



Happiness Pulse methodology

In this paper, we show the different domains and questions we use and which comprise the Happiness Pulse and also provide an overview of way individual scores within the survey themes are calculated .

Happiness Pulse: domains and questions

The Happiness Pulse has four domains - General Wellbeing, BE (emotional wellbeing), DO (behavioural wellbeing) and CONNECT (social wellbeing).

For general wellbeing we use two of the ONS-4 questions on wellbeing.

Our BE domain comprises the seven questions from the short version Warwick-Edinburgh Mental Well-being scale (SWEMWBS) as these questions are robust, subject to stringent testing and provide the best way of summarising the main elements of emotional wellbeing. We also use their prescribed method for working out the results of the BE domain.

The Warwick-Edinburgh Mental Well-being Scale was developed with funding provided by the Scottish Government’s National Programme for Improving Mental Health and Well-being. It was commissioned by NHS Scotland, developed by the University of Warwick and the University of Edinburgh in 2006, and is jointly owned by NHS Scotland, The University of Warwick and the University of Edinburgh.

All the questions in both the DO and CONNECT domains are designed and tested by Happy City.

The additional Community Pulse module uses the following data organisations as its source: the Office for National Statistics, the Understanding Society Survey, the European Quality of Life Survey, the Oxwell Survey. In addition a number of the questions are designed by Happy City.

Where we use a question from another source we also use the original response scale for that question.

Happiness Pulse: domains and question

DOMAIN	TOPIC	QUESTION	RESPONSE SCALE	SOURCE
GENERAL Wellbeing	Life satisfaction	Overall, how satisfied are you with your life nowadays?	0 (Not at all) - 10 (Completely)	ONS
	Worthwhile	Overall, to what extent do you feel the things you do in your life are worthwhile?	0 (Not at all) - 10 (Completely)	ONS
BE	Optimism	I’ve been feeling optimistic about the future	1 (None of the time, 2 - rarely, 3 - Some of the time, 4	SWEMWBS

			- Often, 5 - All of the time) - 5 (Always)	
	Worth	I've been feeling useful	1 (None of the time, 2 - rarely, 3 - Some of the time, 4 - Often, 5 - All of the time) - 5 (Always)	SWEMWBS
	Peace of mind	I've been feeling relaxed	1 (None of the time, 2 - rarely, 3 - Some of the time, 4 - Often, 5 - All of the time) - 5 (Always)	SWEMWBS
	Resilience	I've been dealing with problems well	1 (None of the time, 2 - rarely, 3 - Some of the time, 4 - Often, 5 - All of the time) - 5 (Always)	SWEMWBS
	Competence	I've been thinking clearly	1 (None of the time, 2 - rarely, 3 - Some of the time, 4 - Often, 5 - All of the time) - 5 (Always)	SWEMWBS
	Autonomy	I've been able to make my own mind up about things	1 (None of the time, 2 - rarely, 3 - Some of the time, 4 - Often, 5 - All of the time) - 5 (Always)	SWEMWBS
	Relationships	I have been feeling close to other people	1 None of the time, 2 - rarely, 3 - Some of the time, 4 - Often, 5 - All of the time - 5 Always	SWEMWBS
DO	Be Active	How often do you spend 30 minutes playing sports or physical exercise?	1 - Never, 2 - less than once a week, 3 - 2-3 times a week, 4 - 5 times a week, 5 - Every day	Happy City
		How often do you spend 15 minutes walking or cycling?	1 - Never, 2 - less than once a week, 3 - 2-3 times a week, 4 - 5 times a week, 5 - Every day	Happy City
	Keep Learning	How often do you attend courses of some kind?	1 - never 2 - rarely, 3 - several times a year, 4 - once a	Happy City

			month, 5 - more than once a month	
		How often do you spend time informally learning about something new?	1 - never 2 - rarely, 3 - several times a year, 4 - once a month, 5 - more than once a month	Happy City
	Take Notice	I notice and appreciate the little things in life.	1 Never 2 - Rarely, 3 - Sometimes, 4 - Every day, 5 - Many times a day	Happy City
		I can laugh and see the funny side of things	1 Never 2 - Rarely, 3 - Sometimes, 4 - Every day, 5 - Many times a day	Happy City
CONNECT	Connect	How often do you meet socially with friends, relatives or work colleagues?	1 - Never, 2 - less than once a week, 3 - 2-3 times a week, 4 - 5 times a week, 5 - Every day	Happy City
		How often do you participate in social activities of a club, society or an association?	1 - Never, 2 - less than once a week, 3 - 2-3 times a week, 4 - 5 times a week, 5 - Every day	Happy City
	Give	How often do you help out informally with friends or neighbours?	1 - Never, 2 - less than once a week, 3 - 2-3 times a week, 4 - 5 times a week, 5 - Every day	Happy City
		How often do you get involved in work for voluntary or charitable organisations?	1 - Never, 2 - less than once a week, 3 - 2-3 times a week, 4 - 5 times a week, 5 - Every day	Happy City
	Support	Do you have a friend/s or family member/s with whom you can discuss personal matters?	Yes No	Happy City
	Community	I feel like I belong to this neighbourhood	1 Disagree Strongly, 2 - Disagree, 3 - Neither Agree/Disagree, 4 - Agree, 5 - Agree Strongly	Happy City

Demographics

Question	Categories
Country	United Kingdom, followed by full dropdown (or can do it by council area)
Postcode	Ideally postcode district, sector and unit. Minimum requirement is for district and sector
Gender	Male Female Prefer not to say Prefer to self-describe
Age	Under 16, 16-24, 25-34, 35-49, 50-64, 65-74, 75+
Ethnicity	Full recommended list

Calculating Survey User Results

The calculation of survey results information applies to the basic Happiness Pulse domains - General Wellbeing, Be, Do and Connect. The Community Pulse results are analysed separately using standard question by question analysis approaches.

The basic Happiness Pulse survey results are calculated using a two step method: Aggregation and Transformation.

Step 1: Aggregation

In order to get standardised scores for each domain, we need to aggregate the scores of each item in their respective domain. This is done simply by calculating the mean of the scores of each of the domain items.

E.g. OVERALL domain:

Score for OVERALL domain = (score for life satisfaction + score for worthwhile) / 2

Step 2: Transformation

For presentation purposes, we want to transform the scores to domain **percentage** scores: a 1-100 scale, where each unit on the scale represents a 100th of the range of total use scores. For instance, a percentage score of 1 would mean that the user is in the lowest 100th of user scores; 36 would mean the user is in the 36th percentile; and so on.

Percentage scores are calculated using the following formula:

$\text{percentile} = \frac{\text{domain score}}{\text{total domain score}} \times 100$

This can be done manually in the following way:

- Order range of domain scores from lowest to highest
- Divide total amount of domain scores (e.g. 722) by 100 to find out how many user domain scores belong to each percentile (e.g. 7.22)
- Record range of domain scores for each percentile (e.g. the first percentile will consist on the lowest 7 user domain scores)

Sample size and representativeness

In order to get meaningful data the Happiness Pulse must be used in a way which ensures optimum outreach so that both the sample size and the representativeness of that sample provide valid and reliable data.

We work with our clients to ensure that this is the case, and provide guidelines on the parameters for comparison and analysis.