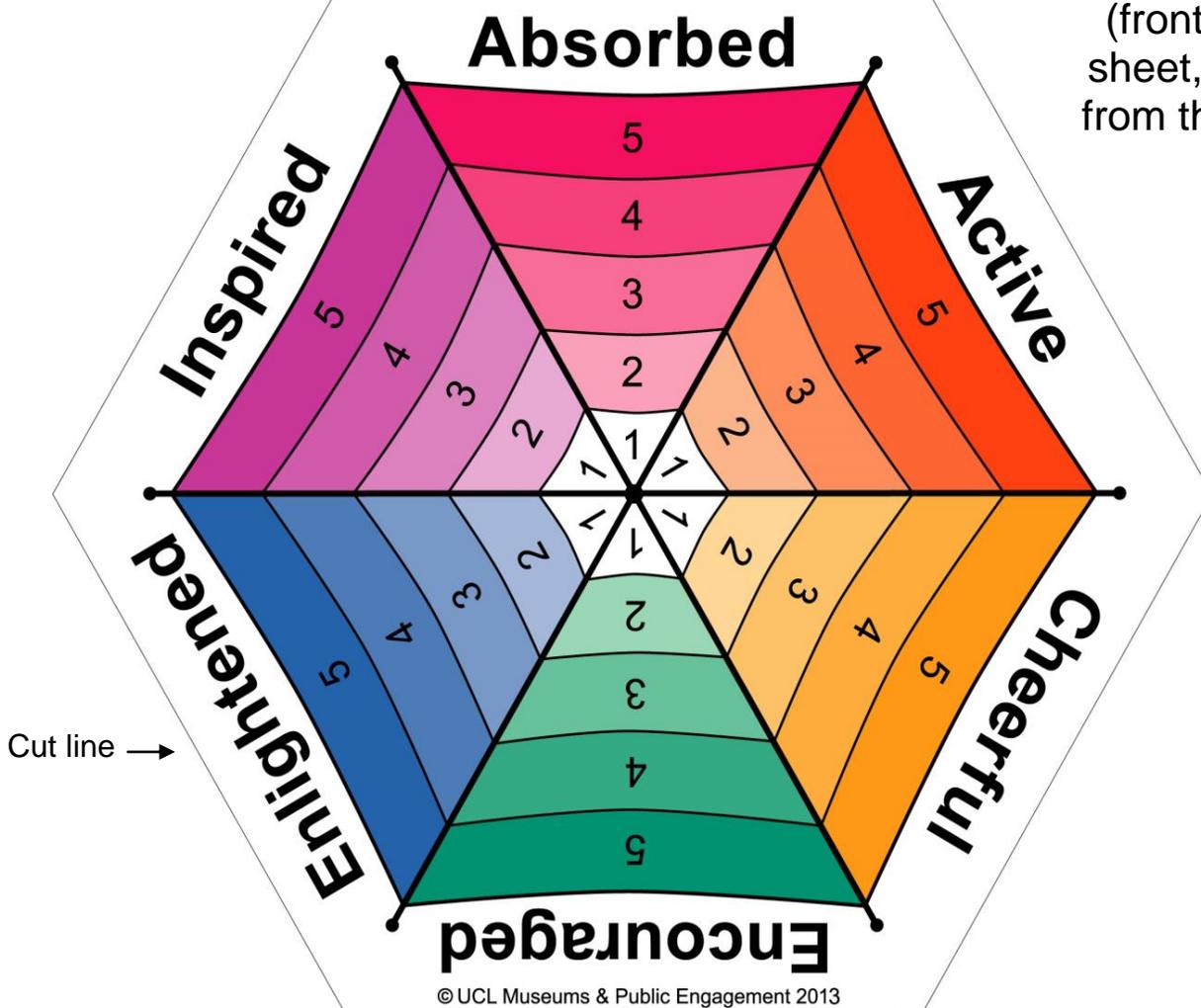
Any thoughts or comments?

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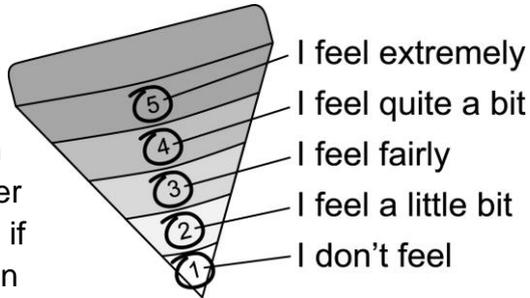
Positive Wellbeing Umbrella - Older Adult
(front, 2 per sheet, cut out from this side)



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Positive Wellbeing Umbrella Older Adult

Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Active', if you feel *fairly* active, then you should circle 3.



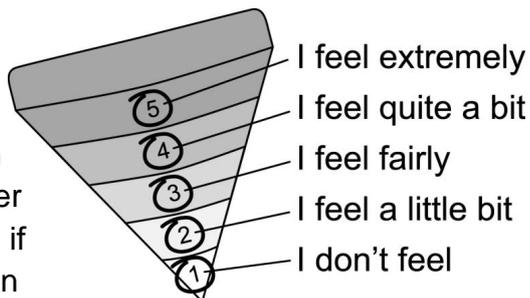
Any thoughts or comments?

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Positive Wellbeing Umbrella - Older Adult
(back, 2 per sheet, cut out from other side)

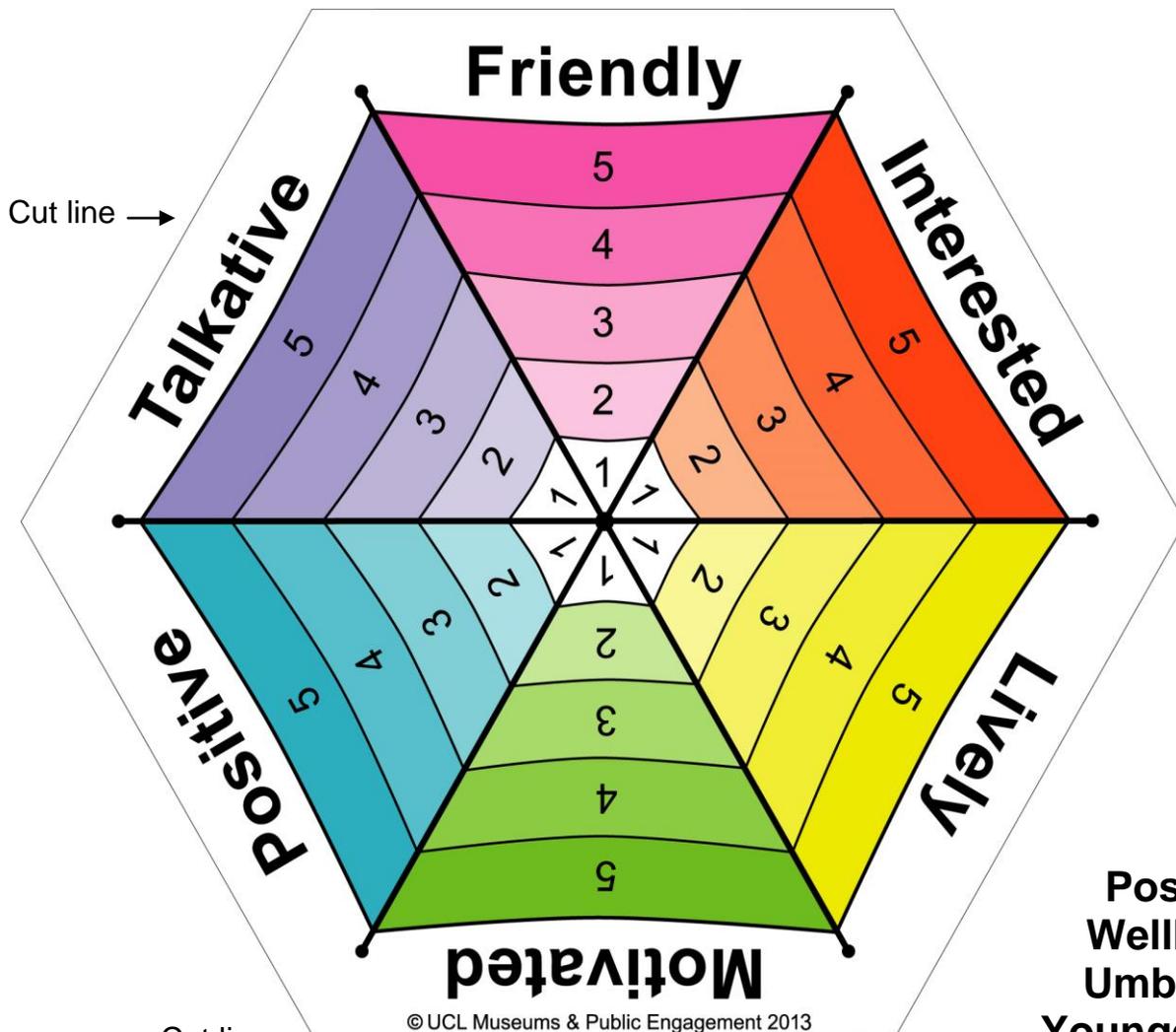
Positive Wellbeing Umbrella Older Adult

Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Active', if you feel *fairly* active, then you should circle 3.

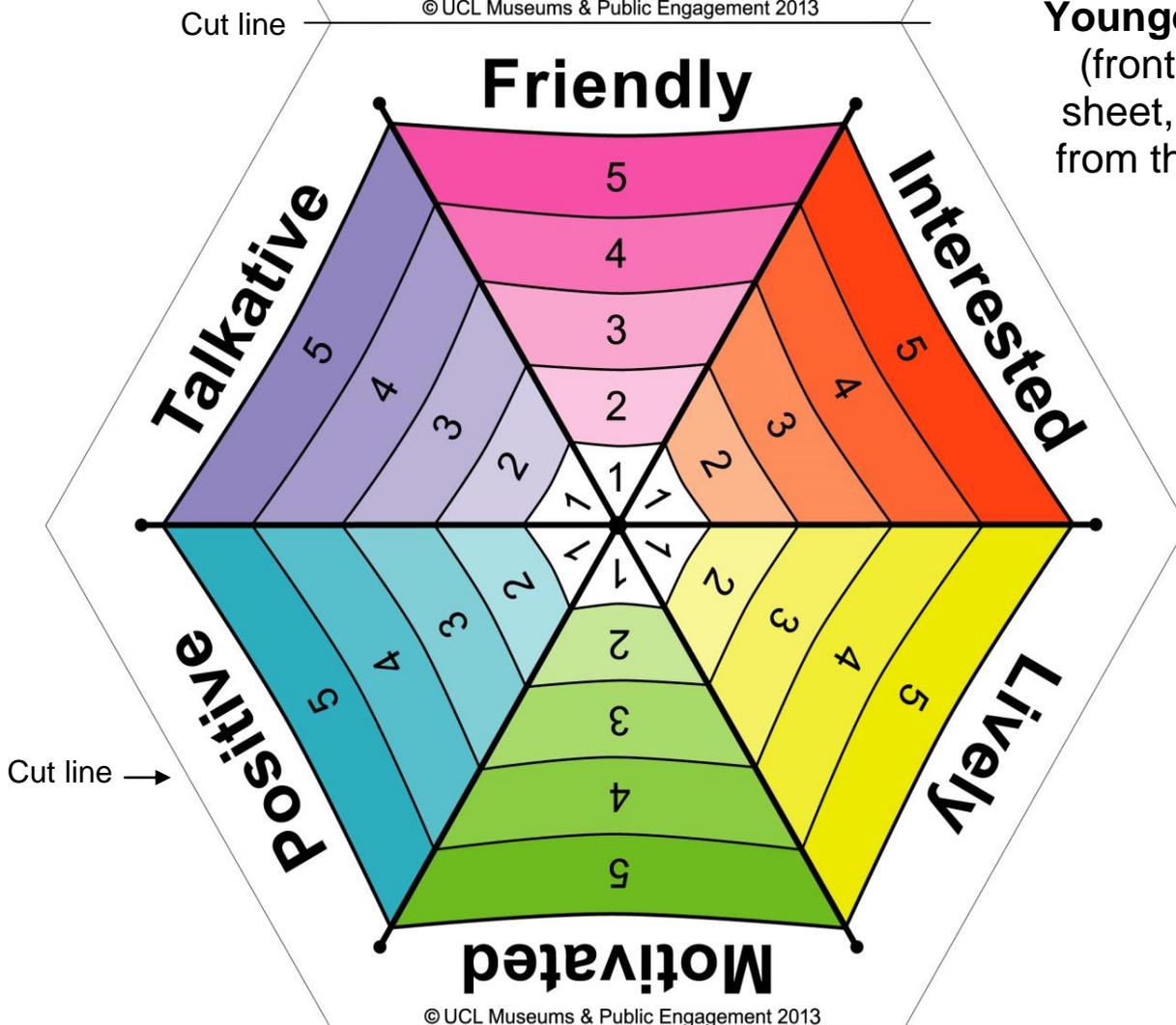


Any thoughts or comments?

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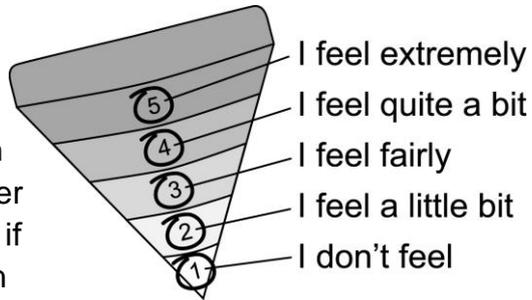


Positive Wellbeing Umbrella - Younger Adult
 (front, 2 per sheet, cut out from this side)



Positive Wellbeing Umbrella Younger Adult

Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Lively', if you feel *fairly* lively, then you should circle 3.



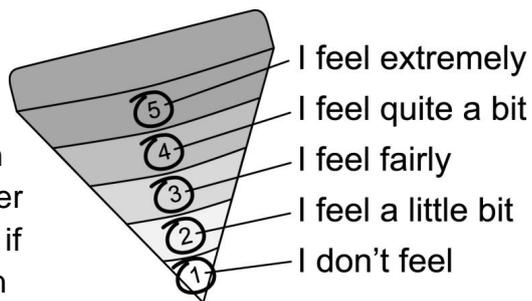
Any thoughts or comments?

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Positive Wellbeing Umbrella - Younger Adult
(back, 2 per sheet, cut out from other side)

Positive Wellbeing Umbrella Younger Adult

Six words are printed around the edge of this umbrella. Please score how much you feel each word by circling a number from 1 to 5, e.g. 'Lively', if you feel *fairly* lively, then you should circle 3.



Any thoughts or comments?

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What to do with the data

All of the measures in the Toolkit use five-point rating scales though the Generic Wellbeing Questionnaire has differently-worded response categories from the Wellbeing Measures Umbrella. The ratings given by participants (i.e. 1, 2, 3, 4 or 5) can be described as 'raw data'. There are several methods possible for converting this raw data into meaningful numeric data that rely on two basic techniques:

1) Finding the average

To find the average score, add together (sum) all of the scores and divide by the number of scores. For example: 10 participants have given ratings of 1, 3, 3, 4, 4, 4, 4, 5, 5 & 5 in response to the statement '*I felt happy*' (where 1 = None of the time; 2 = Not very often; 3 = Some of the time; 4 = Very often; 5 = All of the time). To find the average, sum the scores to give 40, 40 divided by 10 equals 4. Four is therefore the average score. In this example, a score of 4 means that on average participants felt happy 'Very often'. In statistical terms the average score is called the 'mean'.

Strictly speaking the 'median' rather than the mean should be used with rating data. The median is always the middle score. To find the median, arrange the ratings from the lowest to the highest and locate the number in the middle. With an odd number of scores, such as nine, this is quite simple, e.g. 1, 2, 3, 4, 4, 5, 5, 5 & 5, four is the middle score or median. With an even number of scores, such as ten, this is slightly trickier as there are two middle scores, e.g. 1, 3, 3, 4, 4, 4, 4, 5, 5 and 5. With this example the two middle scores are the same so 4 is the median but where the two middle scores are different, e.g. e.g. 1, 3, 3, 3, 3, 4, 4, 5, 5 and 5, the median is obtained by taking an average of the two middle scores, 3 plus 4 divided by 2 equals 3.5 (three-and-a-half).

2) Finding the range

The 'range' is the highest score minus the lowest score, so if a participant gives a rating of 2 before a session and a rating of 5 after a session then the range is 5 minus 2 equals 3. It is important for these measures that when finding the range to always take the rating from before the session (or first rating) away from the rating after the session (or second rating). If the second rating given is less than the first rating, the range should be reported as a minus figure, e.g. if a participant gives a rating of 4 before an session but a rating of 3 after a session, then the range is -1 (minus 1).

The range can be used to describe any change in wellbeing, i.e. it reduces two scores or two average scores to one score describing the difference (e.g. a participant's total ratings from before and after or a group's average ratings from before and after).

Both the mean and the median are referred to as 'measures of central tendency' because they describe a central feature of the data set. The range is referred to as a 'measure of dispersion'. Normally providing one measure of central tendency and one measure of dispersion is sufficient to describe the whole of a data set, consequently these measures are known as 'descriptive statistics'. Descriptive statistics are used to make comparisons between different data sets. Specific comparisons depend on what exactly the researcher is trying to find out, i.e. their 'research question' and might include the following six options:

ii) Comparing the wellbeing improvement of one participant from before to after a session

Add up all of the ratings from before the session (e.g. 18) and add up all of the ratings from after the session (e.g. 29). If a statement or section has not been filled in either before or after the session, omit it from the comparison. Find the difference between the two scores or range (e.g. $29 - 18 = 9$). Nine is the amount of improvement. To find out what percentage 9 is of the score from before the session, divide 9 by 18 and multiply by 100 to give 50. This data represents a 50% improvement in wellbeing from before to after a session.

iii) Comparing the average wellbeing improvement of one participant over time (e.g. at the end of the first session and at the end of the last session)

Follow the process in i) as far as finding the range (e.g. $29 - 18 = 9$). Nine is the amount of improvement. To find out what percentage 9 is of the score from the first session, divide 9 by 18 and multiply by 100 to give 50. This data represents a 50% improvement in wellbeing from the first to the last session.

i) Comparing the average wellbeing improvement of a group from before to after a session

For each participant in the group add up all of the ratings from before the session and add up all of the ratings from after the session. If a statement or section has not been filled in either before or after the session, omit it from the comparison. Add together all of the participants' ratings from before the session (e.g. 180) and all of the participants' ratings from after the session (e.g. 290). Find the difference between the two scores or range (e.g. $290 - 180 = 90$). Ninety is the amount of improvement. To find out what percentage 90 is of the score from before the session, divide 90 by 180 and multiply by 100 to give 50. This data represents a 50% improvement in wellbeing from before to after a session.

iv) Comparing the average wellbeing improvement of a group over time (e.g. at the end of the first session and at the end of the last session)

Follow the process in ii) as far as finding the range (e.g. $290 - 180 = 90$). Ninety is the amount of improvement. To find out what percentage 90 is of the score from before the session, divide 90 by 180 and multiply by 100 to give 50. This data represents a 50% improvement in wellbeing from the first to the last session.

vi) Comparing the average wellbeing improvement from one group with the average wellbeing improvement from another group

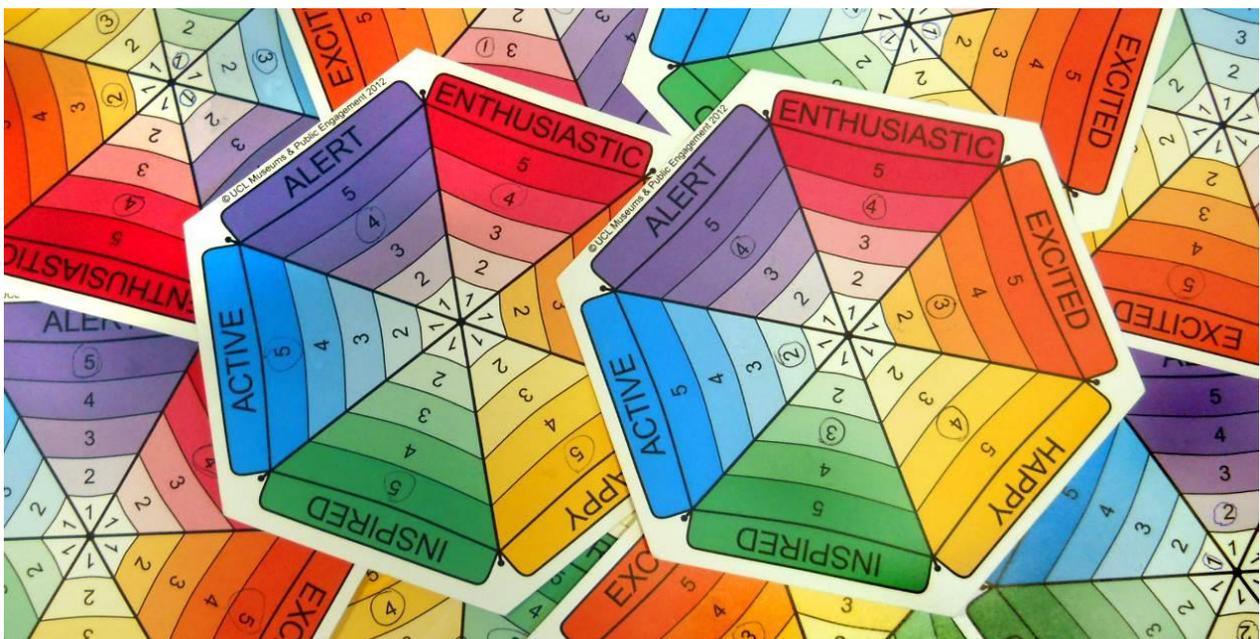
Follow the process in ii) above separately for each group as far as finding the range for each group (e.g. Group A = 90, Group B = 200). Dividing the smaller score by the larger and multiply by 100 (e.g. $90/200 \times 100 = 45$) shows that the wellbeing improvement of Group A was 45% that of Group B.

v) Comparing the wellbeing improvement from one participant to the average wellbeing improvement of the rest of the group

Follow the process in i) for one participant as far as finding the range (e.g. 9) and the process in ii) for a group as far as finding the range (e.g. 120). Divide the range for the group by the number of participants ($n=10$) to give the average improvement per participant (e.g. $120/10 = 12$). Dividing the smaller score by the larger and multiplying by 100 (e.g. $9/12 \times 100 = 75$) shows that the one participant's wellbeing improvement was 75% that of the group.

Descriptive statistics can be supported by 'inferential statistics'; techniques used to make *inferences* about the data and determine whether the findings from a small number of data samples might be widely applicable to the population as a whole. Inferential tests are used to determine whether findings are 'statistically significant'.

The inferential statistical tests suitable for making comparisons between sets of rating data include the Wilcoxon test and Mann-Whitney test. The Wilcoxon is used to compare measures from the same group of participants (e.g. Group A before and after the same session) whereas the Mann-Whitney is used to compare measures from different groups (Group A with Group B after their first sessions). Although these tests are not covered here they can be accessed online or in statistical textbooks.





How the Toolkit was developed

A survey was sent to museum partners across the UK to ascertain how they might use a wellbeing measure and what means of evaluation they already had in place. The survey was followed up with face-to-face or telephone interviews with key staff. Feedback from the partners, the outcomes of previous workshops and research informed the compilation of the Toolkit components and prototypes which were trialled and developed by participating museums and galleries over four stages:

Stage 1: A 14-item generic wellbeing questionnaire adapted from three existing health and wellbeing instruments was sent out with the Wellness and Happiness VAS scales; and the shortened 10-word PANAS comprising five positive and five negative emotions presented both in the original mood check list format and as two, five-sided line-drawings (one to indicate increase in positive emotion and the other to indicate decrease in negative emotion).



Stage 2: Analysis of the responses led to a 12-item generic wellbeing questionnaire with re-worded statements and the shortened 10-word PANAS now presented as two, six-sided images with coloured sections, that came to be known as 'Wellbeing Umbrellas'. Umbrellas comprised the five positive and five negative emotions as before, plus either 'happy' or 'unhappy' taken from the VAS Happiness scale, on the sixth side. In order to determine the different aspects of mood and emotion that participant groups of differing ages and mental and physical health associated with wellbeing, the 'Fill in your own' Umbrellas were developed. For the 'Fill in your own' Umbrellas participants selected up to six wellbeing words at the start of a session, writing these around the edges of a wordless umbrella, and then assessing at the end of the session, the extent to which these outcomes had been met.



Stage 3: Analysis of the responses led to the production of 12-item and 6-item generic Wellbeing Questionnaires, the latter suitable for participants with dementia or those people with a short attention span and validated generic positive and generic negative Wellbeing Umbrellas (developed from the PANAS words plus the VAS Happiness scale). Additionally, analysis of the wellbeing words generated from the 'Fill in your own' word choices led to the production of older adult and younger adult Wellbeing Umbrellas. Space for thoughts and comments was sent out on separate sheets and on the reverse of the cut-out Umbrellas. Museum staff including, curators, learning officers and activity co-ordinators were asked to trial and feedback on the Toolkit with in-house and outreach audiences.



Stage 4: The outputs from Stage 3 were sent out with a follow-up survey to 32 respondents from partner museums and galleries, project advisors and other interested parties so that recommendations could be implemented prior to publication and responses could feed into the Toolkit.



Background to the research

A series of Heritage, Health and Wellbeing, AHRC-funded workshops hosted in London, Newcastle and Manchester revealed the need for generic, museum-focused measures of wellbeing following similar lines to the Generic Learning Outcomes and Generic Social Outcomes. Prior to these workshops, a three-year AHRC-funded research programme called 'Heritage in Hospitals' (HinH) was carried out by UCL and University College Hospital Arts. The project used clinical measurement scales to assess the benefits to patients of handling and discussing museum objects with a facilitator. Scales comprised the Positive Affect Negative Affect Schedule (PANAS) for psychological wellbeing (Watson et al, 1988), and two, Visual Analogue Scales (VAS) for subjective wellness and happiness (EuroQol Group, 1990).

For the PANAS, participants rated 20 words, 10 related to positive emotion and 10 to negative emotion, using a one to five rating scale and for the VAS, participants assessed their levels of wellness and happiness on a vertical scale from zero to 100. Comparison of the measurements taken before and after the HinH sessions showed significant improvements in wellbeing and happiness (Thomson *et al*, 2012a; 2012b). Although PANAS and VAS were selected as optimum measures for HinH research following a review of health status, wellbeing and quality of life scales commonly used in clinical settings (Thomson *et al*, 2011), they were time-consuming to use outside of healthcare environments. Furthermore, regression analysis of the PANAS data revealed redundancy and overlap of several of the words. The analysis showed that five positive and five negative emotions were responsible for around 80% of changes to wellbeing and implied that a shortened, 10-word version, almost as effective as the original, could be used when time was limited.

References

- EuroQol Group (1990). EuroQol: a new facility for the measurement of health-related quality of life. *Health Policy* 16, 199-208.
- Thomson, L.J., Ander, E.E., Menon, U., Lanceley, A. & Chatterjee, H.J. (2011). Evaluating the therapeutic effects of museum object handling with hospital patients: A review and initial trial of wellbeing measures. *Journal of Applied Arts and Health*, 2(1), 37-56.
- Thomson, L.J., Ander, E.E., Menon, U., Lanceley, A. & Chatterjee, H.J. (2012a). Quantitative evidence for wellbeing benefits from a heritage-in-health intervention with hospital patients. *International Journal of Art Therapy*, 17(2), 63-79.
- Thomson, L.J., Ander, E.E., Lanceley, A., Menon, U. and Chatterjee, H.J. (2012b). Evidence for enhanced wellbeing in cancer patients from a non-pharmacological intervention. *Journal of Pain and Symptom Management*, 44(5), 731-740.
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measure of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54, 1063-1070.

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-  Hackney Museum, London
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-  Islington Museum and Local History Centre, London
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-  Liverpool Museums
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-  Oxford University Museums
-  Royal Pavilion and Museums, Brighton
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Contacts

For further information, please contact:

Dr Helen J Chatterjee h.chatterjee@ucl.ac.uk

Dr Linda J Thomson linda.thomson@ucl.ac.uk

For downloadable electronic versions of the UCL Museum Wellbeing Umbrellas please follow the links on the website:

<http://www.ucl.ac.uk/museums/research/touch/>

