



National Survey for Wales: cognitive testing of the 2020-21 questions

Executive summary

1. Introduction and methodology

- 1.1 The [National Survey for Wales](#) questionnaire is revised for the start of each fieldwork year (April-March). As part of the development work for the 2020-21 questionnaire, a significant number of changes were proposed. This question review and testing project aimed to explore these changes to ensure that respondents understand question concepts or tasks in the way the researchers intend, that they understand them in a consistent manner, and are willing and able to provide answers. This will help to ensure that the survey results are reliable, valid and unbiased.
- 1.2 This summary gives an overview of the main findings, taking each questionnaire section in turn.
- 1.3 All questions first underwent a rigorous desk review, carried out using Kantar's Questionnaire Appraisal Framework (QAF). Findings from the desk review led to modification of the draft questions and informed the next stage: cognitive testing of the majority of the questions.
- 1.4 Respondents were invited to take part in a 45 minute face-to-face cognitive interview and were given a £30 gift voucher to thank them for their participants. Interviews were conducted in central locations in Cardiff and Denbigh. A total of 19 interviews were carried out across the two testing rounds.
- 1.5 Some questions were not thought to be particularly problematic at the desk review stage and were not included in the cognitive testing phase. Other questions are currently asked on other UK and European surveys and WG were keen to maintain the existing wording to ensure consistency. Questions that were a priority to include were agreed with WG. The table below shows the questionnaire sections that were included in this review and the rounds of cognitive testing they were part of.

Table 1: Questionnaire sections and review stages

Questionnaire section	Number of questions	Desk review (QAF)	Round 1 cognitive testing	Round 2 cognitive testing
Dental appointments	16	✓	✓	✓
Gambling	11	✓	✓	✓
Climate emergency / Behaviour changes	21	✓	✓	✓
Global citizenship	4	✓	✓	✓
Children’s online safety	6	✓	✓	✓
Armed forces	2	✓	✓	✓
Fly-tipping, litter, dog fouling, graffiti	4	✓	✓	✗
Why participated in survey	2	✓	✗	✓
Universal Credit	2	✓	✗	✗
Location of most recent visit to the outdoors	5	✓	✗	✗
Disability	1	✓	✗	✗
Social care services	1	✓	✗	✗
Exposure to tobacco smoke	1	✓	✗	✗

2. Key findings

Dental appointment questions

2.1 The dental appointment questions provided by WG were divided into three main areas shown in the figure below:

Figure 1: Dental appointment questions: structure



- 2.2 There were some key challenges involved in designing these questions, and they underwent extensive re-design at the desk review stage. The revised questions were well received during cognitive testing, requiring only minor subsequent modification. The key challenges are shown below along with our recommendations for how to address them.

Table 2: Dental appointment questions: challenges and solutions

Identified issue	Recommendations
Dentists vs dental practices: Asking about 'dentists' felt overly simplistic as dental practices offer a range of NHS treatments, not all of which are offered by a dentist (e.g. hygienist or orthodontist).	Ask more generally about dental practices to capture more accurate information and reduce confusion about what should be included. This worked well during cognitive testing.
NHS and private dentists: The distinction between NHS and private dental treatment is not clear-cut. Some people get free NHS dental treatment and others pay a contribution. Some dental practices offer both types of treatment.	As these differences were important, we asked first about any dental treatment and then determined whether this was NHS or private. Again, this worked well when tested.
'Registered': It is possible to be registered with more than one dentist and 'registration' is likely to be an ambiguous concept as patients are no longer required to be 'registered' with a dentist.	The emphasis was placed on a 'regular' dental practice rather than being 'registered' with one. This was well understood during cognitive testing.
Personal treatment only: The questions needed to be clearer in referring to personal treatment only.	The revised questions specified upfront that they were asking about treatment on behalf of yourself, and not other family members. No issues were detected during cognitive testing.

Gambling questions

- 2.3 The gambling questions will be part of a Computer-Assisted Self-Interviewing (CASI) section of the survey. It is recommended this approach is retained as gambling may be considered a sensitive topic by some respondents and as such there is a risk of social desirability bias. These questions were cognitively tested using a self-completion paper questionnaire, whereas in the real survey they would be asked via a laptop (CASI).
- 2.4 The gambling section contains an introductory sentence and eleven questions. Respondents are first asked to select which gambling-related activities they have spent money on in the last 12 months, and second they are asked how often they spend money on the activities selected. The remaining questions ask about a variety of gambling behaviours, such as borrowing money to gamble and whether people bet more money than they can afford to lose.
- 2.5 These questions underwent a thorough desk review. However, WG wanted to avoid making changes for 2020-21 unless significant problems were uncovered during testing in order to maintain comparability with other UK surveys which include this set of questions (for example the Health Survey for England). While recommendations for amendments were made at the desk review stage, the section was cognitively tested using the original wording.
- 2.6 Overall, the questions worked well in testing and it was recommended that the original wording is retained with only two amendments. The first question was split into two as it comprises a long list of gambling activities which may be burdensome for respondents in one. The second question, which asked how often respondents spent money on these activities, was amended to include a list of gambling behaviours selected to act as a reminder for the respondent. Both these changes worked well in testing.

Climate emergency/Behaviour changes questions

- 2.7 The questions in this section are divided into two main areas: 1) a set of six questions covering respondents' opinions about climate change; and 2) one question about specific environmental behaviours and six follow-up questions asking about the reasons behind the behaviours.
- 2.8 The **climate change questions** underwent little amendment at the desk review phase and few issues were uncovered during cognitive testing. Minor amendments to wording to improve clarity and remove the potential for bias were the only recommended changes.
- 2.9 The **environmental behaviour questions** presented a range of issues, as shown in the table below:

Table 3: Environmental behaviour questions: challenges and solutions

Identified issue	Recommendations
Location of questions: As the environmental behaviour questions were asked after the climate emergency module, this might lead to social desirability bias where respondents might over report 'environmentally friendly' behaviours and restrict thinking to climate change.	Relocate questions to sit earlier in the questionnaire. This was found to work well in cognitive testing.
Single-code questions: During a previous cognitive testing project, it was found that the primary driver for behaviours such as cutting down or avoiding car travel is often a lifestyle reason. However, when given the opportunity to select multiple options, respondents tended to select environmental reasons as a secondary driver due to a social desirability effect. Upon probing, during that previous research, it was regularly found that the environmental reasons were not 'real' reasons.	Ask for a single main reason for the behaviour to yield more meaningful results.
The use of showcards/showscreens: To minimise social desirability bias, the questions on specific environmental behaviours were originally asked unprompted (i.e. the interviewer coded verbatim responses to a predetermined list of options). This was felt to require a significant amount of interviewer interpretation around what should count as 'limiting the effects of climate change'.	Cognitive testing showed that these questions worked better when respondents were given a list of options to choose from. We recommend these be displayed on a show screen and randomised to avoid a primacy effect (where respondents show a tendency to select the first option on the list).

Global citizenship questions

- 2.10 This section contains four questions which ask about ways in which respondents have supported international global issues in the last 12 months. These issues, presented on a showcard, are: poverty, human rights, war/conflict, refugees and environment/climate change. Ways respondents may have supported these issues are: donating or raising money, volunteering, campaigning, and avoiding or buying particular services or products.
- 2.11 These questions proved challenging to develop and underwent extensive revision throughout the review and testing process. The main issues were:
- Respondents' interpretations of key terms varied widely; 'Global issues', 'human rights', 'war/conflict', and 'refugees in and outside Wales/UK' were particularly problematic.

- Respondents ignoring the showcard or not necessarily remembering all the items at subsequent questions.
- During testing, respondents included non-international issues (e.g. thinking of giving money to a homeless person) or were uncertain about whether something was international (e.g. donating to Cancer Research UK). The opposite problem was also present in that during probing it appeared that relevant activities had taken place but hadn't been included (e.g. donating to charity shops).
- Supporting these types of causes is a socially desirable behaviour and so respondents may want to include behaviours that don't strictly fit here or fall outside of the reference period.

2.12 Two main recommendations were made in addressing these issues:

- Including a **fuller list of examples** at each question to help respondents' understanding of the kinds of things that should be included at each question.
- Adding a **separate introduction** to encourage respondents to read through the issues first on the showcard before addressing the four individual questions. Introducing the issues in an initial preamble should help respondents focus more on the scope of the questions and help minimise cognitive overload.

Children's online safety questions

2.13 A set of questions for respondents about their child's online safety was included in the desk review and cognitive testing. One child aged 5-15 is selected at random within the household and then questions are asked about internet use at home and at school, activities undertaken online and internet safety.

2.14 Most of the amendments suggested were relatively minor changes to question wording. The table below shows the three main issues that emerged and how they were addressed.

Table 4: Children's online safety questions: challenges and solutions

Identified issue	Recommendations
Where the internet is used: the scope of where the child had used the internet was not clear (e.g. whether to include internet use at home, at school and so on).	A sentence was added to clarify that parents should think about anywhere their child has used the internet ('at home, at school or anywhere else').
Parents may be unaware of their child's activities at school: the desk review and cognitive testing highlighted that parents may not know what activities their child does online at school or whether their teachers talk to them about internet safety.	The wording 'as far as you are aware' was added to the question wording.
Lack of awareness of 'Hwb': Most respondents had not heard of 'Hwb'	The question was split into two parts, the second asking about Hwb more explicitly.

Armed forces questions

2.15 Two questions on armed forces were included in the desk review and cognitive testing. The questions ask whether any immediate family members are or have been in the armed forces; and whether the respondent themselves has **previously** served. Recommendations were made to clarify the following:

- **UK armed forces:** refer to the **UK** armed forces and specify the exact bodies that should be included/excluded under this description.

- **Immediate family:** refer specifically to 'your immediate family' to provide immediate context. It was also recommended the 'son or daughter' category refer to 'child' as a gender-neutral option. The question was also amended to clarify that siblings, ex-spouses, step-children aged 18 or younger, and deceased family members should be included.
- **Those currently serving:** the question originally included a detailed interviewer instruction about why the question only asked about having previously served (not currently). It was recommended that that detail be cut out and instead add 'We do not need to know if you are currently serving'.

Fly-tipping, litter, dog fouling, graffiti questions

2.16 This section includes four questions, one for each of the issues listed above, which aim to gauge respondents' opinions on the extent to which each is a problem in their local area. The questions use a five point agree/disagree scale with a midpoint. The following recommendations were made:

- **Focus on 'problems' rather than agree/disagree:** construct the questions around 'problems' as this is the specific wording used within this section of questions rather than using an agree/disagree scale (i.e. 'how much of a problem is each of these in your local area?'). The answer scale was also amended to refer to 'problems' (a major problem, a moderate problem, a minor problem, not a problem at all).
- **Local area:** add the definition of 'local area' already used elsewhere in the questionnaire ('When answering, please consider your local area to be the area within 15-20 minutes walking distance from your home').

Why participated in survey question

2.17 The review and testing work included one self-completion question which aims to capture the reasons why the respondent took part in the survey from a list of 15 reasons. Recommendations included: making minimal amendments to the question wording and response options, clarifying that this is a multi-code question and removing the sub-headings as some respondents thought they needed to select one reason from each section.

Universal Credit questions

2.18 Two questions about Universal Credit were included in the review and testing. Both are follow-up questions, asked if respondents report receiving any Universal Credit payments in the last 3 months. The two questions seek to find out how often respondents receive their Universal Credit payments; and if they receive them once a month or less often, whether they are aware of the option of receiving them more frequently, either weekly or fortnightly. The only recommendation made was to shorten the second question to make it less wordy.

Location of most recent visit to the outdoors questions

2.19 Four questions were included in the review which are part of a block of questions about outdoor recreational activities. The questions are asked of people who have undertaken these types of activities (e.g. walking, cycling, horse riding, fishing, visiting children's play areas and so on) at least once in the last four weeks. The four questions included in the review are fairly challenging as they aim to pinpoint the exact locations in which these activities took place. The scripting software used to administer the survey will contain lookups to identify the exact place names and ideally the information provided would be specific postcodes or OS codes.

2.20 These questions underwent a desk review but were not included in the cognitive testing for two main reasons. Firstly, there are fairly **lengthy contextual questions** which these are routed from and it would add significant time to the cognitive interviews. Secondly, the questions use a **look up**

function within the scripting software. As we were conducting our testing on paper, it was not felt that this was the best vehicle on which to test these questions.

- 2.21 The main recommendations were: to better **focus or clarify** what the questions are asking through interviewer instructions and improved question wording; **shorten/cut down text** where possible; ensure **consistency** across the questions; and to add **textfills** which feed forward the type of place the respondent visited as specified at the previous question.

Disability question

- 2.22 The review included a question asking whether the respondent considers themselves to have a disability. This question was not included in the cognitive testing phase due to lack of time/space but underwent evaluation at the desk review stage. The original wording was retained.

Social care services question

- 2.23 One question on social care services was included in the desk review and cognitive testing. It is part of a set of agree/disagree questions asked of respondents who have received help from care and support services. The question gauges the extent to which the respondent feels they have been treated with dignity and respect by the care and support services they (or the person they care for) have received over the last 12 months. While no changes were recommended, two issues were raised regarding respondents' comprehension and situation:

- The question combines the concepts of dignity and respect and it may be the case that people think of these differently and would give different answers for each.
- There may be instances where the respondent has accessed different support services or had contact with different individuals and may have had a range of different experiences. In those cases, it could be difficult for them to know what to base the answer on.

Exposure to tobacco smoke question

- 2.24 One question on exposure to tobacco smoke was included in this review. It is designed to find the **locations** in which respondents are **regularly** exposed to other people's tobacco smoke. The review raised a number of issues relating to how concepts within the question might be interpreted, ways it could be clarified and suggested adding a follow-up question to gauge how **regularly** respondents are exposed to tobacco smoke.

The full report is available on request – email surveys@gov.wales

Authors: Alice McGee, Katie Smith and Tim Hanson
Kantar Public

Views expressed in this report are those of the researchers and not necessarily those of the Welsh Government

For further information please contact:
Chris McGowan
Social Research and Information Division
Knowledge and Analytical Services
Welsh Government, Cathays Park
Cardiff, CF10 3NQ

Email: chris.mcgowan@gov.wales

The full report is available on request from surveys@gov.wales.

Mae'r ddogfen yma hefyd ar gael yn Gymraeg.
This document is also available in Welsh.

OGL © Crown Copyright Digital ISBN 978-1-83933-620-1