

# Civil Service People Survey 2018 Full Technical Guide

November 2018



A Brilliant Civil Service

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# Civil Service People Survey (CSPS): technical summary

### Coverage

In 2018, 102 Civil Service organisations took part in the tenth annual survey (listed on page 5).

The survey operates a census approach, with all staff working in participating organisations invited to take part. While small random samples could provide accurate organisation-level summaries we take a census approach to demonstrate that the opinion of everyone who works in the Civil Service has equal value.

The census approach allows us to produce around 12,000 reports for managers and teams so that action can be taken at all of the most appropriate levels across the Civil Service.

A total of 454,857 people were invited to take part in the 2018 survey, and 302,170 participated – an overall response rate of 66.4%. Half of participating organisations achieved a response rate of 78% or greater.

The total headcount we use for each organisation to work out their response rate does not match – in some instances – headcounts published by the Office for National Statistics (ONS). This is because we take our headcounts at a different point in the year (October); organisations such as MOD and FCO include overseas local staff within their surveys; and MOD include military staff undertaking civilian/Civil Service roles.

### Coordination & delivery of the survey

The survey is coordinated by the Employee Engagement Team in the Cabinet Office. The team let a contract centrally on behalf of the Civil Service and act as the central liaison between the independent survey supplier and participating organisations. The 2018 survey was delivered by ORC International.

### Questionnaire

The questionnaire used in the Civil Service People Survey is standardised across all participating organisations, although it has aspects that allow for local variation to ensure that relevant terms are used in each organisation (for example the name of the organisation or the term for senior managers). Page 7 shows the core attitudinal measures asked in the survev.

### Data collection methodology

The questionnaire is a self-completion process; this year 98% of respondents completed it online, and 2% on paper. Completion of all questions in the survey is voluntary. Fieldwork for the 2018 survey began on 1st October and was completed on 31st October.

### Analysis

The framework underpinning the analysis of the Civil Service People Survey is based on understanding the levels of employee engagement within the Civil Service and the experiences of work which influence engagement. The five questions we use to measure engagement and how we use those five questions to calculate the engagement index are outlined on page 12. Their rationale is on page 9.

The main measures used to talk about the nine engagement driver themes are the "theme scores"; this is the average percentage positive response to the theme's constituent questions. Pages 14-15 explain our engagement driver analysis.

### **Publication**

Results from the 2018 People Survey are published on GOV.UK:

https://www.gov.uk/government/collections/civilservice-people-survey-hub



### Participating organisations

102 Civil Service organisations participated in the 2018 People Survey.

New this year were the Government Equalities Office, Government Property Agency, Submarine Delivery Agency and the Welsh Revenue Authority.

### **Attorney General's Departments**

Attorney General's Office Crown Prosecution Service **HM Crown Prosecution Service Inspectorate** Serious Fraud Office

### **Business, Energy & Industrial Strategy**

Department for Business, Energy & Industrial Strategy (excluding agencies) Acas

Companies House

Competition and Markets Authority

**HM Land Registry** 

Intellectual Property Office

Met Office

The Insolvency Service

### **Cabinet Office**

Cabinet Office (excluding agencies) Crown Commercial Service Civil Service HR Government Property Agency

### **Charity Commission**

### **Defence**

Ministry of Defence Defence Electronics and Components Agency Defence Equipment & Support Defence Science and Technology Laboratory Submarine Delivery Agency UK Hydrographic Office

### **Department for Exiting the European Union**

### **Department for International Development**

### **Department for International Trade**

### Digital, Culture, Media & Sport

Department for Digital, Culture, Media & Sport (excluding agencies) The National Archives

### Education<sup>1</sup>

Department for Education

### **Environment, Food & Rural Affairs**

Department for Environment, Food & Rural Affairs (excluding agencies) Animal and Plant Health Agency Centre for Environment, Fisheries and Aquaculture Science Rural Payments Agency Veterinary Medicines Directorate

### **Estyn**

### **Food Standards Agency**

### Foreign & Commonwealth Office

Foreign & Commonwealth Office (excluding agencies) **FCO Services** Wilton Park

### **Government Actuary's Department**

### **Government Equalities Office**

### **Government Legal Department**

#### **Health and Social Care**

(excluding agencies) Medicines and Healthcare products Regulatory Public Health England

### **HM Inspectorate of Constabulary and Fire & Rescue Services**

Department of Health and Social Care

### **HM Revenue & Customs**

HM Revenue & Customs Valuation Office Agency

### **HM Treasury and Chancellor's departments**

**HM Treasury** Government Internal Audit Agency **UK Debt Management Office** 

### Home Office<sup>2</sup>

Home Office: Policy and Enablers Home Office: Border Force Home Office: Immigration Enforcement Home Office: UK Visas and Immigration **HM Passport Office** 

### **Housing, Communities and Local Government**

Ministry of Housing, Communities and Local Government (excluding agencies) Planning Inspectorate

### Justice<sup>2</sup>

Ministry of Justice (excluding agencies) Criminal Injuries Compensation Authority HM Courts and Tribunals Service HM Prison Service HM Prison and Probation Service HQ Legal Aid Agency MoJ Arms Length and Other Bodies National Probation Service Office of the Public Guardian

### **National Crime Agency**

### **National Savings and Investments**

### Office of Rail and Road

### Ofgem

### **Ofqual**

### Ofsted

### **Scottish Government**

Transport Scotland

Scottish Government (excluding agencies) Accountant in Bankruptcy Crown Office and Procurator Fiscal Service Disclosure Scotland Education Scotland Food Standards Scotland National Records of Scotland Office of the Scottish Charity Regulator Registers of Scotland Revenue Scotland Scottish Courts and Tribunal Service Scottish Housing Regulator Scottish Prison Service Scottish Public Pensions Agency Student Awards Agency for Scotland

### Scotland Office. Office of the Advocate General, Wales Office and Northern Ireland Office<sup>1</sup>

Department for Transport (excluding agencies) Driver and Vehicle Licensing Agency Driver and Vehicle Standards Agency Maritime and Coastquard Agency Vehicle Certification Agency

### **UK Export Finance**

### UK Statistics Authority<sup>2</sup>

**UK Statistics Authority** Office for National Statistics

### Welsh Government

### **Welsh Revenue Authority**

### **Work and Pensions**

Department for Work and Pensions Health and Safety Executive

### Notes

- 1. The following sets of organisations participate in a 'ioint-survey', that is where all the organisations take part in the same version of the Civil Service People Survey and therefore are treated as one organisation for analysis and reporting of the survey results.
  - The Department for Education and its executive agencies
  - The Scotland Office and Office of the Advocate General, the Wales Office, and the Northern Ireland Office
- 2. The operational directorates of these organisations undertake their own versions of the Civil Service People Survey and therefore are treated as separate organisations for analysis and reporting of the survey results. However, combined scores for the 'Home Office Group', 'Ministry of Justice (including agencies)' and 'UK Statistics Authority (including ONS)', which contain all directorates are also presented.

# People Survey Questions and Development

## The core questionnaire

The core questionnaire includes 62 questions about perceptions of work, which are grouped into themes using factor analysis to identify statistical relationships between different questions and how they are collectively manifestations of different experiences at work. These attitudinal measures are rated on a 5 point strongly agree to strongly disagree scale. No new core questions were added in 2018.

### Mv work

B01. I am interested in my work

B02. I am sufficiently challenged by my work

B03. My work gives me a sense of personal accomplishment

B04. I feel involved in the decisions that affect my work

B05. I have a choice in deciding how I do my work

### Organisational objectives and purpose

B06. I have a clear understanding of [my organisation's] objectives

B07. I understand how my work contributes to [my organisation's] obiectives

### My manager

B08. My manager motivates me to be more effective in my job

B09. My manager is considerate of my life outside work

B10. My manager is open to my ideas

B11. My manager helps me to understand how I contribute to [my organisation's] objectives

B12. Overall, I have confidence in the decisions made by my manager

B13. My manager recognises when I have done my job well

B14. I receive regular feedback on my performance

B15. The feedback I receive helps me to improve my performance

B16. I think that my performance is evaluated fairly

B17. Poor performance is dealt with effectively in my team

### My team

B18. The people in my team can be relied upon to help when things get difficult in my job

B19. The people in my team work together to find ways to improve the service we provide

B20. The people in my team are encouraged to come up with new and better ways of doing things

### Learning and development

B21. I am able to access the right learning and development opportunities when I need to

B22. Learning and development activities I have completed in the past 12 months have helped to improve my performance

B23. There are opportunities for me to develop my career in [my organisation]

B24. Learning and development activities I have completed while working for [my organisation] are helping me to develop my career

### Inclusion and fair treatment

B25. I am treated fairly at work

B26. I am treated with respect by the people I work with

B27. I feel valued for the work I do

B28. I think that [my organisation] respects individual differences

(e.g. cultures, working styles, backgrounds, ideas, etc)

### Resources and workload

B29. I get the information I need to do my job well

B30. I have clear work objectives

B31. I have the skills I need to do my job effectively

B32. I have the tools I need to do my job effectively

B33. I have an acceptable workload

B34. I achieve a good balance between my work life and my private life

### Pay and benefits

B35. I feel that my pay adequately reflects my performance

B36. I am satisfied with the total benefits package

B37. Compared to people doing a similar job in other organisations I feel my pay is reasonable

### Leadership and managing change

B38. [Senior managers] in [my organisation] are sufficiently visible

B39. I believe the actions of [senior managers] are consistent with [my organisation's] values

B40. I believe that [the board has] a clear vision for the future of [my organisation]

B41. Overall, I have confidence in the decisions made by [my organisation's senior managers]

B42. I feel that change is managed well in [my organisation]

B43. When changes are made in [my organisation] they are usually for the better

B44. [My organisation] keeps me informed about matters that affect me

B45. I have the opportunity to contribute my views before decisions are made that affect me

B46. I think it is safe to challenge the way things are done in [my organisation]

### Employee engagement

B47. I am proud when I tell others I am part of [my organisation]

B48. I would recommend [my organisation] as a great place to

B49. I feel a strong personal attachment to [my organisation]

B50. [My organisation] inspires me to do the best in my job

B51. [My organisation] motivates me to help it achieve its objectives

### Taking action

B52. I believe that [senior managers] in [my organisation] will take action on the results from this survey

B53. Where I work, I think effective action has been taken on the results of the last survey

### Organisational culture

B54. I am trusted to carry out my job effectively

B55. I believe I would be supported if I try a new idea, even if it may not work

B56. In [my organisation], people are encouraged to speak up when they identify a serious policy or delivery risk

B57. I feel able to challenge inappropriate behaviour in the

B58. [My organisation] is committed to creating a diverse and inclusive workplace

### Leadership Statement

B59. [Senior managers] in [my organisation] actively role model the behaviours set out in the Civil Service Leadership Statement B60. My manager actively role models the behaviours set out in the Civil Service Leadership Statement

### Civil Service Vision

B61. I am aware of the Civil Service Vision for a Brilliant Civil

B62. I understand how my work contributes to helping us become a Brilliant Civil Service

### Notes

Words in square brackets are variable terms - these are replaced in each survey by e.g. the name of the organisation.

# The core questionnaire (continued)

The core questionnaire also includes questions on future working intentions, the Civil Service Code, discrimination, bullying and harassment, and subjective wellbeing. These have different response options, as noted below. Demographic questions feature at the end of the core questionnaire.

Where possible these use the harmonised questions for government social surveys recommended by the Office for National Statistics\*, to ensure that the CSPS results can be compared to other surveys of the wider labour market and general population.

### Your plans for the future

C01. Which of the following statements most reflects your current thoughts about working for [your organisation]?

- •I want to leave [my organisation] as soon as possible
- •I want to leave [my organisation] within the next 12 months
- •I want to stay working for [my organisation] for at least the next year
- •I want to stay working for [my organisation] for at least the next three years

### Civil Service Code

D01. Are you aware of the Civil Service Code?

D02. Are you aware of how to raise a concern under the Civil Service Code?

D03. Are you confident that if you raised a concern under the Civil Service Code in [your organisation] it would be investigated properly?

Yes

### Discrimination

E01. During the past 12 months have you personally experienced discrimination at work?

 Prefer not to say Yes

E02. If Yes to E01 On which of the following grounds have you personally experienced discrimination at work in the past 12 months?

- Age
- Caring responsibilities
- Disability
- Ethnic background
- Gender
- Gender reassignment or perceived gender
- Grade, pay band or responsibility level
- Main spoken/written language or language ability
- Marital status
- Pregnancy, maternity or paternity
- Religion or belief
- Sexual orientation
- Social or educational background
- Working location
- Working pattern
- Any other grounds
- Prefer not to say

### Bullying and harassment

E03. During the past 12 months have you personally experienced bullying or harassment at work? Prefer not to sav

E04. If Yes to E03 Who were you bullied or harassed by at work in the past 12 months?

- A colleague
- Your manager
- Another manager in my part of [my organisation]
- Someone you manage
- Someone who works for another part of [your organisation]
- A member of the public
- Someone else
- Prefer not to sav

E05. If Yes to E03 Did you report the bullying and harassment you experienced?

Yes Prefer not to say

E06. If Yes to E03 In your opinion, has this issue been resolved?

Yes Prefer not to say

### Wellbeing

W01. Overall, how satisfied are you with life nowadays?

Answer scale 0 (Not at all satisfied) to 10 (Completely satisfied)

W02. Overall, to what extent do you feel that the things you do in life are worthwhile?

Answer scale 0 (Not at all worthwhile) to 10 (Completely worthwhile)

W03. Overall, how happy did you feel yesterday?

Answer scale 0 (Not at all happy) to 10 (Completely happy)

W04. Overall, how anxious did you feel yesterday?

Answer scale 0 (Not at all anxious) to 10 (Completely anxious)

#### **Notes**

Words in square brackets are variable terms - these are replaced in each survey by e.g. the name of

Multiple options can be selected for E02 and E04.

'Marital status' and 'Pregnancy, maternity or paternity' were new response options to E02 in 2018.

\* See https://www.ons.gov.uk/methodology/classificationsandstandards/harmonisationwithinthegss for further details

## Questionnaire development and changes over time

### 2007 – 2008: Pathfinder studies and harmonisation

Pathfinder studies were conducted with Civil Service organisations over 2007 and 2008, to inform the development of a core questionnaire for a pilot of the 'single survey' approach. The questionnaire used in the pilot was a pragmatic harmonisation of previous questionnaires used in staff surveys by Civil Service organisations, while ensuring it covered key areas identified by previous studies of employee engagement.

Employee engagement is a workplace approach designed to ensure that employees are committed to their organisation's goals and values, motivated to contribute to organisational success, and are able at the same time to enhance their own sense of well-being. There is no single definition of employee engagement or standard set of questions; we decided to use five questions measuring pride, advocacy, attachment, inspiration, and motivation.

Aspect	Question	Rationale
Pride	B47. I am proud when I tell others I am part of [my organisation]	An engaged employee feels proud to be associated with their organisation, by feeling part of it rather than just "working for" it
Advocacy	B48. I would recommend [my organisation] as a great place to work	An engaged employee will be an advocate of their organisation and the way it works
Attachment	B49. I feel a strong personal attachment to [my organisation]	An engaged employee has a strong, and emotional, sense of belonging to their organisation
Inspiration	B50. [My organisation] inspires me to do the best in my job	An engaged employee will contribute their best, and it is important that their organisation plays a role in inspiring this
Motivation	B51. [My organisation] motivates me to help it achieve its objectives	An engaged employee is committed to ensuring their organisation is successful in what it sets out to do

The development of the Civil Service People Survey questionnaire was done in consultation with survey managers and analysts across all participating organisations. This development process consisted of a substantial review of the questionnaire (including cognitive testing) to ensure it used plain English and that the questions were easily understood by respondents. The 'single survey' approach meant that organisations could retain trend data, by using questions they had previously measured, while ensuring that the questionnaire was fit for purpose in measuring employee engagement in the Civil Service and the experiences of work that can affect it.

### 2009: First CSPS and factor analysis

The CSPS was launched in 2009. From the dataset, factor analysis was conducted to identify 10 distinct themes across the questionnaire. Factor analysis identifies the statistical relationships between different questions, and illustrates how these questions are manifestations of different experiences of work. For example, the question "I have the skills I need to do my job effectively" might, at first glance, seem to be a question about learning and development – but factor analysis of the CSPS dataset found that this was more closely related to other questions about resources and workload. The themes have shown relatively strong consistency in structure across organisations and across time.

### 2011: Taking action

In 2011 an additional question was added to understand whether staff thought effective action had taken place since the last survey.

### 2012: Organisational culture and subjective wellbeing

Five questions on organisational culture were added to the core questionnaire in 2012. They were included to help measure the desired cultural outcomes of the Civil Service Reform Plan.

Four new guestions on subjective wellbeing, as used by the Office for National Statistics as part of their Measuring National Wellbeing Programme, were also added to the core questionnaire in 2012: Overall, how satisfied are you with your life nowadays?; Overall, to what extent do you think the things you do in your life are worthwhile?; Overall, how happy did you feel yesterday?; Overall, how anxious did you feel yesterday? These were piloted with five organisations in the 2011 survey prior to their inclusion. The wellbeing questions are measured on an 11-point scale of 0 to 10, where 0 means not at all and 10 means completely.

### 2015 to 2016: Leadership statement and organisational culture

There were no changes to the core questionnaire in 2013 and 2014. In 2015, eight questions related to the Leadership Statement were added to measure perceptions of the behavioural expectations and values to be demonstrated by all Civil Service leaders. This section was reduced to two questions in 2016 as analysis of the 2015 results showed us that six questions were highly correlated with the 'leadership and managing change' theme questions, meaning we could remove the questions without losing insight.

Depending on how respondents answered the Leadership statement questions B62 and B63 follow up questions were asked. For those who answered 'strongly disagree', 'disagree' or 'neither agree nor disagree' in the online survey to B62 and B63 we asked: "List up to three things that [senior managers/managers] in [your organisation] could do to demonstrate the behaviours set out in the Leadership Statement", followed by three text boxes for short answers. For those who answered 'strongly agree' or 'agree' to B62 and B63 we asked: "List up to three things [senior managers/managers] in [your organisation] do to demonstrate the behaviours set out in the Leadership Statement"; again, followed by three text boxes for short answers.

One of the questions added in 2012 on organisational culture ("My performance is evaluated based on whether I get things done, rather than on solely following process") was removed in 2016 as stakeholder feedback suggested that it offered little insight and removing it would reduce questionnaire length while having minimal impact on the time series.

### 2017: Questionnaire review and theme changes

In 2017 the Leadership statement follow up questions were amended to "Please tell us what [senior managers] in [your organisation] do to demonstrate the behaviours set out in the Leadership Statement" and "Please tell us what managers in [your organisation] do to demonstrate the behaviours set out in the Leadership Statement" and asked to all respondents. Each was followed by one text box. The follow up questions were not asked in paper surveys.

We also removed six questions, which were found to be duplicative or difficult to take action on (B06, B30, B40, B56, B60 and B61 in 2016). This broke the time series for three of the nine headline theme scores (Organisational objectives and purpose; Resources and workload; Leadership and managing change). Our independent survey supplier recreated trends for these theme scores for 2009 - 2016, so that organisations would still be able to see their 2017 results compared to equivalent 2016 theme scores, and theme scores in previous years.

Five new questions were then introduced in 2017 to improve insight into key business priorities. This included two questions on the Civil Service Vision, and three relating to organisational culture.

Following stakeholder consultation the response options to J01 "What is your gender identity" were expanded to include 'I identify in another way' (with a free text box for specifying). Question J01A was also added to identify sex at birth.

### 2018: Discrimination, gender identity, function and free-text comments

Following stakeholder consultation, two additional response options - 'Marital status' and 'Pregnancy, maternity and paternity' - were added to question E02, "On which of the following grounds have you personally experienced discrimination at work in the past 12 months?"

The wording of two response options, to question J01 "What is your gender identity", were changed from 'Male' and 'Female' to 'Man' and 'Woman' respectively, to differentiate identity from sex at birth (asked in question J01A).

The wording of question H8B was changed from "Does the team you work for deliver one of the following Functions?" to "Which Function(s) are you a member of?" This was because our analysis found that respondents could be working in teams that delivered multiple Functions, some of which were not directly related to the work they did themselves.

We added new preamble before question G01 "What would you like [your organisation] to change to make it a great place to work?" in light of the new General Data Protection Regulation (GDPR) to explain how we would use the free text comments provided by respondents.

The Employee Engagement Index and Key Drivers

# Calculating the employee engagement index

Like all of the other core attitudinal questions in the CSPS, each of the engagement questions are asked using a five-point agreement scale.

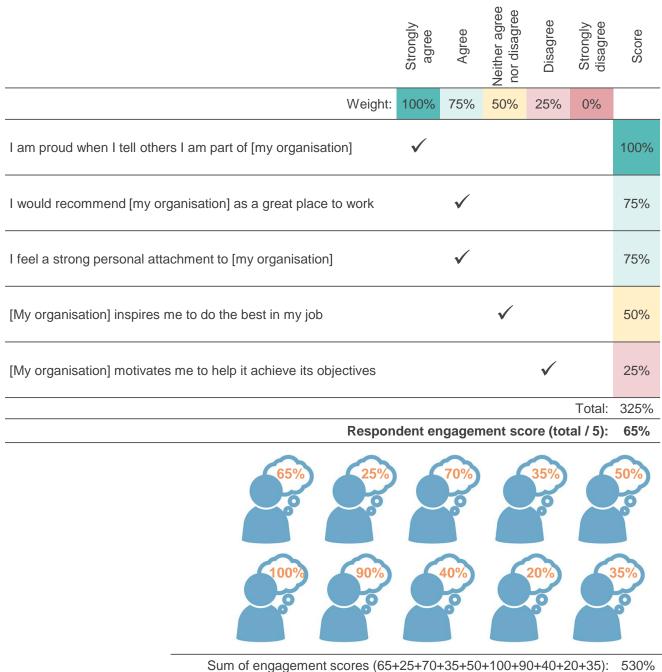
For each respondent an engagement score is calculated as the average score across the five questions where strongly disagree is equivalent to 0, disagree is equivalent to 25, neither agree nor disagree is equivalent to 50, agree is equivalent to 75 and strongly agree is equivalent to 100.

The engagement index is then calculated as the average engagement score in the organisation, or selected sub-group.

This approach means that a score of 100 is equivalent to all respondents in an organisation or group saying strongly agree to all five engagement questions, while a score of 0 is equivalent to all respondents in an organisation or group saying strongly disagree to all five engagement questions.

Like all questions in the survey this cannot be linked back to named individuals.

The nine theme scores that drive engagement (e.g. My work) are calculated using only the positive answers (Strongly agree and Agree).



Engagement Index for the group (530 / 10):

53%

# Comparing the "index" scores to "percent positive" scores

Because the engagement index is calculated using the whole response scale two groups with the same percent positive scores may have different engagement index scores. For example comparing one year's results to another, or as illustrated in the example below comparing two organisations (or units).

In the example below two organisations (A and B) have 50% of respondents saying strongly agree or agree. However the index score for the two organisations is 49% in A and 63% in B.

The index score gives a stronger weight to strongly agree responses than agree responses, and also gives stronger weight to neutral responses than to disagree or strongly disagree responses.

Figure 1 shows the distribution of the responses in each organisation. Table 1 shows how the calculations on the previous page translate these response profiles into index scores. Finally Figure 2 contrasts the percent positive scores between the two organisations with their index scores.

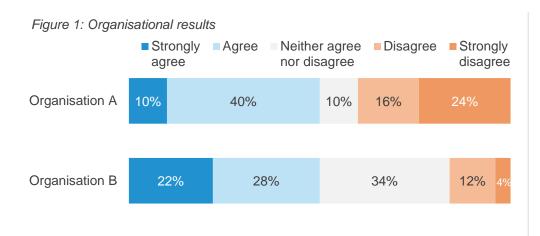
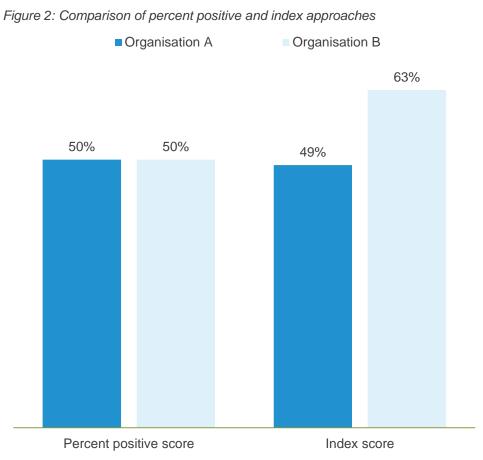


Table 1: Calculating the index score Organisation A Organisation B Score Weight % Score % Strongly agree 100% 10% 10% 22% 22% 40% 21% Agree 75% 30% 28% 50% 10% 5% 34% 17% Neither agree nor disagree Disagree 25% 16% 4% 12% 3% 24% 0% Strongly disagree 0% 0% 4% Total 100% 49% 100% 63%



Civil Service People Survey 2018: Technical Guide

# Using driver analysis to understand what influences employee engagement

**QUESTION:** How engaged is my team?

**ANSWER: CSPS** report **Engagement Scores** 

**NEXT STEP:** How am I going to improve my team's engagement?

**ANSWER:** CSPS key drivers of engagement

The engagement questions measure emotional outcomes but do not give us the insight to know how to improve or maintain engagement - for example, the question on advocacy may tell us that you do not recommend the organisation you work for as a great place to work, but it doesn't tell us how to make it a great place to work. This is where key driver analysis comes in, as this pinpoints the factors that have the strongest association with engagement levels.

From 2009 to 2017, the key driver analysis was run on the themes of the survey, using step-wise regression, rather than at a question level. This meant that any given organisation would see the strength of association between, for example, the 'Learning and Development' theme and their employee engagement index, but they wouldn't know which specific elements of Learning and Development had a strong relationship with engagement levels (e.g. the 'Learning and development activities I have completed while working for my organisation are helping me to develop my career').

The new driver analysis process uses a python based engine, which allows the driver analysis to run at a question level at an exponentially faster rate than a human could do. It enables us to apply a consistent and statistically based method to identifying drivers at high volume. With the fully automated process, the drivers for a range of demographics can be produced. It also allows for local questions – additional questions added to the People Survey by each organisation, for their organisation alone - to be included within the analysis.

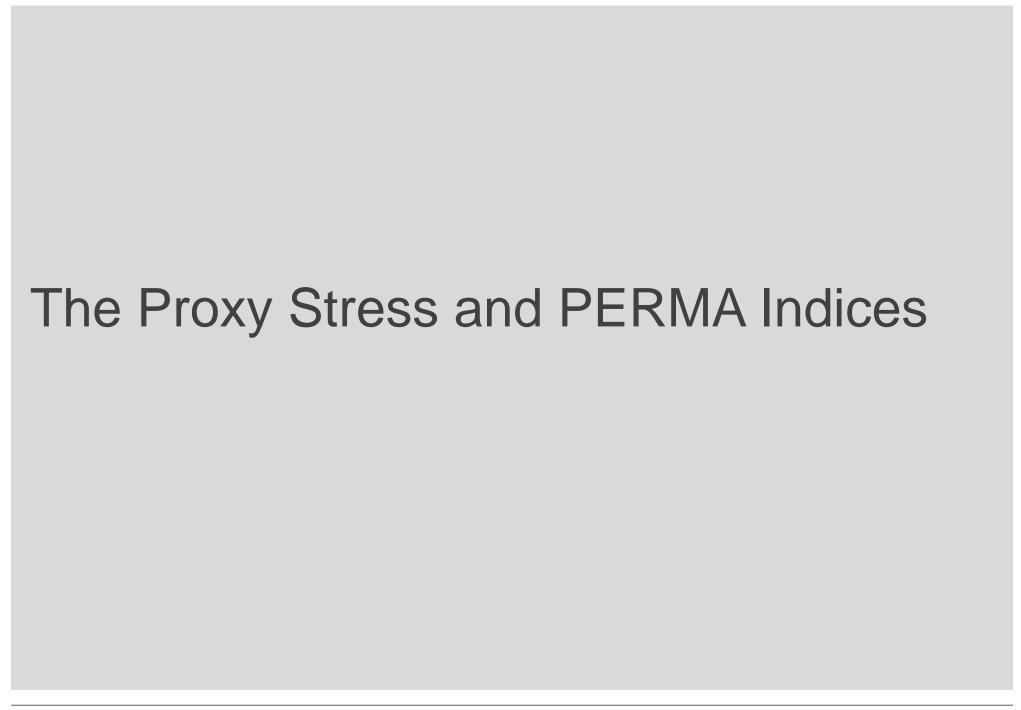
2009 - 2017

### Learning and development Difference from +5 ♦ previous survey Difference from +2 ♦ CS2017 Difference from CS -3 <> High Performers

Previous reports: 'mobile phone signal bar' showing strength of association between theme and engagement index 2018

	Drivers of Engagement  Difference from Cs from Cs from Provious from Flight							
R	ank			% Positive	previous survey	from CS2018	High Performers	
	1	B24	Learning and development activities I have completed while working for the [my organisation] are helping me to develop my career	50%	+6∻	+3♦	-2♦	
	2	B04	I feel involved in the decisions that affect my work	63%	0	+5∻	-1∻	
	3	B36	I am satisfied with the total benefits package	32%	+1	-2∻	-8∻	
	4	B18	The people in my team can be relied upon to help when things get difficult in my job	87%	-1∻	+1∻	-1∻	
	5	B45	I have the opportunity to contribute my views before decisions are made that affect me	39%	-1	0	-9♦	

Reports in 2018: Top 3 to 5 key driver questions are listed and ranked – so the first question in the list is the strongest driver of engagement, the second question is the second strongest driver of engagement, and so on.



# Using existing People Survey questions to calculate two health and wellbeing indices

High employee engagement is often conceptualised in terms of the benefits it can bring to organisations. Through the inclusion of four subjective wellbeing questions in the People Survey since 2012, as used by the Office for National Statistics as part of their Measuring National Wellbeing programme, we are trying to understand the benefits that high engagement can bring to our employees as individuals.

Building on this work, our 2018 products include two new indices based on existing questions in the People Survey, which have been shown as important elements of wellbeing. The new indices are described below, and we have retrospectively calculated scores for all previous survey years to look at trends over time.

### **Proxy Stress Index**

This index aligns to the Health and Safety Executive stress management tool. It uses the 8 questions from the People Survey shown below. It is calculated a similar way to the Employee Engagement Index.

We 'invert' the final index so that it is a measure of conditions that can add to stress rather than alleviate stress, i.e. a higher index score represents a more stressful environment.

- Demands: B33 I have an acceptable workload
- Control: B05 I have a choice in deciding how I do my work
- Support 1: B08 My manager motivates me to be more effective in my job
- Support 2: B26 I am treated with respect by the people I work with
- Role: B30 I have clear work objectives
- Relationships 1: B18 The people in my team can be relied upon to help when things get difficult in my job
- **Relationships 2:** E03 During the past 12 months have you personally experienced bullying or harassment at work?
- Change: B45 I have the opportunity to contribute my views before decisions are made that affect me

### The PERMA Index

This index measures the extent to which employees are 'flourishing' in the workplace; it is based around the 5 dimensions: Positive emotion, Engagement, Relationships, Meaning and Accomplishment. The index is computed using the 5 questions from the People Survey shown below and combining them in a similar way as the Employee Engagement Index.

A high score for a department represents a greater proportion of employees agreeing with the statements below and rating two well-being questions as high.

- Positive Emotion: W01 Overall, how satisfied are you with your life nowadays?
- Engagement: B01 I am interested in my work
- **Relationships**: B18 The people in my team can be relied upon to help when things get difficult in my job
- **Meaning**: W02 Overall, to what extent do you feel the things you do in your life are worthwhile?
- Accomplishment: B03 My work gives me a sense of personal accomplishment

# Calculating the Proxy Stress Index

**Step One:** Ensure an individual has responded to all 8 questions the index is based on.

**Step Two:** Recalculate the scores as percentages:

- 0 if Strongly Disagree, 25 if Disagree, 50 if Neither agree or disagree, 75 if Agree, 100 if Strongly agree
- For bullying and harassment: 0 if Yes, 50 if Prefer not to Say, 100 if No

**Step Three:** Add together the scores for all 8 questions answered by the respondent, and divide them by 8. This gives you the respondent's mean score.

**Step Four:** Invert the result by taking the mean score from 100%.

**Step Five:** For a team or organisation level Proxy Stress Index score, the Proxy Stress scores of all the individuals in the group should be added up, and that score divided by the number of individuals in the group.

Lower Proxy Stress Index for a team indicates a greater capacity to prevent and manage stress in that team.

Rounding should take place at the final stage, if needed.

Steps One to Four	Response:	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Score
	Weight:	100%	75%	50%	25%	0%	
I have an acceptable workload		$\checkmark$					100%
I have a choice in deciding how I do my work				✓			50%
My manager motivates me to be more effective in my jo	b			✓			50%
I am treated with respect by the people I work with				✓			50%
I have clear work objectives					✓		25%
The people in my team can be relied upon to help when get difficult in my job	things		✓				75%
I have the opportunity to contribute my views before decare made that affect me	cisions			✓			50%
F	Response:	<sup>o</sup> Z		Prefer not to sav	<b>S</b>	Yes	Score
	Weight:	100%		50%		0%	
During the past 12 months have you personally experie bullying or harassment at work?	nced	✓					100%
Mean score (total / 8): 62.5  Respondent Proxy Stress Index (100% – mean score): 38%  Step Five							62.5%
50.0% 62.5% 37.5% 18.75% 18.75%	75.0%	50.0	0%	37.5%	62.	5%	37.5%
Sum	of Proxy St	ress sco	ores fo	r each ir	ndividua	al 49	50%

Sum of Proxy Stress scores for each individual (50.0+62.5+37.5+18.75+18.75+75.0+50.0+37.5+62.5+37.5):

450%

Proxy Stress Index for the group (450 / 10):

45%

# Calculating the **PERMA Index**

Step One: Ensure an individual has responded to all five questions the index is based on.

**Step Two:** Recalculate the scores as percentages:

- · 0 if Strongly Disagree, 25 if Disagree, 50 if Neither agree or disagree, 75 if Agree, 100 if Strongly agree
- For the two questions with a response scale of 0 to 10: assign a score of 0 if 0, 25 if 1 to 4, 50 if 5 or 6, 75 if 7 to 9, and 100 if 10.

**Step Three:** Take a mean of the percentage scores for each question, by totaling them and dividing by five.

Step Four: For a group PERMA score, the PERMA scores of all the individuals in the group are averaged.

**Higher PERMA Index scores represent higher** levels of flourishing and engagement at an individual or team level.

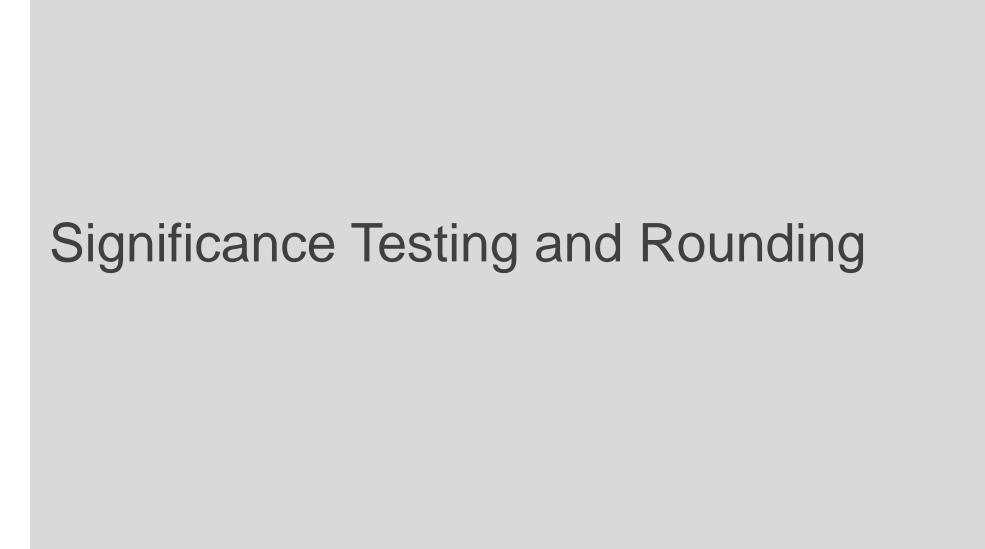
Rounding should take place at the final stage, if needed.

Steps One to Three  Response:	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Score
Weight:	100%	75%	50%	25%	0%	
I am interested in my work		✓				75%
The people in my team can be relied upon to help when things get difficult in my job	✓					100%
My work gives me a sense of personal accomplishment			✓			50%
				4		
Response:	10	7, 8, 9	5, 6	1, 2, 3, 4	0	Score
Weight:	100%	75%	50%	25%	0%	
Overall, how satisfied are you with your life nowadays?		✓				75%
Overall, to what extent do you feel the things you do in your life are worthwhile?				<b>√</b>		25%
Respond	lent PE	RMA I	ndex sc	ore (to	Total: <b>tal / 5):</b>	
Step Four						
65% 50% 70% 25% 55% 65	% 5	50%	70%	25%	55%	

Sum of PERMA Index scores (65+50+70+25+55+65+50+70+25+55): 530%

PERMA Index for the group (530 / 10):

53%



# Using statistical testing to compare sets of results

Unless an organisation or team has a 100% response rate, we have to take account of the fact we do not know the views of those who did not take part. In statistical terms this is called the "margin of error".

When making comparisons between groups over time it is important not just to look at the absolute difference between the reported figures but also to consider the margin of error. If the margins of error overlap then we cannot be confident that the difference between the two figures is a 'real' difference of opinion.

For example, take the situation outlined on the right. Here we see that the margin of error for Group A and Group B overlap and therefore we cannot be confident that there is a real difference of opinion between the two groups. However, for Group A and Group D the margins of error do not overlap and therefore we can be confident that there is a real difference between the two groups.

Statistical testing is used when comparing the following sets of results:

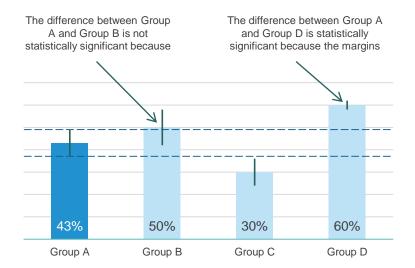
- A unit or organisation's 2018 scores against that unit or organisation's scores from previous years
- A unit against its parent, organisation or another unit's results
- A unit or organisation's scores against a Civil Service benchmark

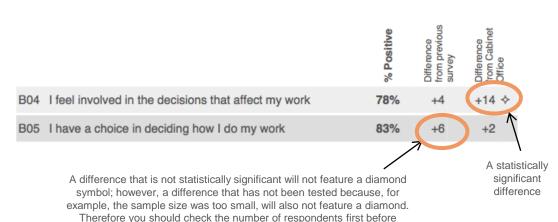
Survey proportions (the percent positive and theme scores) are tested using z-tests, while the engagement index is tested using the t-test. Comparisons between groups or over time use two-sample tests, while comparisons to benchmark scores use one-sample tests. All tests are conducted at the 95% confidence level.

As a rule of thumb, there needs to be 30 responses at question level, 20 responses at theme level or 10 responses at index level for statistical testing to be carried out.

Differences that are statistically significant the result are flagged with a diamond symbol, ⋄.

Unit	Headcount	Responses	% positive score	Margin of error
Group A	200	120 (60%)	43%	± 6%
Group B	150	80 (53%)	50%	± 8%
Group C	50	40 (80%)	30%	± 6%
Group D	500	375 (75%)	60%	± 2%





inferring a result is not statistically significant.

All results in CSPS reporting products are rounded to the nearest percentage point

Figures (notably percentages) are displayed as whole numbers for the ease of reading. To ensure the figures are as accurate as possible the reports and tools apply rounding to the figures at the last stage of calculation and are rounded to the nearest percentage point.

Sometimes this will mean that the figures shown may not be identical if calculations are performed using the figures displayed in the report, however any difference would not be larger than  $\pm 1$  percentage point.

For example results of 23.00% to 23.49% are displayed as 23%, while results of 23.50% to 23.99% are displayed as 24%. Therefore if you sum the percentages for all the response options to a question the figure may not sum to 100%, but may sum to 99% or 101%.

In the example shown in Table A if we sum the displayed percentages for strongly agree and agree to calculate the percentage positive response as 47% (18% + 29%), but using the raw figures we calculate the result as 48%.

Similarly when comparing figures between different groups or benchmarks, the difference displayed in reporting may not be identical to that if the difference is calculated using the reported figures.

For example, as shown in Table B, Group E has an engagement index score of 52.952% which rounds to 53% in their report, while Benchmark has a score of 58.495% which rounds to 58%. The difference between these two figures is 5.543, which is rounded to a 6 percentage points difference. However, if the calculation was carried out manually using the whole numbers readers would calculate the difference as 5 percentage points (58 minus 53).

Table A: Demonstration of rounding when presenting question results

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Total	Positive responses
Number of responses	103	166	176	96	24	565	269
Percent of responses	18.23%	29.38%	31.15%	16.99%	4.25%	100.00%	47.61%
Figure displayed in reporting	18%	29%	31%	17%	4%	99%	48%

Table B: Demonstration of rounding when calculating differences

	Group E	Benchmark	Difference (Group E - Benchmark)
Engagement Index	52.952%	58.495%	- 5.543
Figure displayed in reporting	53%	58%	- 6

