Jersey Opinions & Lifestyle Survey Methodology

Introduction

The Jersey Opinions and Lifestyle Survey (JOLS) is annual survey that tracks changes in social attitudes and lifestyle patterns across demographic groups, offering insights into wellbeing, health, housing and finances.

Background to the survey

JOLS is conducted annually to gather detailed information on Islanders' opinions, behaviours and social circumstances. Its primary purpose is to improve understanding of life in Jersey to help inform policy decisions, guide service planning and evaluate the impact of Government initiatives through the Island Outcome Indicators.

Statistics Jersey seeks the views of departments and other stakeholders as to which topics they would like to see included in each annual survey. Statistics Jersey independently runs the survey, undertakes the analysis and publishes the results.

The survey was launched in 2005 as the Jersey Annual Social Survey (JASS) and was renamed as the Jersey Opinions and Lifestyle Survey in 2016.

Reference population

The sampling frame for JOLS is all adults aged 16 and over living in private households in Jersey. This means that adults living in communal establishments such as care homes or the prison are not included in the survey.

Sampling

The sample for JOLS is drawn from the Jersey Land and Property Index (JLPI). This a comprehensive list of all private addresses in Jersey, updated daily from authoritative sources. Each year, around 4,000 households are randomly selected from the JLPI to participate in the survey.

A two-stage approach to sampling is used. The sample is first split by parish, with St Helier divided further into vingtaines. Households are randomly selected within each of these groups: a process known as stratification.

To randomly cover the entire adult population, the household member next celebrating their birthday, and aged 16 years or over, is asked to complete the survey. This is designed to achieve a good mix of ages responding. Once an address has been chosen to participate in JOLS, it is excluded from selection for at least three years.

To ensure a random, unbiased sample, participation is limited to households which have been invited to take part. The survey is not made available online for anyone to take part as this would likely bias the results.

Collection methods

The survey offers different response options. All households selected to take part are sent a letter to their address inviting them to participate in an online self-completion questionnaire. Households can request a paper version of the questionnaire. After a period of non-completion, all outstanding households are sent a reminder with a paper copy of the survey. A Portuguese language version of the survey is available online.

Questionnaires

The questionnaire combines three types of question:

1. **Core questions** – covering demographics, household structure and economic activity. These are included every year to ensure key census variables can be monitored annually.
2. **Rotational questions** – on topics such as diet, exercise and alcohol consumption. These are asked on a two- to three-year cycle, with many feeding into regular Government of Jersey reports, or performance measures such as the Island Outcome Indicators (IOIs).
3. **Topical questions** – requested by government departments and arms-length bodies to address emerging issues or current policy priorities.

Questions are included in the survey for one of three distinct purposes:

- to provide benchmark data or measure change over time
- to provide information to assist the development of policy
- to gauge public opinion

Government departments and other organisations including scrutiny panels and States Assembly members can request topics for inclusion in the questionnaire. These requests are reviewed by Statistics Jersey with input from an advisory panel, with the final decision on the topics and questions made by the Chief Statistician. Topics are assessed on a range of criteria including relevance, urgency, respondent burden and impact on response rates, ethical considerations and government importance. Following the Panel process, Statistics Jersey meets with each person who requested topics to develop their questions to best meet their needs. Where possible, questions are based on surveys used elsewhere.

Current and past questionnaires can be accessed at www.stats.je/statistic/opinions-and-lifestyle.

Data processing workflow

Paper questionnaires are inputted and combined with online responses. A series of quality checks and validations are applied, including identifying duplicate responses, detecting outliers, and verifying logical consistency (for example, the year residence began should not precede the year of birth). Free-text "other" responses are reviewed and reclassified into existing categories where appropriate.

Calculated variables are created in line with the methodologies outlined in Question-specific methodologies. For industry and profession questions left unanswered, classification is based on the job description provided. No imputation is applied for other missing responses.

Analysis is conducted in the statistical software R using custom-built functions developed for JOLS and the Jersey Children and Young People's Survey (JCYPS). Where relevant, responses such as "don't know", "not applicable" and "prefer not to say" are excluded to ensure accurate comparisons across questions.

Weighting

Responses are weighted to ensure the sample represents the eligible population. Weighting assigns each responding case a value that represents a number of people in the population. These weights are calculated so that, when applied, the survey data aligns with known population totals.

Weighting is based on the latest available census data and uses three key variables: sex, age and tenure. This process compensates for different patterns of non-response among sub-groups of the population. All analysis presented within the reports use weighted responses.

Since 2017, overall response rates have ranged between 31% and 42%. As with all sample surveys, there is an element of statistical uncertainty, therefore it is essential to check the profile of respondents against other population data to verify representativeness. For example, young adults typically respond at lower rates than the overall average. However, differences between survey responses and census proportions are generally small, with the largest weighting factor (the ratio of a subgroup's proportion in the sample to its proportion in the population) typically no greater than 5. These small weighting factors are appropriate for a survey of this nature.

Confidence intervals

The principle behind a sample survey is that by asking questions of a randomly selected representative subset of a population, conclusions can be drawn about the overall population without having to approach every individual. Provided the sample is representative, the results will be unbiased and accurate. However, the sample results will always have an element of statistical uncertainty, because they are based on a sample and not the entire population.

While non-sampling uncertainty cannot be easily quantified, the sampling uncertainty can: this is done below for this survey.

Under the sampling design implemented (simple random sampling without replacement) the standard error on the estimate of a population proportion p is:

$$s.e(p) = \sqrt{\frac{p(1-p)(1-f)}{n-1}}$$

Where:

n is the total number of respondents

f is the sampling fraction, equal to $\frac{n}{N}$, where N is the number of adults in the Island

The 95% confidence interval on any proportion p is then given by:

$p \pm 1.96 s.e(p)$ and attains a maximum for $p = 0.5$, i.e. 50%.

For analysis done on a household level, such as total household income, the confidence interval is based on the number of households, rather than the number of people. When calculating this using the above formulae, N is the number of households in Jersey. n is still the total number of respondents, as each person has responded for their household.

As a result of the confidence intervals described above, results for the full population which show small changes or differences, e.g. of 1 or 2 percentage points, should be treated with some caution, as the differences will not be significant with respect to the confidence intervals attached to each single value.

However, for larger differences of 5 percentage points or more, the chance that such a difference is due to sampling (rather than being a true measure of a difference or change in the overall population) is small. Since this report focuses on larger differences, there can be confidence that the results presented, and inferences drawn, do indeed reflect the views or behaviour of the overall population.

Some of our analysis is based on the mean values of numeric values, rather than percentages of the population. The standard error for means is calculated using this formula:

$$s.e.(Q) = \sqrt{\frac{(1-f)\sum_{r=1}^{n} W_r\left(x_r - \bar{x}\right)^2}{(n-1)\sum_{r=1}^{n} W_r}}$$

Where:

n is the total number of respondents

f is the sampling fraction, equal to $\frac{n}{N}$, where N is the number of adults in the Island

$\sum_{r=1}^{n}( )$ is the sum of the specified values for each respondent, from the 1st to the nth

x_r is the rth score; that is, the score for a particular respondent

W_r is the rth weight; that is, the weight for a particular respondent

$\bar{x}$ is the mean score for the population

The 95 percent confidence interval on the sample mean is then given by: $\bar{x} \pm 1.96 \times s.e.(Q)$

Reporting

Reported percentages are rounded to the nearest integer. All calculations are independently rounded and so totals in tables may not necessarily sum to the corresponding row or column totals, and charts may not sum to the corresponding text.

Data collected in JOLS is used only for statistical purposes. Individual responses are aggregated and only this grouped data is used to produce statistics. Statistical techniques are used to ensure that individuals cannot be identified by any published statistics based on JOLS.

'-' signifies a blank cell
'~' is used where a value is positive, but represents fewer than 3 people

Definitions

This survey is completed by persons aged 16 years or over, so where any of the terms 'Islander', 'adult', 'public', 'residents', 'respondent', 'population' or 'people' are used it refers to this age group, unless otherwise specified.

The 'working age' population is defined as adults aged 16 to 64 years.

For results published by tenure:

- **social rent** includes Andium Homes, previously States housing, housing trust and parish rent
- **private rent** includes sheltered/disabled accommodation
- **non-qualified accommodation** includes non-qualified 'rented' accommodation, registered lodging houses, private lodging arrangements and staff or service accommodation

To ensure that results are robust, parishes other than St Helier have been grouped together by location as follows:

- **suburban** includes St Brelade, St Clement and St Saviour
- **rural** includes Grouville, St John, St Lawrence, St Martin, St Mary, St Ouen, St Peter and Trinity

For questions referencing 'town', this refers to the built-up area extending from First Tower to Greve D'Azette extending back to B&Q, and Hautlieu School and Highlands College.

Education qualification (highest achieved, excluding professional qualifications) is defined as:

- **no formal qualifications**
- **secondary qualifications** includes GNVQ Foundation level; GCSEs and equivalent; AS Level and A2 Level and equivalent
- **higher qualifications** includes First degree and Higher degree (including Masters / PhD)
- all other qualifications are classified as **other**

Question-specific methodologies

Below are notes and methodologies specific to individual questions.

BMI

BMI is calculated by dividing weight (in kilograms) by height (in metres squared): $\frac{w}{h^2}$

BMI is categorised as follows:

- Less than 18.5: Underweight
- 18.5 to 24.9: Healthy weight
- 25.0 to 29.9: Overweight
- 30.0 to 39.9: Obese
- 40.0 or more: Severely obese

Exercise guidelines

The NHS and Public Health England indicate that adults aged 19 and over should aim for at least:

- 150 minutes of moderate aerobic activity (such as cycling or walking) in bouts of 10 minutes or more, each week
  Or
- 75 minutes of vigorous aerobic physical activity (such as running or a game of singles tennis) in bouts of 10 minutes or more each week
  Or
- a mixture of moderate and vigorous aerobic activity which equates to 150 minutes of moderate intensity activity in bouts of 10 minutes or more each week (a general rule of thumb is that 1 minute of vigorous activity provides the same health benefits as 2 minutes of moderate intensity activity)

Fast Alcohol Screening Test (FAST)

The FAST Alcohol Screening Test comprises four questions:

- How often have you had six or more units if female, or eight or more if male, on a single occasion in the last year?
- How often in the last year have you failed to do what was normally expected of you because of your drinking?
- How often in the last year have you been unable to remember what happened the night before because you had been drinking?
- Has a relative, friend, doctor or other health-worker been concerned about your drinking or suggested that you cut down?

For each respondent a score between 0 and 4 was given for each response, the sum of which provides the FAST score:

Questions	Scoring system					Your score
	0	1	2	3	4	
How often have you had 6 or more units if female, or 8 or more if male, on a single occasion in the last year?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
Only answer the following questions if the answer above is Less than monthly or Monthly. Stop here if the answer is Never, Weekly or Daily.						
How often during the last year have you failed to do what was normally expected from you because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
How often during the last year have you been unable to remember what happened the night before because you had been drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily	
Has a relative or friend, doctor or other health worker been concerned about your drinking or suggested that you cut down?	No		Yes, but not in the last year		Yes, during the last year	

An overall score of 3 or more on the first or all 4 questions is FAST positive.

Problem Gambling Severity Index (PGSI)

The PGSI Gambling Severity Index comprises three questions:

- In the last 12 months, how often have you bet more than you could really afford to lose?
- In the last 12 months, how often have people criticised your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?
- In the last 12 months, how often have you felt guilty about the way you gamble or what happens when you gamble?

For each respondent a score between 0 and 3 was given for each response, the sum of which provides the PGSI score:

Questions	Scoring system				Your score
	0	1	2	3	
In the last 12 months, how often have you bet more than you could really afford to lose?	Never	Sometimes	Most of the time	Almost always	
In the last 12 months, how often have people criticised your betting or told you that you had a gambling problem, regardless of whether or not you thought it was true?	Never	Sometimes	Most of the time	Almost always	
In the last 12 months, how often have you felt guilty about the way you gamble or what happens when you gamble?	Never	Sometimes	Most of the time	Almost always	

- PGSI score 0: No risk gambling
- PGSI score 1: Low risk gambling
- PGSI score 2 to 3: Moderate risk gambling
- PGSI score 4 or more: Problem gambling

Time Poverty

The Time Poverty classification is based on responses to the following question:

Do you think that you spend too much, too little or just about the right amount of time in the following areas?

- Contact with family members living in this household or elsewhere
- Other social contact (not family)
- Hobbies / interests

Respondents who selected 'too little time' for all three areas were classified as 'very time poor'.

Respondents who selected 'too little time' for one or two areas were classified as 'somewhat time poor'.

Respondents who did not select 'too little time' for any of the areas were classified as 'time sufficient'.

Wellbeing and satisfaction

The following questions are reclassified using the ONS methodology:

- Overall, how satisfied are you with your life nowadays?
- Overall, to what extent do you feel the things you do in your life are worthwhile?
- Overall, how happy did you feel yesterday?
- Overall, how satisfied are you with what you do in your leisure time?
- Overall, how satisfied are you with your current job?

Score of 0 to 4 are classified as 'Low'; 5 to 6 as 'Medium', 7 to 8 as 'High' and 9 to 10 as 'Very high'.

The question 'Overall, how anxious did you feel yesterday?' uses a different scoring also based on ONS methodology. Scores of 0 to 1 are classified as 'Very Low', 2 to 3 as 'Low', 4 to 5 as 'Medium' and 6 to 10 as 'High'.

Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS)

The Short Warwick-Edinburgh Mental Wellbeing Scale comprises seven questions:

- I've been feeling optimistic about the future
- I've been feeling useful
- I've been feeling relaxed
- I've been dealing with problems well
- I've been thinking clearly
- I've been feeling close to other people
- I've been able to make up my own mind about things

For each respondent a score between 1 and 5 was given for each response, the sum of which provides the SWEMWBS score:

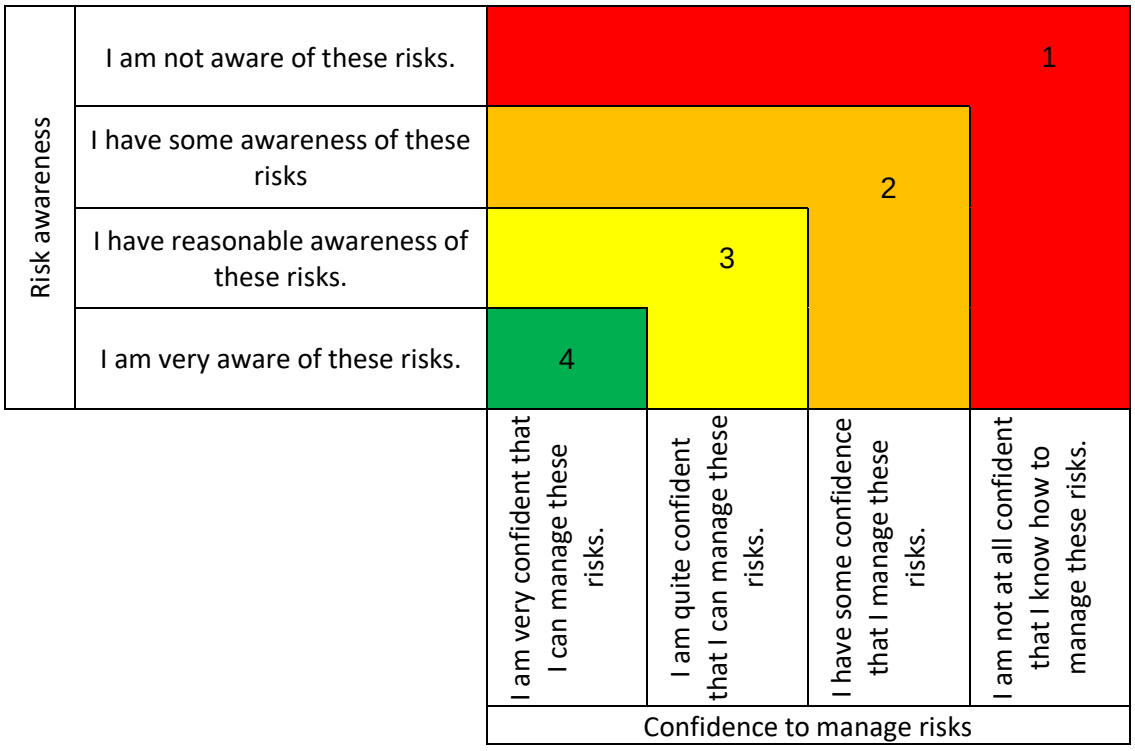
1	2	3	4	5
None of the time	Rarely	Some of the time	Often	All of the time

Data security combined vulnerability score

The data security vulnerability score is based on responses to the following questions:

- Please select the option below that best describes your awareness of the risks to your personal information
- Please select the option below that best describes how confident you feel in managing these risks

In consultation with the Jersey Office of the Information Commissioner (JOIC), Statistics Jersey have constructed a matrix to combine the two questions into a single vulnerability score:



This results in the following classifications:

- A score of 1: Very high vulnerability
- A score of 2: High vulnerability
- A score of 3: Moderate vulnerability
- A score of 4: Low vulnerability

Equivalised income

Household incomes may be equivalised based on household makeup. This will be noted within the report as 'equivalised income'.

The midpoint of each income band is divided by the equivalisation factor, calculated as follows:

- The first adult in the household is worth 2/3
- Every additional adult is worth 1/3
- Every child is worth 0.2

The total of all household members forms the equivalisation factor. For upper and lower income bands, the midpoint is taken based on the latest Income Distribution Survey.