

Birmingham Secondary Schools - Pilot Extended Wellbeing Census 2024 Lay Summary

Why an extended Wellbeing Census?

The gap between levels of need and the availability of resources to support school-age young people with mental health and wellbeing issues has been rapidly increasing in recent years against a background where half of all mental health disorders are estimated to emerge by age 14.

Employing wellbeing metrics to annually gauge the emotional health of young people in school settings (Thapar et al., 2021) is a practical way to indicate the current and ongoing wellbeing and future mental health status of pupils.

Through extending the wellbeing census to investigate factors that may protect wellbeing, this provides schools with targeted areas to both monitor and support their young people. We can also use this data to evaluate current and future interventions that support young people in the city and try find out what works and is useful regarding their wellbeing.

In 2024, we completed an extended wellbeing census to pilot the feasibility of collecting both wellbeing and protective factor data in schools. This was completed with schools who volunteered to take part in the extended census.

The aim of this pilot study was to test if it would be feasible for all participating secondary schools to complete an extended census in 2025. To make this decision, the Breathe Education Team will review response rates, pupil feedback, and the data collected, to determine if extending the wellbeing census would be successful.

The 2024 Breathe Education Extended Wellbeing Census

Between March-July 2024 the extended wellbeing census was conducted in a sample of secondary schools across the Birmingham LEA, which included an extended survey to look at factors that can protect wellbeing.

Digital delivery of the census was through www.breathe-schools.co.uk, a platform that enables collaborative work to take place across a regional partnership of mental health professionals and individual schools. This is part of an ongoing programme creating resources and interventions for schools via our teacher focused website www.breathe-edu.co.uk.

The measures used for the survey were:

The Warwick-Edinburgh Mental Wellbeing Scales (WEMWBS, (Tennant et al., 2007). The 14-item scale WEMWBS has 5 response categories, summed to provide a single score ranging between 14-70. All items are suitable for young people and worded positively, covering both emotional and functional aspects of mental wellbeing thereby making the concept more accessible.

The School Connectedness Scale (Resnick et al., 1997) which is assessed by 4 items across 5 response categories, summed to provide a single score ranging between 4-20. Questions are adapted from Resnick et al. (1997). School connectedness is protective against a range of risk behaviours and poor academic achievement.

Demographics for pupils were collected around ethnicity, sex, school year, SEND status, free school meals and persistent absence. For inter-school comparisons we matched overall averages to publicly available school-level information, %SEN support, % Pupils with English as not first language and % Free School Meal (FSM) status (average of last 6 years) from Dfes (2021) and Local Super Output Area (LSOA) deprivation data from www.gov.uk (2019).

Multidimensional Scale of Perceived Social Support – The family and friend subscales (8-items) will be used to identify an individual’s perceived level of social support from friends and family (Zimet, Dahlem, Zimet & Farley, 1988). Each subscale is summed to provide a single score ranging between 4-20, with a higher score representing higher perceived support.

The Emotion Regulation Questionnaire Short Form has 6-items to measure emotion regulation skills including cognitive reappraisal and expressive suppression (Preece, Petrova, Mehta & Gross, 2023). Each subscale is summed to provide a single score between 3-15, with a higher score representing higher use of this regulation style.

The 3-item Self-Kindness subscale taken from the Self-Compassion Scale Youth will be used to assess self-kindness and provide an insight into self-compassion (Neff et al, 2021). This scale is summed to provide a single score between 3-15, with a higher score representing more self-kindness.

One question taken from the Pittsburgh Sleep Quality Index was selected to provide an insight into overall sleep quality over the last month (Buysse, Reynolds, Monk, Berman & Kupfer, 1989). This question provides a score between 1-4, with a higher score representing better sleep quality.

To get an insight into diet, three questions asking what you ate for breakfast today, what did you eat for lunch yesterday, and how many portions of fruit and vegetables did you eat yesterday, were adapted from Hayhoe et al (2021). The number of choices will be displayed for each school.

Who were involved?

16 secondary schools collected data for 3,952 pupils between the ages of 11-18 years. Participating schools constituted 15 academies and 1 independent school. The schools spanned across all 5 Birmingham constituencies North (1 schools), East (1 Schools), West (5 Schools), South (5 Schools), Central (3 Schools) and a further 1 school from Staffordshire LEA ¹. Secondary Schools registered 15,902 pupils for the extended census of which 7,262 took part in the original wellbeing census and 3,952 of

these took part in the extended census. All pupils from years 7-13 (11-18 years old) were able to take part in the census.

Representation

Census schools were generally representative of the broader picture of schools in Birmingham LEAs. The schools that took part in the survey had a similar percentage of pupils with special educational needs support 11.4%, when compared to the England average of 12.4% (Dfes, 2022). The schools that took part had slightly higher proportions of pupils with their first language other than English with 20.6%, compared to the England average 18.1% (Dfes, 2022). The percentage of pupils taking part in receipt of FSM was 33.8%, compared to the England average of 27.1% (Dfes, 2022). The West Midlands typically reports higher levels of these indices compared to the rest of the England.

A note on terminology used in this analysis

Significant denotes statistical significance – Statistical significance means that our findings are unlikely to have occurred by chance, but this does not always indicate a large difference between groups.

The 2024 Extended Wellbeing Census

Table 1. 2024 Wellbeing and Protective Factor Scores for Pupil Demographic Groups.

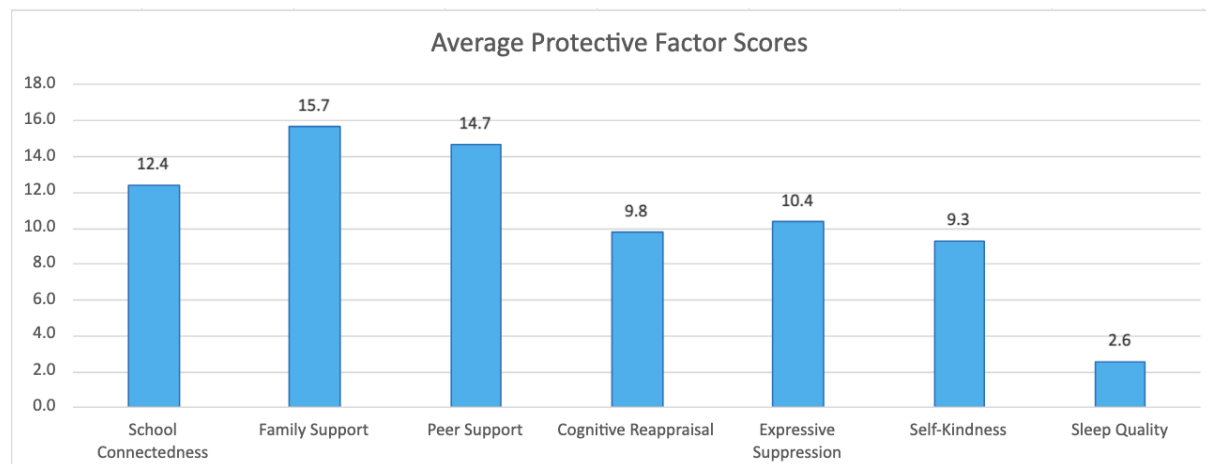
	Frequency	Percentages	Wellbeing	School Connectedness	Family Support	Peer Support	Emotion Regulation Cognitive Reappraisal	Emotion Regulation Expressive Suppression	Self Kindness	Sleep Quality
Overall	3952	100%	46.6	12.5	15.7	14.7	9.8	10.4	9.3	2.6
Male	1660	42%	48.7	13.0	16.3	14.5	10.2	10.4	9.8	2.7
Female	2292	58%	45.1	12.2	15.3	14.9	9.6	10.3	8.8	2.6
Year 7	929	24%	46.9	12.8	15.9	14.7	9.7	10.2	9.3	2.7
Year 8	914	23%	46.2	10.1	15.7	14.1	9.7	10.3	9.3	2.6
Year 9	778	20%	47.7	12.5	15.3	14.4	9.7	10.5	9.1	2.6
Year 10	732	19%	46.0	12.3	15.3	14.7	9.7	10.6	9.2	2.5
Year 11	215	5%	45.4	13.1	15.7	15.0	9.7	10.5	8.8	2.3
Year 12	231	6%	47.4	13.4	15.9	15.1	9.9	10.6	9.5	2.5
Year 13	153	4%	45.2	12.9	15.3	14.7	9.7	10.9	8.9	2.5
White	1085	27%	45.2	11.9	15.6	14.8	9.3	10.0	8.8	2.6
Asian	1229	31%	47.5	12.9	15.3	14.6	9.9	10.5	9.4	2.6
Black	243	6%	47.2	11.9	15.9	14.7	10.0	10.8	9.6	2.6
Mixed	227	6%	46.9	12.7	15.4	14.1	9.5	10.3	9.0	2.7
Other	98	2%	44.4	11.8	15.1	13.7	9.3	10.7	8.5	2.4
Ethnicity not known	1070	27%	47.0	12.9	15.5	14.8	10.0	10.5	9.5	2.6
No SEND	3623	92%	46.8	12.6	15.7	14.7	9.8	10.5	9.3	2.5
All SEND combined	329	8%	45.0	12.2	15.5	14.4	9.2	10.0	9.0	2.5
Communication & Interaction	98	2%	45.1	12.6	14.6	14.5	9.2	9.9	9.2	2.5
Cognition & Learning	112	3%	45.7	12.5	11.1	13.4	9.8	10.0	9.2	2.8
SEMH	73	2%	44.0	11.3	15.6	14.5	9.0	10.3	8.6	2.4
Physical or Sensory	46	1%	44.9	12.1	9.6	14.6	9.8	10.8	8.7	2.6
In Receipt of FSM	1007	25%	45.6	12.0	15.2	14.5	9.6	10.4	9.2	2.5
Not in receipt of FSM	2577	65%	47.0	12.6	15.8	14.7	9.9	10.5	9.3	2.6
FSM not known	368	9%	47.0	13.8	15.8	15.2	9.6	10.5	9.4	2.6
Persistent Absenter	380	10%	45.1	11.7	15.0	14.1	9.4	10.8	8.8	2.4
Below PA threshold	3572	90%	46.8	12.6	15.7	14.7	9.8	10.4	9.3	2.6

Table 1 details the 2024 extended census which collected data on wellbeing as well as factors that may protect wellbeing. These factors included school connectedness, family support, peer support, cognitive reappraisal, expressive suppression, self-kindness, sleep quality and fruit/vegetable consumption. Overall scores for each factor can be seen in Table 1.

School connectedness has been measured annually with the wellbeing census and is part of the original census. However, as this is considered a factor that can protect wellbeing it is being included when discussing protective factors.

Protective Factors

Chart 1. Average Protective Factor Scores for All Schools That Took Part.



A school connectedness score of 12.4 out of 20 reflects a reasonably positive level of pupil sense of belonging and connectedness to the school environment.

Perceived family support averaged at 15.7 on a scale of 4-20, indicating a strong level of perceived support and understanding from family members.

Perceived peer support was averaged slightly lower than this with 14.7 on a scale of 4-20, but still suggests a strong perception of feeling supported and understood by their friends.

The emotion regulation scores were on a scale of 3-15, with cognitive reappraisal averaging at 9.8 and expressive suppression averaging at 10.4. This suggests on average pupils are emotionally regulating through hiding their emotions more than trying to positively reframe situations.

A self-kindness average score of 9.3 on a scale of 3 to 15 suggests that there is a moderate level of self-kindness and understanding.

Chart 2. Percentages of Pupils for Breakfast and Lunch Food Choices, and Fruit/Vegetable Consumption for All Schools That Took Part.

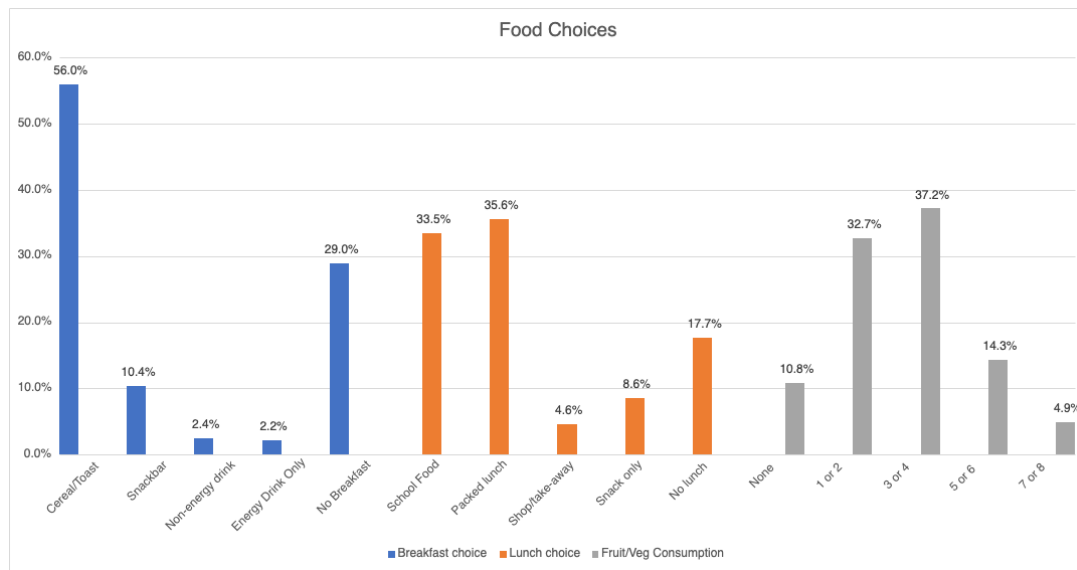
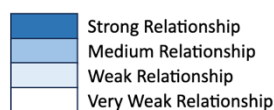


Chart 2 provides a breakdown of the food choices that are generally made by pupils on a school day. As diet can have an impact on physical health and overall wellbeing it is important to look at pupil food choice as this can impact mood, concentration and energy levels in school.

The Relationship Between Wellbeing and the Protective Factors

Chart 3. Correlational Relationships Between Wellbeing and Protective Factors for All Schools That Took Part.

	School Connectedness	Family Support	Peer Support	Cognitive Reappraisal	Expressive Suppression	Self-Kindness	Sleep Quality	Fruit/Veg Consumption
Wellbeing	0.61	0.59	0.45	0.53	-0.18	0.66	0.43	0.24



Self-kindness was found to have the strongest relationship with wellbeing scores, and therefore would be considered the most influential factor for protecting wellbeing in this group. Similarly, school connectedness also demonstrated a strong influential relationship with wellbeing scores.

This was closely followed by family support and cognitive reappraisal also having a medium connection and influence on wellbeing scores.

Peer support and sleep quality showed a medium connection and influence on wellbeing scores, but these were less influential than the factors discussed above.

Expressive suppression and fruit/vegetable consumption showed weak connections to wellbeing scores.

This research into the relationship between wellbeing and protective factors is ongoing. This report will be updated as analysis continues and decisions regarding the extended census are made.