SAGE Research Methods Cases

Structured Interview Tools: Insights and Issues from Assessing Wellbeing of Fishermen Adapting to Change Using Scoring and Ranking Questions

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Structured Interview Tools: Insights and Issues from Assessing Wellbeing of Fishermen Adapting to Change Using Scoring and Ranking Questions

This case discusses the use of researcher-administered structured interview tools, with ranking and scoring exercises, combined with more open-ended fluid interviews. Drawing on empirical work applying methods from wellbeing research to understanding the social impacts of change in a small-scale fishing community in the East of England, I discuss the insights that were gained from using these tools and some of the methodological issues I encountered. Finally, I reflect on my experience and some of the ethical questions that arose when using these tools. In doing so, I explain my decision to abandon the use of these tools and to privilege a less structured interview approach.

Learning Outcomes

By the end of this case students should

- Understand the insights that can be gained using researcher-administered ranking and scoring interview questions rather than only using unstructured interviews
- Understand the need to go beyond numbers in order to understand subjective aspects of people's lives and understand the issues of analysing participants' scores in isolation from their qualitative reflections
- Have some practical insights into the importance of designing questions well and piloting them and be mindful of possible response biases
- Be aware of the need to be adaptive and responsive during data collection; try to anticipate unexpected answers

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• Reflect on ethical issues in conducting research on wellbeing and asking questions of a personal nature

About the Research Project

The research focused on the small-scale crab and lobster fishery from coastal towns and beaches in North Norfolk, England. The fishery involves approximately 40 boats working seasonally along the coast and has a high cultural value and identity. Although there has been an overall decline in this fishery since the start of the century, many have engaged in several strategies to stay in business and deal with natural, social and economic threats over the past 20 years, and the number of boats has remained relatively stable. The fact that they have remained in business over the years may be taken as evidence of resilience in the face of change. However, the motivation for these different livelihood strategies and how these changes have impacted on the lives of fishermen is less clear, and this is what I wanted to address in my research.

The premise of this research is that choices people make about their lives are motivated by their values, goals and pursuit of wellbeing. The approach for examining this was based on 'social wellbeing', defined by Ian Gough and Allistair McGregor in *Wellbeing in Developing Countries: From Theory to Research* as 'a state of being with others, where human needs are met, where one can act meaningfully to pursue one's goals, and where one enjoys a satisfactory quality of life'. This approach has been put forward by Sarah Coulthard in her article 'What does the debate around social wellbeing have to offer sustainable fisheries?' as having the potential to highlight social impacts in fisheries undergoing change. It can also provide insights into fisher behaviour, when this is understood as the pursuit of wellbeing and a valued way of living.

The theoretical framework understands adapting to change as being dependent on

- material resources: what a person has;
- relational resources: interactions a person engages in via social relationships to pursue goals;
- subjective resources: feelings about what ones does and has.

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Relational and subjective resources are inherently more difficult to assess and quantify. This is what this case is concerned with: how to assess the more intangible elements of adapting to change; the relational and the subjective dimensions of wellbeing. Specifically, this research was concerned with understanding the role of relationships in mediating what fishers do and how they adapt to change in the community and, in what ways the pursuit of wellbeing goals has shaped how fishers adapted to or coped with change.

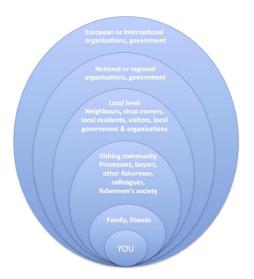
Research Practicalities

A methodology was developed to assess the types and nature of relationships fishers had and what was perceived as valuable in order for fishers to live well, using semistructured or unstructured interview followed by two structured interview tools from wellbeing research, which are explored in this case. The first is the Governance Relationships Assessment (GRA), concerned with relational wellbeing. The other, the Global Person Generated Index (GPGI), is aimed at assessing subjective wellbeing. In total, 27 recorded semi-structured or unstructured interviews were conducted with fishermen between March 2013 and February 2014. The GPGI and GRA were interview administered for the first 11 of these. The next two sections provide illustrated examples of the insights I gained through using the tools and the issues I encountered, which led to my decision to stop using them.

I adapted the GRA from similar research conducted in fishing communities in Northern Ireland by Easkey Britton and Sarah Coulthard in 'Assessing the social wellbeing of Northern Ireland's fishing society using a three-dimensional approach'. The aim was to find out which relationships affect fishermen's actions. The question 'What relationships influence your fishing decisions (day to day and longer-term)?' was read to the participants, giving them sufficient time to reflect and answer before showing them the relational landscape diagram (Figure 1). This encouraged the respondent to think about a wide range of relationships and to list up to five.

Figure 1. The relational landscape diagram.

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The term 'relationship' is used in a broad sense, in order to include relationships from fishermen's close circle (family and friends), to wider spheres of influence (the market, government personnel) or anyone else the interviewee thought of as having a significant influence over what he does. Once five different relationship types had been noted, I asked the participant to rank these in order of importance and to score these on a scale of 1 to 4 (with 4 being the most satisfied with). Finally, I asked the participant whether or not he would like to change any relationship in any way.

I used the Global Generated Person Index (GPGI) to measure individual subjective wellbeing by asking what is necessary in order to live well. Originally from the health sector, it was developed by Danny Ruta and colleagues in 'A New Approach to the Measurement of Quality of Life: The Patient-Generated Index', and was adapted by Allistair McGregor and colleagues. It has recently been applied to research in fishing communities by Easkey Britton and Sarah Coulthard.

The researcher takes the respondent through three steps (Figure 2):

Figure 2. Global Person Generated Index Questionnaire.

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Step 1: Identifying aspects of life that are important for living well here	Step 2: Scoring Satisfaction in Each Area	Step 3: Spending Points – what needs to be changed?
We would like you to think of the areas of your life that are most important for you to be able to live well in this community. These can be things that you: a) need to have b) need to be able to do c) need to be able to be Please tell us up to five areas in order of IMPORTANCE	In this part we would like you to score your level of satisfaction in the areas that you mentioned in step 1. This score should show how you felt about this area of your life over the past MONTH. Please score each area using this scale: 5 = Excellent - Exactly as you would like to be 4 = Good - Close to how you would like to be 3 = OK, but not how you would like 2 = Poor but not the worst you could imagine 1 = Bad - The worst you could imagine	If you were able to change these areas of life what would you seek to change? We want you to 'spend' 10 points to show which areas of your life you feel are most important to change in order to improve your overall quality of life. Spend more points on areas you feel are most important for you to change and less on areas that you feel are not so important. You don't have to spend any points on each area (i.e. you can choose to spend no points on one or more areas). You can't spend more than 10 points in total.
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- 1. Step 1: List the five most important aspects of your life that you need to have a good life, 'things that you need to have, need to able to do or able to be'.
- 2. Step 2: Rank these in order of importance, and then score satisfaction with each listed area from 1 to 4.
- 3. Step 3: 'Spend' up to 10 points on the area(s) you would most like to improve.

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The final step can help to reveal what is perceived as being the most important in improving wellbeing through the allocation of points, in a sense by 'putting money where your mouth is'.

Insights Gained

Using the two structured interview tools revealed some important themes, which may not have been come through as explicitly if less structured interviews had solely been used. The main strength of these tools relative to other measures is that the responses are 'person-generated' and provide a way of asking what matters most for the person, rather than proposing predetermined response categories. However, these tools also have weaknesses, which are discussed in the next section. Overall, the most useful part of using these tools was in encouraging respondents to reflect on their choices, which generated a discussion relevant to that particular person. The main insights I gained by using structured interview tools are summarised in this section as

- 1. a thinking tool: elucidating choices and linkages between them;
- 2. discrepancies through scores: highlighting further areas of investigation;
- 3. person-generated themes: getting to personal topics without directly asking.

A Thinking Tool: Elucidating Choices and Linkages between Them

The most valuable part of using the structured interview tools was the discussion that was generated as a result of having to rank, score or attribute points to the answers given. Taking the time to ask the respondent to explain his choices was crucial to being able to interpret them.

For example, the tools helped to highlight the trade-offs that fishing families make between different aspects of their lives. One fisherman, Jack, listed income, healthy fish stocks, weather, new fishermen injecting 'young blood' into the industry and health as

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most important for him to live well. He explained how fishing not only affects his own wellbeing and that of his family, but also the community as a whole.

I need someone to help me look after the stocks so I can carry on catching more crabs, or continue to catch crabs, not necessarily catch more, then everything else is all tied in and looked after. It looks after my family and my close family. It then looks after the wellbeing of my town and my area because we continue to do what we have been doing for 2, 3, 4 hundred years.

However, when asked to spend 10 points in the GPGI exercise, he said,

They are all important but I suppose on a personal level, the weather and new fishermen is neither here nor there so I'll have 4 for my health and 3 for income, and 3 for healthy stocks.

When asking about why he had put 0 for 'new fisherman', he responded,

It affects the community and the area we live in but I could live without it.

This shows how the notion of 'spending points' and prioritising choices can expose a more individualist conception of wellbeing.

Another example of how different aspects of well-being are traded off was expressed in the interview with Matt, who discussed why he chooses to sell his catch live for a lower price rather than spending extra time cooking and processing. Matt scored satisfaction with buyers the lowest out of all the respondents in the GRA and in his GPGI, said what he would most like to change is income. However, his strategy of selling his catch live for less money is motivated by the value he places on other parts of his life such as spending time with family, which he ranked the highest. His wife works part-time and they have managed to work together over the years to bring up their children and divide household tasks. He explains that this works because his wife has a part-time job. Without this extra income into the household, he says,

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We'd have to be cooking, and she'd have to dress crab to make up the money that way, which I know she wouldn't want to do.

Their household trades off maximising potential earning from fishing with other aspects of family life.

The tool was also useful in demonstrating linkages between different aspects of one's life. For example, when talking about important relationships, Karl explained how relationships in the fishing community affect home life and vice versa. He ranks relationships with other fishermen with the highest importance followed by family:

You need to get on with your fellow fishermen. If you don't get on then you've got a problem. You rely on each other for safety, launching, sourcing gear etc., [...] If you're not happy there then it will impact on your family life. It might seem silly to put it [fishermen] in front of your family but if you're at loggerheads with someone then that will affect your family.

He later makes the reverse link about how family life can affect fishing performance, showing how intertwined family and fishing can be:

When you are out there, safety is paramount and if you got silly things going on in your head, that's when problems can happen.

The scoring and ranking elements of the tools are useful in drawing out what is most important to people, or how aspects of wellbeing are linked. However, gaining these insights relies on encouraging participants to reflect on their answers at the end of the exercise.

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Discrepancies through Scores: Highlighting Further Areas of Investigation

Using the tools also helped to indicate further areas of investigation. For example, health came up the most frequently in the GPGI as the most important in order to live well and satisfaction with health was usually scored very highly. As Jim explained,

I think health is the most important thing because without it, you've got nothing, have you? Especially in my industry. I've got to be healthy enough to go to sea. At the end of the day, it's the most important thing.

The fact that satisfaction with health was scored so highly was relatively surprising given the age of these fishermen (40–75 years old) and a recent National Health Service project, which reported high blood pressure for many of these fishermen who had been advised to have regular check-ups. Interestingly, younger fishermen in their 20s tended not to place as much emphasis on health. Similarly, safety was scored highly in terms of satisfaction. This was despite several incidents having occurred in recent years with fishermen – many of whom now work on their own – being rescued after ending up overboard. Several fishermen reflected to an extent in other parts of the interview on the stress, worry and loneliness of being at sea on their own.

This apparent discrepancy between scores and other sources of data including the less structured interview exposes an interesting paradox, which may warrant further investigation. Perhaps everyday lived experience has more influence in shaping fishermen's perceptions of health and safety? Perhaps expressing positive perceptions of health and safety is a mechanism for coping with risk? When I asked about safety and working alone, one of the fishermen simply responded: 'It's just not something we think about'. Another explanation for these discrepancies could be a 'social desirability bias' (explored in the next section). Fishermen may be expressing what is perceived as the conventional attributes related to being a fisherman, including being courageous and physically fit. The scoring element of the tool draws these influences out for further exploration.

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Person-Generated Themes: Getting to Personal Topics without Directly Asking

Using structured interview tools such as the GRA and GPGI, written down on paper in front of me, allowed me to ask questions more directly and confidently as I read these out and followed the steps. Importantly, these questions were asked in a relatively open way: 'What is important for you to live well?' I could then encourage further discussion by asking participants to rank, score and then reflect on their responses. Some of the themes which came up as a result of the tools may have appeared out of context and too indiscreet to ask in an unstructured interview.

For instance, I found that these tools brought out the crucial role of relationships with other fishermen they worked with and in their home life. For instance, Karl listed 'trust' in his GPGI.

Trust. You need to trust people around you. It's essential to how fishermen work. You need to at least have the perception of honesty. That is important. Of course fishermen won't tell each other everything because they are in competition but, that's not being dishonest. It's about trust. That's the nucleus that runs through the centre of being a fisherman. You don't get on in this game if people can't trust you. You soon get a reputation.

Another respondent, Peter, who works alone, ranked having 'an understanding wife' as the most important for him to live well, scoring satisfaction highly saying,

I don't think most women would put up with what we do. If I'm not here [the shed] then I'm at sea.

One of the younger fishermen I spoke to, and who is single and works as crew on a boat, reflected on the importance of having a 'good relationship', with 'someone who respects what you do'. In the last question of the GPGI, where points can be allocated to an area of your life that you would like to change, he said he would put all 10 points

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towards this rather than other listed areas which included income, freedom, fishing gear and friends. He reflected on how he would try to make a relationship work if he had one, highlighting some of the challenges fishermen face in having a balanced life. It would have been difficult for me to ask questions directly about the research participant's personal life, and particularly about their satisfaction with this aspect of their life in an unstructured interview without investing time in building a closer rapport first. However, I was able to discuss more personal topics because the respondents brought them up themselves, when responding to the open question of 'What is important for you to live well?'.

Methodological Issues

A number of considerations arose when using structured interview tools to assess wellbeing, which can be summarised in five points:

- 1. careful question framing and avoiding response bias
- 2. response bias: 'acquiescence' and 'social desirability bias'
- 3. dealing with unexpected answers
- 4. quantification and small sample sizes
- 5. ethical issues

Careful Question Framing

In both the GRA and GPGI, how the initial question was framed had a significant bearing over the nature of the responses. The GRA question uses the word 'relationship' in a very broad sense from the local and intimate circle of family to more remote circles including national and even global scales of governance. Whether or not participants really understand the word relationship in this wider sense is questionable, particularly when referring to institutions or processes with which they have little or no interaction. It is possible that this question may have biased the answers and limited their range to the local sphere rather than with higher levels of governance, as also intended.

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Second, the question asks about how relationships influence decisions. This led to some participants saying that no one influences them, particularly as most fishermen have a tendency to be self-reliant and would resist admitting being 'influenced' by anyone else. In many cases, after fishermen emphasised the independent nature of their work, the vital role of a friend, partner, sibling or grandchild in their work would be mentioned in passing. For example, Matt explained, 'We're fishermen, we are independent, we work on our own'. As the conversation progressed, he mentioned another fisherman with whom he is good friends, saying 'We always help each other out'. On a few occasions, when fishermen forgot to mention family or their partner initially, they would later hastily express their importance, making statements such as 'Well, of course, family comes first, doesn't it?' which was then usually given the highest satisfaction rating and often ranked as the most important relationship type. There may be two conflicting influences at work in responding to this question, which relate to different held identities of masculinity. On one hand, there may be a desire to show that being a fisherman means being self-reliant, being influenced or dependent on no one, and on the other, the role of being a husband and a father who provides for his family and values their support. Due to this issue, I rephrased the question slightly to be about which relationships affect you, negatively or positively, as this helped generate a wider range of responses. This shows the importance of piloting a tool or questionnaire such as this one sufficiently before conducting research. However, the tendency for such response biases is common in conducting research which relies on self-reported responses; this is discussed further in the next section.

Response Bias: 'Acquiescence' and 'Social Desirability Bias'

Several fishermen expressed some discomfort with allocating scores. One said 'I'm not sure how to translate that into numbers'. This reluctance or uncertainty in how to respond may have resulted in scores being allocated arbitrarily, leading to response bias. First, several fishermen scored every response in their GPGI or GRA highly. This may be a demonstration of 'acquiescence', a tendency to respond identically to a batch of questions statements. Second, someone may not want to admit dissatisfaction

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with certain areas deemed to be personal and where responses may be influenced by social norms, for example, in discussing satisfaction with one's family or partner, or with income. As Jim explained,

I'm pretty happy with everything so, how can I answer that without putting 5 for everything, which would be pretty boring? That's why I've gone with some fours. I can only spread these equally.

This is known as 'social desirability bias'. Other examples of this bias could also be interpreted in the responses given regarding health and security or relationships.

In several cases, being able to discuss scores with the participants offered insights into their rationale for allocating points and highlighted that analysing the quantitative element of the tools in isolation of any subjective reflection on the score may be misleading. For example, Pete said,

Income has to be the biggest thing really. Because in theory if I have more money, then I can have time off and if it's rough I haven't got to worry about it. So I'd spend points on income and weather because if there is good weather I can earn more and if I earned more I could have some time off.

He decided to allocate 5 to the weather, 5 for income and 0 for time off as 'that would be reflected in there anyway'. Sensing that this response may not be consistent with the way in which other respondents would have allocated points, I prompted him by asking whether he would spend any points on time off since he had mentioned it was important. He then changed his allocation to 5 for weather, 4 for income and 1 for time off 'because 1 is better than nothing'. If his logic is that good weather would lead to more income, which leads to time off, then he might have allocated all 10 points to the weather. The fact that he initially (before my prompting) spent points on income and weather (which leads to income) may suggest that income is what really matters most and time off is not a priority. This example shows the difficulty in interpreting scores and in trying to understand the reason behind the score without interfering and influencing the respondent's answers.

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Dealing with and Interpreting Unexpected Answers

The interpretation of scoring satisfaction with aspects of wellbeing, which were highly temporal, such as the weather and seasonal income, or relationships which are perhaps less readily observable (e.g. spiritual, with the deceased, non-human) brought further challenges.

One fisherman explained,

The biggest thing that affects my life is the weather. [...] I need good weather. I need nice weather to go to sea but not only that but to sell the crabs. You sell a whole lot more when the sun is shining. So the weather has a massive bearing on my life.

The first issue with evaluating satisfaction with the weather is what period of time to use. If only the past month is used, then the results would be greatly influenced by the time of year. Similarly, as income was dependent on good weather to be able to go to sea, satisfaction with income was also temporally dependent. Second, weather is an area of wellbeing over which one has no control and cannot change. This led to the question of whether respondents could allocate points to change the weather. I decided to allow respondents to 'spend points' on the weather, and then interpreted this as a factor, which could limit or enable their wellbeing and actions.

A similar issue occurred during the administration of the GRA. One of the fishermen mentioned his father, who had taught him everything he knew and had passed away over 10 years ago, saying, 'He still influences my fishing decisions'. Scoring this notional relationship in terms of satisfaction was not possible and I would have had to adapt and rephrase the question in order for this to make any sense. It may have been possible to ask about the satisfaction with the help he gets out of this notional relationship but this may have been too abstract.

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Quantification and Small Sample Sizes

An important question following data collection was how to analyse the responses from the structured interviews in light of some of the response biases discussed above. It makes the interpretation of individual differences and any average tendencies uncertain. Although guidance of what each score meant was given (e.g. 3 = good but not quite how you would like it), there are many reasons (explained in the preceding sections) why the scores attributed may not be reflective of reality. In these cases, is there any added value in analysing the quantitative element generated from structured tools? With a small sample, such as the 11 individuals in this study, creating averages for scores and areas selected seems rather meaningless, especially when large variation exists in scores for similar areas. In this case, can they be used to compare between individuals or groups? My conclusion was that the scores should be used to understand each individual interview but not used to compare across individuals.

Ethical Issues

One of the most important limitations of the GRA and GPGI tools, which resulted in my abandoning their use in favour of less structured interviews, was the discomfort some of the questions caused certain participants.

For most participants, the concept behind GPGI and GRA seemed rather abstract and the level of prompting needed by the researcher risked producing bias. One of the participants said, 'That's a very difficult question. That's a funny bloody question, that is' and 'I can't really fathom this. Can you explain it again?' And another also expressed similar frustration with the questions. 'I can't quite grasp it. Give me some sort of example', and 'I'm not quite with you, how they support you or how they are involved?' I tried to explain the purpose of the question by explaining that what is important for a young person to live well may be very different to someone who is retired. On some occasions, I gave an example by explaining some of the answers I might give which were related to me being a student.

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Several became fatigued and irritated by the questions in the GRA and GPGI. Jim joked, 'I'd like Norwich City to stay in the premier league, which would be very helpful' and another exclaimed 'What do you want to know now? The meaning of life?' Yet another, after a painful silence, exclaimed 'Well, think of something and put it down!' In most cases, after the questionnaire was finished, participants were happy to continue talking which indicated that it was the structured element and the deeply personal and abstract nature of the questions of the interview they were uncomfortable with.

The part of the tool requiring satisfaction to be rated was the most awkward, particularly when asking about a participant's family members or their partner. In most cases, I would find myself going quickly over these, or reframing the question by explaining that one could be satisfied or dissatisfied with a relationship for many different reasons (e.g. if someone did not spend enough time with a loved one). On other occasions, I skipped the question altogether if the person in question was within earshot or if it felt inappropriate to ask.

Conclusion

In some ways, structured interview questions can be a shield behind which a researcher can ask questions that may be difficult to drop into a more open-ended interview. They allow the researcher to get straight to the core of what they are interested in finding out rather than skirting about the topic in the hope of drawing out the information they seek. Similarly, I found that for some participants the structured element of the interview gave them the opportunity to express themselves on topics which they may have felt too personal to bring up with an outsider. While I was able to gain a number of insights from some participants using structured interview questions, the discomfort this caused other participants risked jeopardising my interaction with them and future participants. In addition, the issues I experienced when it came to interpreting the quantitative element of the questions made me reconsider the added value of using scoring and ranking in my research at all.

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Exercises and Discussion Questions

- 1. Discuss the strengths and weaknesses of using structured methods in interviews which involve scoring and ranking.
- 2. Put yourself in the shoes of the person you will interview. Think about how you would answer the questions in the GRA and GPGI. How would you respond? How would you feel about scoring and ranking your responses?
- 3. Now that you have tested the tools on yourself, test the tools on a friend or someone you know well and then repeat this with someo ne else you know less well. How well do these tools work in practice and how does the experience differ depending on who you ask?
- 4. Using the data you have collected, think about how you would analyse the scores. First, look at each participant's responses and think about how you would interpret these. How much do you use other personal knowledge you have in order to do this? In particular, analyse and compare the difference between the experience of collecting GRA and GPGI data with someone you know and someone you don't.

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