The SHINE Interactive Dashboard

A guide for schools

The SHINE Interactive Dashboard was created to support schools and young people to understand and use Health and Wellbeing data. Health and Wellbeing are an integral part of the Curriculum for Excellence. The development of HWB data skills - collection, interpretation, and implementation in the school setting - can support an evidence-based, whole-school approach to health and wellbeing improvements.

This shiny app resource for members of the SHINE network can be used by pupils and teachers in a range of curriculum areas, such as PSE, maths, social sciences and health and wellbeing (PE and Food technology). This resource uses data from the Health Behaviour in School-aged Children (HBSC) Survey 2018 to support an understanding of the factors which impact on young people's health and wellbeing as they develop.

The SHINE model aligns closely with the HWB Experiences and Outcomes of the Curriculum for Excellence, the GTCS Standards for Career-Long Professional Learning, HGIOS4 Leadership and Management- examples of highly effective practice and the Scottish Government Whole School Approach to Mental Health and Wellbeing framework document.

What is a shiny app?

A Shiny app is an open, accessible web app which is used through a web browser to run the same tools on the data that researchers use every day. By using the interactive inputs, without needing specific technical skills, users can ask questions and investigate the data which is used in decision-making to improve health and wellbeing. The SHINE Interactive Dashboard allows users to see the relationships between certain health behaviours, trends over time and consider the international context.

Access

To access the SHINE Interactive Dashboard, use this link:

https://shine-explorer.sphsu.gla.ac.uk/

The app displays most clearly on a computer screen or tablet in landscape. It is less well suited to use on a mobile phone.

Saving Images

Do feel free to save and use images for teaching purposes. In apps 1 and 2 this can be done by right-clicking (on a computer) or long-pressing (on a tablet) and saving/downloading the image from the menu. As Apps 3 and 4 are interactive, saving images should be done through taking a screenshot.

Contents

There are 4 areas for exploration within the SHINE Interactive Dashboard:

- **How are Scotland's young people doing?** This section shows a range of health topics and how boys and girls at ages 11, 13 and 15 answered questions on these health topics. Differences across ages and genders can be seen in the data and may provide a useful starting point for class discussion.
- **What influences health and wellbeing?** This section shows a range of health behaviour in relation to feeling low, life satisfaction and health.
- **Changing rates** This section shows how various aspects of young people's health behaviour have changed over time in Scotland from 2002 to 2018
- **How does Scotland Compare?** This section shows Scotland's data in relation to the other countries which submitted data in 2018, providing an international context to the data.

Practical applications of the SHINE Interactive Dashboard in the classroom

If you are asking pupils to complete a health and wellbeing survey in your school, this app provides the perfect "warm-up" activity to help young people understand why health and wellbeing data is useful. If young people understand how data can be used and are interested to see how young Scottish people answer the health and wellbeing questions, it is more likely that they will engage confidently and willingly in the health and wellbeing survey.

The app will also help young people to understand the data graphs which are used to show the data and support their understanding of the factors which influence wellbeing. The national data in the app can be used as a comparison or benchmark to understand the Scottish context.

How does each app work?

App 1 : How are Scotland's Young People doing?

How are Scotland's young people doing?

Select a health topic to compare across ages and genders:

☑ Split by age groups?

| Eat breakfast every morning on weekdays ▾ |

How often do you usually have breakfast (more than a glass of milk or fruit juice)?

% who say every day on school days

Gender
Boys
Girls

Age: 11-year olds, 13-year olds, 15-year olds
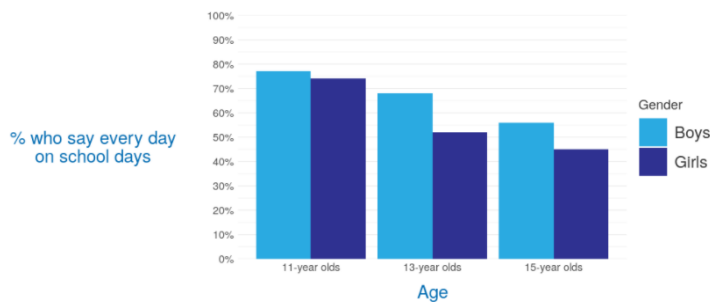
Use this app to look at various health topics according to age and gender.

Use the drop-down menu to select a health behaviour to explore.

This can be used with a class with the teacher operating the app on a whiteboard, asking pupils to choose the topics to explore, or pupils can access the app on their own device.

Starting points for discussion: Understanding why health data is collected

Class questions:
- Why are data relating to COVID statistics shown every night on the news?
- Who is interested in that data and why?
- How can that data be used to help people?

- How can data about health behaviour like eating chips, drinking alcohol help decision-making?

Prompts:
- Understanding the scale of the problem, understanding risk and/or being reassured
- Politicians, NHS, schools, the public
- Safety measures, allocating resources, supporting decision-making
- If trends increase or decrease, more resources can be allocated to tackle problems, policies can be amended & if young people understand the risks, it can support positive decision-making

Health research has shown the links between certain health behaviours and physical or mental ill health

Understanding the context

This data was collected in 2018 from 11, 13 & 15 yr olds

- What was different then to now for young people?
- Look at the topics listed in the menu – in which topics might you expect to see a bigger difference between the ages or between the genders? Why?

- Consider the effects of COVID on young people
- Ask YP to express their opinions about what they might expect to see (depending on the topic, raise hands if they think it will be higher or lower by age or gender), then show the data
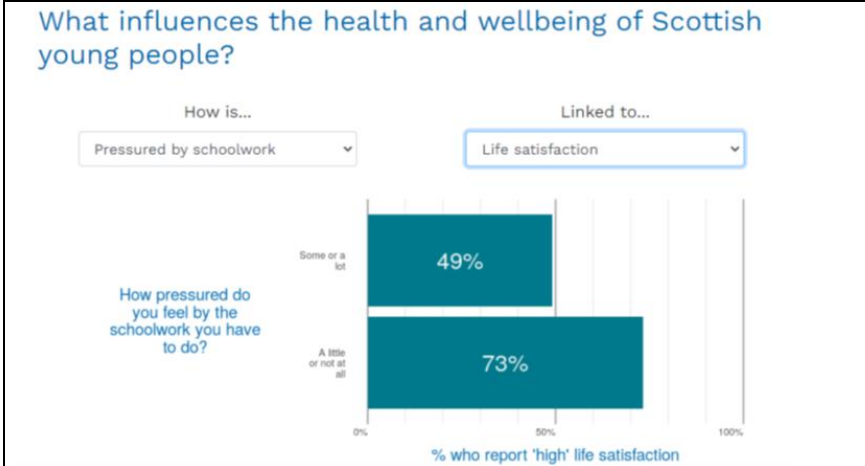- Ask YP for opinions on the reasons for differences

At a glance: The range of health behaviours you can choose from in App 1 includes:

- Eat breakfast every morning on weekdays
- Daily fruit consumption
- Daily vegetable consumption
- Daily consumption of sweets or chocolate
- Daily consumption of sugary drinks
- Daily consumption of energy drinks
- Feel very happy
- Often or always feel confident
- Sleep difficulties
- Been bullied at least 2-3 times a month in the past couple of months
- Been cyber-bullied at least 2-3 times a month in the past couple of months
- Report good or excellent health
- Watching TV for 2 or more hours a day on weekdays
- Using computers (not games) for 2 or more hours a day on weekdays
- Report high life satisfaction
- Feel low
- Feel nervous

In the following pages, you will find a description of each of the four apps, a picture of each app and some notes for teachers. The notes are designed to support the use of the apps in the classroom to generate discussion and improve knowledge about health data

App 2 : What influences the health and wellbeing of Scottish Young People?

What influences the health and wellbeing of Scottish young people?

How is... | Linked to...
Pressured by schoolwork | Life satisfaction

How pressured do you feel by the schoolwork you have to do?
Some or a lot — 49%
A little or not at all — 73%

% who report 'high' life satisfaction

Click on the menu button on the left to see the range of health behaviours.

Click on the menu button on the right to choose whether you would like to see the health behaviour you have chosen on the left is linked to either
- Health
- Life satisfaction
- Feeling low

Understanding the data

- Show young people how the categories in the left-hand menu relate to the categories in the right-hand menu by pointing to them to highlight the fact that they are on the x and y axis of the graph (y = left hand menu and x=right hand menu)
- On the y axis – you will see the question that the young people were asked in the survey
- On the x axis – you will see the outcome for the righthand menu
- In the example above you can compare the results for the young people who answered the question as "some or a lot" versus the young people who answered "a little or not at all"

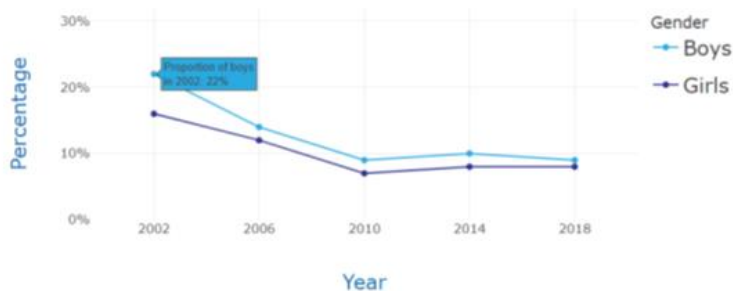| **Approaches** |
|---|
| • Do a quick poll (hands up) with the class to ask them the question that was used on the survey – then compare their data with the national Scottish data and discuss the reasons which might be behind any differences. (Location/age/education/school ethos/year group) |

App 3 What's changed for Scotland's Young People?	
	This app shows how young people's health behaviour has changed over time. Choose a health behaviour from the menu. To see the actual percentage, hover your cursor over the dot (or tap on the dot on a tablet) and the statistics will appear

Approaches

1. The HBSC data is collected from young people aged 11,13 and 15 every four years so you can see how the trends have changed
   - Click on the arrow to pull down the menu
   - Ask young people to vote on whether they think certain behaviours will increase or decrease
   - Then click on the chosen behaviour to see the result
   - Discuss with the young people why they think these changes have occurred

2. Compare the two lines to see if there are any differences between the genders
   - Ask the young people to offer suggestions as why there might be differences

3. Use a shoe box with a slot in it to gather anonymous data or a digital polling app
   - Provide pupils with a voting slip with some of the questions on them – these could be topics that you want to introduce to the class such as sleep or diet
   - Prepare the voting slips/poll with statements that the young people can tick so that no handwriting can be recognized. (eg. Male/female/non-binary/prefer not to say + suggested answers to the question eg. never, once a week, twice a week, more than 3 times a week
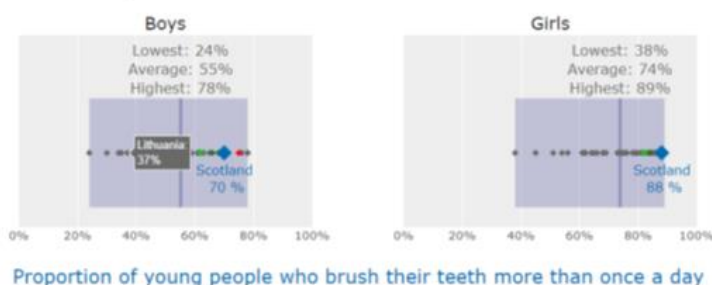   - Make sure the young people don't put names on their voting slip

App 4 How does Scotland compare with other countries?

This app shows the Scottish national data in comparison to all the other 51 countries that complete the HBSC survey.

The Scottish data is highlighted in blue. Hover your cursor over the dots (or tap on the dots on a tablet) to see the percentages for other countries.

The lowest, average and highest statistics are stated above the graphs

Read the information in black as this tells you which response to the question is shown – % of YP who reported brushing their teeth more than once a day

Approaches

The HBSC survey is run in collaboration with the World Health Organisation in 51 countries in Europe and North America.

Pupils are likely to be interested in the comparisons with countries near to Scotland such as Ireland, England and Wales. However, this app offers the opportunity to extend their knowledge of the other countries which are mentioned.

The teacher can show a map of the world on the whiteboard to identify where some of the less well-known countries are. Pupils could be put into groups to find out some facts about certain countries, such as population, climate, affluence, education system or location.

Having picked a country for each group to focus on, the pupils could explore the data for that country, noting:
- If the statistics are similar for boys and girls in the country
- Whether the statistics are higher or lower than the Scottish ones
- Pupils can then consider whether the facts they found out about the country might suggest a reason for any differences or similarities noticed.

Please provide feedback

The SHINE Interactive Data Dashboard has been launched in the 2022-2023 academic session as an open pilot. As such, we are keen to gain feedback from users in order to inform further refinement and development of the interactive tool.

If you have used the interactive data dashboard with a class and would be prepared to share some feedback with us to support further development, we would be very grateful. Feedback can be providing by pupils and /or staff via this 60 second survey by clicking on this link:

https://uofg.qualtrics.com/jfe/form/SV_8uAAT2goqBfiSgK

or by using this QR code:

Many thanks for trialling the SHINE Interactive Data Dashboard – we hope you enjoyed using it!