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Editorial

Richard Bartholomew

Editor

In this issue Alex Bogdan, Ipsos UK, presents an important analysis of an experiment designed to test whether there is a quicker (and less costly) way of classifying a respondent's social grade in online panel surveys (**No corners cut: coding social grade in self-complete online surveys**). The well-known social grade classification (that is, A, B, C1, C2, D and E) is an important tool in market, as well as some social research, especially for explaining variations in attitudes and behaviours. But the collection of the data necessary to allocate respondents (or their households) to one of these grades requires detailed and time-consuming questions on employment status, occupation, type of employer and sources of income. Subsequent coding is both time consuming and requires skilled coders who have had extensive training. The experiment described by Alex set out to discover whether relying on a more direct method of self-classification by respondents, using 12 broad job groupings, could offer an alternative approach with acceptable levels of accuracy.

Ensuring that sound research evidence feeds into and informs policy decision-making is one of the perennial and most challenging issues for both social researchers and policymakers. The Covid-19 Inquiry hearings have provided another telling example of the difficulties of making research evidence count in crucial policy decisions – ensuring that policymakers both understand, and are prepared to use, the messages from research. Even more recently, the Academy of Social Sciences has launched a new project on 'Whitehall's use of evidence to inform impactful policy'.[1] It aims to understand how social science evidence can be utilised better in policymaking across government to provide better outcomes for citizens.

In this context our second article (**How to increase evidence adoption into policy or practice**) by Lucy King of the Food Standards Agency (FSA), is particularly timely. Based on work commissioned by the FSA, the article sets out both the barriers to the effective use of evidence and those 'enablers' or factors which help to improve the chances of making research count. Lucy identifies eight guiding principles for effective evidence generation, translation and dissemination. For each of these she sets out a very helpful checklist of points and actions to consider. I commend these to you.

We welcome proposals for new articles or shorter research notes. If you are interested in offering a research note or a full article you can find more information on the **SRA website**.

My thanks to Shirley Henderson, Ross McLeod and Zoe Tenger for their work in preparing this issue for publication.

[1] https://acss.org.uk

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No corners cut: coding social grade in self-complete online surveys

Alex Bogdan, Ipsos UK

Abstract

Originally developed for the National Readership Survey, now PAMCo, social grade has been adopted by social researchers as a useful tool for classifying respondents' households and analysing survey results. Coding social grade accurately requires detailed information being collected from respondents and coding according to strict rules. This process can be costly and time consuming, and various approaches have been developed to address some of these challenges. We test one such approach – deriving social grade from a single question with a pre-defined list of responses in a self-administered online survey, against a more standard approach – asking detailed questions about the chief income earner's occupation and having professional coders code the data to social grade. We find that a single question approach is not sufficiently robust for establishing detailed social grade but may potentially be used for broader groups depending on researchers' accuracy requirements.

Funding acknowledgement

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Introduction

Social grade is a socio-economic classification which groups people 'based on their social and financial situation' (ONS, 2023a). Initially developed for the National Readership Survey (Collins, 2009) – now PAMCo, social grade has been found to be a useful classification tool for explaining attitudes and behaviours, from consumer behaviour, to media consumption (NRS, 2016), to social and political attitudes (Skinner et al., 2019).

Collecting and coding social grade can be a time consuming and expensive task. In interviewer-administered surveys, often administered face-to-face in respondents' homes, the process can be straightforward: interviewers ask a series of questions about the chief income earner's (CIE) occupation and code social grade during the interview, based on training received beforehand. If necessary, they are able to probe for more information and details required for specific coding. The proliferation of self-complete surveys brings new challenges to collecting accurate social grade. Respondents often do not provide sufficient information to allow precise coding when not prompted to do so. Research has also found that respondents are better at reporting job titles and descriptions of their work – which can usually be found in work contracts or job descriptions – than they are at providing occupational titles (Tijdens, 2021). For example, a social research practitioner will likely be able to tell us they are a 'senior research executive' and provide a detailed description of their day-to-day role in checking data tables or moderating focus groups, but might struggle to recognise themselves as an 'advertising and marketing professional' as would be required by ISCO-08, a standard international classification system. Furthermore, office coding can be expensive, at a time when research budgets are increasingly under pressure.

In this article, I present research conducted through the Ipsos UK KnowledgePanel, an online random probability panel. I compare two approaches to collecting and coding social grade: a detailed questionnaire administered to respondents, including open-ended questions and other detailed occupation classification questions, versus a single question asking respondents to self-classify into a pre-defined list of 12 occupational categories. Both approaches collect information about the CIE, allowing for the classification of households.

The remainder of the article provides an overview of social grading, introduces the data and methods used, sets out the findings and discusses the importance of accurate social grade coding.

Social grade is a standard, but complex system of classification

Social grade categorises households according to the occupation of the CIE into six groups (table 1).

Table 1: Social grade groups

Social grade	Description
A	High managerial, administrative or professional
B	Intermediate managerial, administrative or professional
C1	Supervisory, clerical and junior managerial, administrative or professional
C2	Skilled manual workers
D	Semi and unskilled manual workers
E	State pensioners, casual or lowest grade workers, unemployed with state benefits only

It is also common for researchers to further group these into ABC1 and C2DE, roughly equivalent to middle-class and working-class occupations, respectively.

It should be noted that social grade is different from other occupational classifications such as the National Statistics Socio-Economic Classification (NS-SEC) developed by ONS (Rose and Pevallin, 2003), which is based on 'typical "employment relations"' (ONS, 2023b). Social grade is commonly used in market research and often in social research due to its discriminatory power regarding attitudes and behaviours (Lambert and Moy, 2013), while NS-SEC is more commonly used in academic research, perhaps due to each tool's different origins in market research, and from the ONS respectively. In as much as both use information about a household reference person, and both are related to occupational characteristics, findings presented in this article might be relevant across multiple occupational classification coding schemes. But readers should apply findings to other schemes with caution.

Social grade classification is fairly complex, with coders receiving extensive training before they can take on the task. Extensive guidance is available from the Market Research Society (MRS) (2010). Coding must take into account many nuances that can be challenging to capture in a survey, especially a self-complete survey. For example, an accountant can be classified as C1 if they don't have any relevant qualifications, whereas they would be classified as B if they do have qualifications, and A if they not only have relevant qualifications but are also self-employed. Correct classification depends not only on qualifications obtained in order to perform that job, but also on managerial responsibilities. A self-employed hairdresser with no employees is classified as C2, but if they have at least one employee they are classified as C1.

It is easy to understand how misclassifications can occur if coders do not have access to detailed information on participants. Nonetheless, given recent trends towards more self-administered surveys, there is a heightened need to capture relevant information that allows us to correctly classify respondents into social grades. Whereas interviewers can probe for the relevant information during an interview, in online or postal surveys we are at the mercy of the information provided by respondents, making it ever more important that the questions we ask are clear and generate detailed and relevant information.

A second concern relates to the cost and time required to collect and code social grade. In order to collect sufficient information, a questionnaire of a substantial length is administered to respondents, increasing respondent burden and taking up valuable space in a questionnaire that could otherwise be dedicated to the main survey topic. Additionally, if respondents are being recompensed for their time completing the survey, researchers might also consider increasing the incentive value to account for a longer questionnaire. Software such as CASCOT can help automate the process of coding, but trained office coders are still required to process the data, check codes and manually code cases that are not satisfactorily coded automatically.

Testing two approaches to collecting and coding social grade

Two approaches to collecting and coding social grade were tested.

A **detailed questionnaire** was used to derive social grade. This included detailed questions about the CIE's employment status, pension, benefits, the size of the organisation where they work(ed), managerial responsibilities, as well as detailed descriptions of their main area of activity, job title and relevant qualifications (see table 2). The data collected were coded by trained office coders.

Table 2: Information collected through the full social grade module

Questionnaire flow of the full social grade module, coded by trained office coders
Q1. Who in your household would you say is the MAIN INCOME EARNER, that is the person with the largest income?
Q2. Which of these options best describes the current working status of the main income earner?
IF UNEMPLOYED
Q3. For how long has the main income earner been unemployed?
IF UNEMPLOYED FOR MORE THAN 6 MONTHS: Does the main income earner have any income apart from state benefits?
IF RETIRED
Q4. Does the main income earner have a private pension or a pension from any previous place of work?
IF RETIRED AND DOES NOT HAVE PRIVATE PENSION
Q5. Does the main income earner have state benefits and/or other form of private income (such as pension from a deceased spouse, savings or investments etc.)?
IF EVER WORKED
Q6. Is/was the main income earner: employee/self-employed or freelance without employees/ self-employed with employees?
Q7. Approximately how many people are/were employed at the main income earner's place of work in total?
Q8. Approximately how many people is/was the main income earner responsible for?
Q9. What is/was the main income earner's full job title?
Q10. Please provide a brief description of what the main income earner does/did in their main job.
Q11. What is/was the main activity of the main income earner's employer/business?
Q12. Does the main income earner have any qualifications which are relevant to the job being done?
Q13. At what age did the main income earner finish their full-time education?

We also designed a new, **single question with a pre-defined list of responses** which asked respondents to classify the CIE's current or most recent job. The available response options distinguished between skill levels, managerial responsibilities and size of the organisation for business owners, while keeping the list of available options manageable for self-completion. The question used examples sourced from MRS (2010). Responses were automatically coded into the six social grade groups: A, B, C1, C2, D and E as shown in table 3.

Table 3: Social grade coding through single question with a pre-defined list

Single question with a pre-defined list, auto-coded	
Q: Which of the following best describes the main income earner's job/most recent job?	
Answer	**Social grade code**
Unskilled or semi-skilled manual worker (no responsibility for other employees) For example: farm worker, cleaner, postal worker, van driver, care worker, waiter, taxi driver, shop assistant, apprentice/trainee in skilled trade	**D**
Skilled manual worker (no responsibility for other employees) For example: HGV driver, train/bus/ambulance driver, chef, hairdresser, mechanic, plumber, bricklayer, carpenter, painter, electrician, caterer, specialised machinery operator, fire-fighter, pub/bar worker	**C2**
Manual worker – manager – responsible for 1-24 employees	**C2**
Manual worker – manager – responsible for 25+ employees	**C1**
Non-management office role; middle manager in small organisation; qualified nurse; performing artist For example: secretary, personal assistant, clerical worker, office worker, call centre agent, salesperson, nurse or nursery nurse, actor, musician, sportsperson	**C1**
Middle manager or executive in large organisation; senior manager of small organisation; qualified professional (with no senior management responsibility) For example: department manager, teacher, engineer, accountant, doctor, manager of small building firm	**B**
Top/senior manager in large organisation; qualified senior professional For example: main board director, senior civil servant, headteacher, partner in professional practice, surgeon	**A**
Business owner – responsible for 1-4 employees	**C1**
Business owner – responsible for 5-24 employees	**B**
Business owner – responsible for 25+ employees	**A**
Casual worker or no regular income	**E**
Full-time student	**C1**
Don't know	**Insufficient information**
Prefer not to say	**Insufficient information**

Data were collected through the Ipsos UK KnowledgePanel, an online probability panel (Ipsos UK, 2021). Established in 2020, the panel is recruited offline, using a postal push-to-web methodology, with a pre-selected address sample drawn from the postcode address file (PAF). Up to two adults aged 16+ are invited to join the KnowledgePanel. Those who are digitally excluded are offered further support, including a tablet with restricted internet access free of charge. Panellists are regularly invited to complete online surveys.

We implemented a within-respondent design to compare two approaches to capturing social grade. Each respondent was asked the detailed social grade module, and then asked to self-classify using the single question. Data were collected on three surveys which ran: 29 April – 5 May, 5 – 11 August and 28 October – 3 November 2021. Data collected in the full social grade module were coded by trained office coders. A total of 10,707 interviews was collected. Data presented here are unweighted as the analysis focused on identifying and diagnosing errors in self-classified social grade.

Throughout the analysis, the implicit assumption is that office-coded data from the full social grade module are correct. While it is reasonable to believe this assumption is correct for the purposes of this analysis, both data sources are likely to contain some errors coming from data input (respondents not providing correct or sufficient data) or from coding (either office coders selecting the wrong code or respondents selecting a response option they did not intend to select). It should also be noted that, as respondents were primed to think about the CIE's occupation in detail before being asked the single-code question, it is likely that responses to the single-code question may be more accurate than if they had been asked that question on its own. A limitation of the analysis is that we have not accounted for order effects. During the design of the experiment, it was decided to prioritise the detailed social grade module as this was going to be used extensively in other analyses and reporting on the KnowledgePanel. This decision may mean that the accuracy figures presented below for the single-code question are likely to be upper bounds due to the trial design.

Results

Levels of successful classification

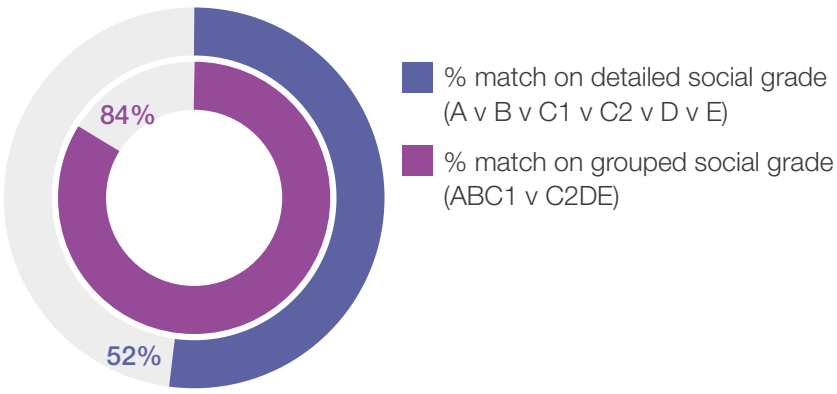
Both approaches achieve near universal levels of successful classification – 97% of respondents provided sufficient information for coding (in the detailed module approach) and 96% selected a substantive response (in the single question approach).

Agreement between the two coding approaches

When comparing detailed social grade (A v B v C1 v C2 v D v E), there is an exact match between the two social grade coding approaches in only half of cases (see figure 1). This is worrying for researchers interested either in profiling their samples on detailed social grade or in using social grade as an analysis tool to understand respondent attitudes and behaviours.

It is common across market and social research to group respondents into broader social grade categories, ABC1 and C2DE. When grouped, there is an 84% match between the two coding approaches (figure 1).

Figure 1: Levels of agreement between the two tested coding approaches



Understanding the cause of mismatches

The data allow for further exploration of mismatches in order to identify where errors are occurring. The heatmap in figure 2 shows the chances that a professional coder will assign the same or a different code to respondents' self-classification, with matches highlighted in blue on the diagonal line and mismatches in red on either side of the diagonal. For example, of all respondents who self-classified as social grade A, only 35% were coded A by office coders.

Figure 2: Crosstabulation of self-classified and office coded social grade coding

		Self-classified – single code question Column percentages						
		A	B	C1	C2	D	E	Insufficient information
Full social grade module – office coded	A	35%	4%	2%	0%	0%	2%	1%
	B	48%	57%	22%	6%	0%	16%	20%
	C1	14%	35%	64%	27%	17%	36%	34%
	C2	1%	2%	7%	53%	27%	16%	7%
	D	0%	0%	1%	7%	45%	13%	5%
	E	1%	1%	2%	4%	7%	12%	4%
	Insufficient information	1%	1%	1%	3%	2%	6%	28%

A few patterns emerge:

People tend to self-classify as a social grade close to their own

Typically, mismatches are not egregious: in most cases the two methods yielded either exactly the same grade or adjacent grades. This should give some confidence that, while the number of mismatches is high, the errors are, for the most part, not severe. The only exception is social grade E which is discussed in more detail below.

Errors are particularly high among those who self-classify as social grade E

Social grade E indicates the CIE is not working because they have been unemployed for over six months, are on state pension or are a casual worker. The high level of discrepancy indicates that the complexity of these cases cannot easily be captured in a single question. Other criteria, such as length of unemployment, should be taken into account for more accurate coding.

Across all other self-classification codes, a high share of respondents is coded by office coders as social grade C1 (supervisory, clerical and junior managerial, administrative or professional)

This respondent bias against self-coding as C1 should be studied more. Apart from introducing bias in our analyses, it is particularly problematic for researchers who use social grade in their weighting schemes or for setting quotas (where these are used).

Understanding the groups most impacted by mismatched coding

Further analysis reveals that mismatches occur more frequently in the following circumstances.

- The CIE is someone other than the respondent or their partner/spouse (56% mismatch vs 47% if the respondent or their partner/spouse is the CIE in detailed coding, 28% vs 15% respectively in grouped coding).
- The CIE is in part-time work eight to 29 hours a week (20% mismatch in grouped coding); part-time work under eight hours a week (26%); unemployed and seeking work (39%); or not in paid work and not seeking work (25%); vs 15% for those in full-time paid work.
- There are also higher levels of mismatches when the CIE is self-employed (55% mismatch in detailed coding, 23% in grouped coding, vs 46% and 14% respectively for employees).

Finally, using detailed demographic information about the respondents held on the KnowledgePanel, groups that are more likely to be misclassified using the single question approach are identified. These are:

- younger age groups: 16-24-year-olds (54% mismatch on detailed coding) and 35-44-year-olds (50% on detailed coding) vs 47% mismatch for those aged 45+
- from ethnic minority backgrounds (20% mismatch on grouped coding) vs 15% of white respondents
- people without a degree (20% on grouped coding) vs those with a degree (11%)
- renters (22% on grouped coding) vs homeowners (14% respectively)
- low-income households, earning under £26,000 a year (22% mismatch on grouped coding), vs only 7% of those earning £52,000 and over a year

Findings confirm previous research that found that rates of correct occupational coding in web-based surveys correlate with respondent characteristics such as ethnicity, education and cohabitation status (Peycheva et al., 2021).

The case for accurate social grade coding

The analysis in this article reveals a high level of mismatches between social grade that is coded by professional coders based on detailed information on the CIE's occupation versus social grade derived from respondents' self-classification based on a single question with a pre-defined answer list. This is especially true when looking at detailed social grade coding, but mismatches are still substantial when grouping social grades into broader categories. It is up to every researcher to decide what level of error they are willing to accept in their data, balancing the need for accuracy and robustness against costs.

The demographic analysis of mismatches is particularly concerning. Not only do we see high levels of error overall, but the analysis presented here shows that some groups are more likely to mis-classify than others, resulting in an inaccurate understanding of the size of each social grade and how they relate to social and consumer attitudes and behaviours.

Given the high levels of mismatches between the two approaches tested here, it is this author's view that collecting social grade using a single question is not sufficiently robust for most social research purposes. Similar efforts have been made to adapt NS-SEC to self-completion surveys (Birch and Beerten, 2002) which resulted in agreement levels between 61% and 75%. Given the growing complexities of today's occupations, with technological innovations leading to a boom of new jobs that might not have existed at all 10 to 15 years ago, is there any hope that we can ever develop a quick way for respondents to self-classify that will keep up with the changing nature of work and provide robust data for researchers? That question remains open for the time being.

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How to increase evidence adoption into policy or practice: eight guiding principles

Lucy King, Food Standards Agency

Abstract

Evidence-based decision-making is something that, in theory, makes sense. Yet, in practice, there are many barriers and challenges when making evidence-based decisions. As a result, a great deal of evidence is not reflected in policy or practice. The Food Standards Agency (FSA) commissioned work to explore how evidence could be better translated to food policymakers and practitioners to encourage greater adoption of evidence within the food system. We identified eight guiding principles for generating, translating and disseminating evidence for researchers and research commissioners to support them in ensuring the most useful evidence gets to the right people in the most effective way. Although the principles were developed for those working in the food sector, they can be applied to evidence-use more broadly.

Funding acknowledgement

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Introduction

Evidence-based decision-making is something that, in theory, makes sense. Decision-makers will make better decisions if they take into account the best available evidence, as opposed to basing decisions on intuition or feeling. Yet, in practice, there are many barriers and challenges when making evidence-based decisions. One of the barriers decision-makers currently face is the growing volume of evidence. In 2022 alone, 5.14 million academic articles were published worldwide, a 22.78% increase since 2018. In addition to the growing number of academic publications, there are multiple other forms of non-academic research or evidence that decision-makers might consider, such as reports or research funded by governments, non-governmental organisations or professional bodies.

In its 2022 Evidence Commission Report, the Global Commission on Evidence concluded that evidence is not being systematically used, with decision-makers often relying on ineffective and informal feedback, resulting in poor decisions. The report reflected on how the demand for evidence became unparalleled during the Covid-19 pandemic as decision-makers were having to address new and rapidly evolving challenges. The report recommended that government policymakers and other decision-makers who were involved in decision-making during this period should use this as a learning opportunity to review and improve how evidence is used within their respective countries. Within the UK, the National Audit Office also recognises barriers to evidence-based decision-making within government.

In its 2021 report it concluded that, despite the recent creation of the Analysis Function and a central Evaluation Task Force, the government still has some way to go to address the systemic barriers to effective evaluation and the application of evaluation evidence to policymaking.

Evidence-based decision-making is not a new concept to the FSA, the food regulator working across England, Wales and Northern Ireland to protect public health in relation to food. In fact, being science- and evidence-led is central to how the independent government department operates, and has been since it was established in 2000. However, despite a growing body of evidence on food and diets, this is not always reflected in food policy or practice. In recognition of this, in 2021 the FSA commissioned a team of academics at the University of York and University of Hertfordshire to explore how evidence could be better translated to food policymakers and practitioners, to encourage greater evidence adoption within the food system.

Developing a set of guiding principles

The main output from this study was a set of guiding principles for effective evidence generation and translation. The guiding principles are intended for researchers, or research commissioners, who are responsible for generating evidence (referred to as 'evidence generators'). They are designed to support the creation and translation of evidence, making it easier for policymakers and practitioners within government, the public sector and industry ('evidence users') to make evidence-based decisions.

Each principle is accompanied by a checklist which presents a series of issues or questions for evidence generators to consider throughout the different stages of evidence creation, translation and dissemination. The principles were informed by discussions with food policymakers and practitioners, as well as the existing literature on the barriers and enablers to evidence-use more broadly. Although the principles were developed for those working in the food sector (with a particular focus on the area of healthy and sustainable diets) the principles can be applied to evidence-use more broadly.

Barriers and enablers of effective evidence-use

In order to increase evidence adoption among policymakers and practitioners, we first need to understand what is preventing these groups from using existing evidence. For instance, is it a lack of access to credible evidence? A lack of skills or knowledge to understand and interpret evidence? Or simply a lack of time to search for and read the relevant evidence? It is equally important to consider what would make it easier for decision-makers to use evidence more effectively. For example, would the use of visuals, clearer recommendations, or more timely or relevant research improve the chance of evidence being understood and adopted? To help understand this, the project team reviewed the existing literature on evidence-use. From this initial literature review, a series of barriers and enablers of evidence-use were identified, presented in figure 1.

Figure 1: Barriers and enablers of evidence-use

Barriers

- **Volume of evidence** – overload of information
- **Comprehensibility** – how easy the evidence is to understand
- **Ineffective presentation of evidence** – poor interpretation and communication of the evidence by the evidence generator
- **Complexity and uncertainty** – evidence being unclear or conflicting which could lead to distrust or uncertainty over the credibility of the information
- **Lack of salience** – evidence not being timely or relevant to the user
- **Trust and transparency** – evidence users' perceived credibility of evidence
- **Lack of skills/knowledge** – of both the evidence generator (for example communication skills) and evidence user (for example academic reading)
- **Time** – a lack of time from the evidence generator to create and translate evidence, and/or a lack of time from the evidence user to review the evidence
- **Attentive capacity** – the amount of focus the evidence generator or user can dedicate to the task due to time pressure, competing demands and so on
- **Resources** – a lack of resources (budget, people and so on) from the evidence generator to conduct research, and/or a lack of resources from the evidence user to adopt evidence into policy or practice
- **Limited access to credible evidence** – not being able to access academic articles, or having access to only poor quality evidence due to cost/time constraints
- **Organisational complexity** – ineffective collaboration and communication among evidence users created by complex or hierarchical structures
- **Biases** – for example confirmation bias (users seeking out evidence that confirms their assumption), selection bias (selectively paying attention to certain evidence that reinforces their beliefs and disregarding evidence that challenges it) or publication bias (where certain fields or types of studies get prioritised over others)

EVIDENCE USE

Enablers

- Clarity of evidence
- Adapting evidence to the audience
- Use of visuals
- How evidence is framed
- Timing (when and how often evidence is communicated)
- Being practical
- Building and sustaining relationships with evidence users
- Salience and relevance of the evidence
- Capacity/skills of evidence generators and users

Eight guiding principles for effective evidence generation, translation and dissemination

Evidence generation

The first three principles relate to generating useful evidence.

PRINCIPLE 1: Take a joined-up approach to evidence

It is unlikely that all the evidence needed to address a complex policy problem will come from a single study, or even a single discipline. Decision-makers are, therefore, often encouraged to take a holistic approach to issues and to consider evidence from multiple sources and disciplines. This is particularly important in highly complex and multifaceted policy areas involving multiple systems and actors, such as the food system.

One way to help evidence users take a holistic approach to decision-making is to bring all the relevant evidence together for them. Sometimes this evidence synthesis can be done by evidence intermediaries or 'knowledge brokers'. These are organisations that bridge the gap between evidence generators and decision-makers, supporting both sides to make use of the best evidence. Examples include research institutes, think tanks, learned societies and charities. These intermediaries can support with translating evidence in a format that will be well-received and understood by users. They can also support by ensuring evidence is disseminated to the right people at the right time.

However, in the absence of these organisations, those generating evidence can support evidence users, for example by familiarising themselves with the existing evidence base from all relevant disciplines, presenting evidence within its broader context, or by signposting users to other complementary sources of evidence. If possible, economic implications and behaviour change aspects associated with any findings or recommendations should also be considered.

PRINCIPLE 1: Checklist

- ☐ Have you familiarised yourself with the existing evidence base?
- ☐ Is your evidence positioned within the wider context?
- ☐ Are you clear which evidence gap you are filling, and have you explained how it fills that gap?
- ☐ Have you demonstrated an awareness of how your evidence aligns with evidence aimed at other aspects of the food system?
- ☐ Are you able to link to any complementary evidence sources?
- ☐ Is it clear which outcomes your evidence is relevant to?
- ☐ Have you considered the economic implications of your evidence?
- ☐ Can you say anything specific about potential costs or savings?
- ☐ Have you considered the economic pressures on different evidence user groups?
- ☐ Are you familiar with the range of objectives or trade-offs the relevant users face when deciding whether to take action?
- ☐ Have you included 'how' considerations in your evidence?
- ☐ Have you considered the behaviour change aspects of your evidence?
- ☐ Have you considered undertaking evidence synthesis on a particular issue?

PRINCIPLE 2: Involve evidence users and citizens in generating evidence

It is good practice to involve evidence users in evidence generation to ensure it meets their needs, increasing the likelihood of it being adopted into policy or practice. Ideally decision-makers should be involved as early as possible and remain involved throughout, from designing the research questions, to interpreting the findings.

There are a number of ways that evidence users can be involved in evidence generation. Common approaches include:

- calls for evidence, typically issued by government asking stakeholders to contribute evidence on a specific topic
- commissioned research on a particular topic, by government or other funders
- workshops or other co-creative activities where stakeholders can contribute to discussions on problems and potential solutions to policy issues
- professional partnerships (such as committees or networks) between academic researchers and policymakers or practitioners

The idea behind co-creative approaches is that that they should lead to more useful and relevant evidence being gathered, more feasible recommendations being proposed, and increased ownership by those who need to take action to implement these. However, in reality, these mechanisms can have varying levels of effectiveness and there can be tensions between what researchers and policymakers want. The cost and skills required to do co-creation well also need to be factored in.

In addition to evidence users, involving citizens in evidence generation can also improve the quality and usefulness of the evidence generated. For example, having citizens involved helps to ensure evidence is representative of diverse (and potentially unequal) groups, and that findings reach a wider group of users. Citizens can be involved in a number of ways, from the more traditional focus groups, where researchers seek to understand the perspectives of citizens on a particular issue, to the more innovative citizen science methods, where individuals are more directly involved in the research.

PRINCIPLE 2: Checklist

- ☐ Could you involve evidence users in your generation and which users would be most relevant?
- ☐ Do you understand the associated costs and skills required to engage users and the possible negative impacts on those participating?
- ☐ Have you looked into the effectiveness of different methods for engaging users?

PRINCIPLE 3: Identify who needs to see your evidence and understand their needs

Identifying the relevant people who should be interested in the evidence being generated is an important step to ensuring evidence is adopted. It is likely that there will be a diverse group of actors (policymakers and practitioners) from different sectors (public or private) each with different roles and responsibilities. Evidence generators may also want to engage with evidence intermediaries (such as research institutions, professional bodies, think tanks, learned societies, charities) that may have better access to, or established and trusted relationships with, certain policymakers or practitioners.

Once potential evidence users have been identified, it is important to understand their individual needs, interests and priorities so that evidence can be tailored to them. To increase the chance of evidence being adopted into policy, it is also helpful for evidence generators to understand how the policymaking process works, who is responsible for what, and what action policymakers can actually take. Although researchers

may have an idealised understanding of the policymaking process or cycle, in practice, policymaking can be messy, complicated and non-linear and there are many factors other than the available evidence which can play a role in policy decisions. Ensuring research topics are timely and already of interest to decision-makers, for example by tying them to political priorities of the day, is one way of improving the likelihood it gets noticed.

PRINCIPLE 3: Checklist

- [ ] Are you familiar with the wide range of relevant actors and which ones your evidence relates to?
- [ ] Are you aware that related issues may be dealt with by different departments or organisations, or different individuals or groups within departments or organisations?
- [ ] Does the organisation you are targeting have a dedicated person responsible for evidence, and if not, which individuals need to see your evidence?
- [ ] Have you accounted for the fact that government departments, or internal divisions in an organisation or department, may not share evidence with one another?
- [ ] Have you considered the different roles which fall under the umbrella term 'policymaker'?
- [ ] Have you ensured your evidence is sector-specific and tailored to different actors?
- [ ] Have you considered the differing needs of policymakers vs practitioners?
- [ ] Does any policy action indicated by your evidence involve implementation by practitioners, including businesses, and are their needs acknowledged?
- [ ] Have you factored in the role other actors play in the capacity of particular users to act?
- [ ] Do you understand what action policymakers themselves can actually take on the issue your evidence addresses?
- [ ] Have you identified whether the levers for change reside with national or local policymakers?
- [ ] Have you reflected on the on-the-ground actors which may need to implement policy actions?
- [ ] Are you familiar with how policymaking works, and the many different influences, other than evidence, which influence policymaking?
- [ ] Have you stated the policy problem as opposed to the scientific problem that your evidence addresses?
- [ ] Can you link your evidence to current political priorities, and/or any political or social events?

Evidence translation

The next three principles relate to effective evidence translation.

PRINCIPLE 4: Familiarise yourself with different types of evidence, sources where users find evidence and the role of knowledge/evidence brokers

Evidence can take many forms. It includes academic publications, government reports or datasets, as well as reports by non-governmental organisations, professional bodies or other evidence intermediaries.

Different evidence users have preferences for the type of evidence they draw upon. For instance, policymakers tend to draw on a wide range of evidence sources, combining their own experience with information from the scientific and grey literature, public opinion and feedback from consultations. Commercial practitioners, on the other hand, are more likely to rely on their peers, networks and professional bodies as important evidence sources.

As a general rule, the more credible evidence or evidence generators are perceived to be, the more likely the evidence will be considered in decision-making. This is where evidence intermediaries can help as, often, they have existing and trusting relationships with evidence users. Another way to improve evidence credibility is to ensure the method used to produce it is robust and clearly explained to users.

PRINCIPLE 4: Checklist

- ☐ Are you aware of the pros and cons of different types of evidence?
- ☐ Have you factored in that users source different types of evidence and do you understand why they use these?
- ☐ Do you know which kinds of evidence are seen as credible by different users?
- ☐ Can you utilise knowledge brokers or other intermediaries to add credibility to your evidence?
- ☐ Have you demonstrated credibility through using and detailing methods which are robust and clearly explained?
- ☐ Are you working to establish trusted relationships with users and are the resources required for this available to you?
- ☐ Have you identified the evidence brokers that can be used to reach particular actors?
- ☐ Is it possible to disseminate your evidence via a trusted scientific body?

PRINCIPLE 5: Be clear, concise and direct

To increase the chance of evidence being understood and used to inform decisions, it should be communicated clearly and concisely. Jargon should be avoided, and the language used should match that of the audience. Shorter summaries or briefings can also assist with getting the key messages across to time-poor policymakers or practitioners.

Another criticism from evidence users is recommendations being unclear. Evidence users should, therefore, clearly identify what practical actions should take place as a result of the evidence. This is particularly important for practitioners. Providing clear and direct recommendations can be challenging, however, particularly when evidence addresses a relatively under-explored or complex topic. While recommendations of the type ‘more evidence is needed’ are typically seen as unhelpful, if this is the only recommendation, this should specify exactly what evidence is needed and why.

PRINCIPLE 5: Checklist

- [ ] Does the language you have used match the knowledge base of the audience?
- [ ] Has any jargon, or have any specialist terms, been translated into common terms and phrases?
- [ ] Is the length of your document as short as possible, without losing important detail?
- [ ] Would your materials benefit from input from a professional editor?
- [ ] Have you made your evidence conclusions or recommendations as direct as possible while acknowledging complexities or uncertainties?
- [ ] Have you been clear which practical actions should result from your evidence?
- [ ] Have you been specific about what further evidence is needed and why?
- [ ] Have you considered the role of upstream government standards and regulations in commercial practitioners adopting evidence?
- [ ] Can you help users to translate your evidence to benefit citizens on the ground?

PRINCIPLE 6: Think about how you want to 'frame' your evidence

When translating evidence, evidence generators need to consider how the evidence is framed, or how much emphasis is placed on certain aspects. This framing will influence how evidence is understood and interpreted by those receiving it.

There are many different ways in which evidence can be framed. At the simplest level, evidence can be framed in response to the questions 'why is this evidence relevant?' or 'so what?' This helps policymakers and practitioners understand why and how the evidence is relevant to them and their priorities.

Another way of framing evidence is to present it in the form of a story. Storytelling can help users to connect with a message, and motivate or persuade action. However, storytelling is an acquired skill, and sometimes an acquired taste, with some users perceiving stories to communicate evidence as suggesting evidence is less credible, or less rigorous.

Evidence can be framed neutrally or persuasively. The approach taken is likely to depend on the type of evidence being presented. For example, if evidence challenges an existing paradigm or process, it may need to be presented persuasively to prompt a different course of action. Whichever framing approach is chosen, evidence generators should be clear about what is evidence and what is their interpretation.

PRINCIPLE 6: Checklist

- [ ] Have you framed your evidence in terms of why it is important?
- [ ] Are you framing your evidence as an advocate or as an honest broker?
- [ ] Have you made it clear what is evidence and what is interpretation within your message?
- [ ] Would it be appropriate to incorporate a storytelling dimension into your evidence?

Evidence dissemination

The final principles relate to how and when evidence is disseminated to users.

PRINCIPLE 7: Be visual and explore different formats

The way in which evidence is presented and disseminated to potential users can influence how likely it is to be noticed and understood. The use of visuals, such as graphs, tables, infographics or diagrams, is a simple way of helping (often time-poor) evidence users digest information quickly and easily. Presenting evidence through a short video as opposed to a long, written report is another way of getting the key messages across.

The way evidence is communicated should be tailored to the audience, as different users will have different preferences or learning styles. Offering multiple formats (reports, email, video, webinars, workshops) will ensure that different learning styles are catered for and improve the chances of evidence being noticed by a wider range of users.

PRINCIPLE 7: Checklist

- ☐ Could you make your evidence more aesthetically pleasing and easy-to understand through the use of visuals?
- ☐ Could you present your evidence in an exciting way, such as through video, social media or a personal experience?
- ☐ If using icons, are you confident they are understandable and representative?
- ☐ Have you considered using a professional designer to help communicate your evidence?
- ☐ Are there different formats you could utilise (emails, webinars, workshops)?
- ☐ Could you employ multiple mechanisms and a balance of auditory and visual presentations to cater to different learning styles?
- ☐ Are you familiar with the varying evidence of effectiveness for different formats?
- ☐ Have you considered digital inequality, particularly if your end-users are individual citizens?

PRINCIPLE 8: Get your timing right

Finally, timing is crucial if evidence generators want their evidence to be adopted. Policy decision-making is often done at pace and can't always wait for the evidence. Therefore, sometimes evidence generation can require some compromises on quality so that the opportunity to provide evidence to inform a decision isn't missed completely. As Sir Chris Whitty said, 'An 80% right paper *before* a policy decision is made is worth ten 95% right papers *afterwards*, provided the methodological limitations imposed by doing it fast are made clear.'

As well as considering the timing of evidence delivery, other aspects of timing to consider include the time evidence users have to read and digest it. Policymakers and practitioners are often time-poor so presenting evidence in a succinct and easily accessible format will make it quicker and easier to review and consider in decision-making. Frequent and ongoing communication throughout a project rather than waiting until the project is complete to deliver the results is another way of keeping evidence users engaged in the evidence, and receptive to the findings.

PRINCIPLE 8: Checklist

- ☐ Does the timing of your evidence match the needs of users?
- ☐ Are there compromises in the development of your evidence which mean it might be available at a crucial time for a particular user?
- ☐ Have you made your evidence as accessible as possible for time-poor users?
- ☐ Could you communicate your evidence throughout a research project rather than wait until the end?
- ☐ Have you considered delivering evidence multiple times?

Despite a growing body of research and evidence, a large proportion of this evidence is not reflected in policy or practice. Researchers (and research commissioners) have an important role to play in helping decision-makers understand, interpret and use the evidence they generate. The eight guiding principles presented in this article are designed to support evidence generators in creating, translating and disseminating evidence in a way that encourages adoption into policy and practice. More detail about each of these principles is in the **full report on the FSA website: Promoting healthy and sustainable diets: How to effectively generate and translate evidence.**

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