Review of FSA Social Science - Chapter 4 The Technical Skills Framework

The GSR Technical Skills Framework

The GSR Technical Framework (GSR, 2022) outlines the technical expertise expected of members of the GSR profession, and how they apply for each grade of researcher. The framework "comprises technical skills and the use and promotion of social research" around the following dimensions:

- knowledge of research methods, techniques, and their application.
- identifying research needs, designing and specifying research.
- analysis and interpretation.
- managing and commissioning social research.
- leading, communicating and championing social research.
- understanding government context.
- learning and development.

A full list of the skills and abilities expected for the grades currently employed by the FSA social research team – Research Officer, Senior Research Officer, Principal Research Officer – is presented at Annex 4A. The social science team (N=15) completed an online survey of the technical skills specified for each grade.

It should be noted that the technical skills contained in the GSR Technical Framework are fairly general and do not question researchers' knowledge of, or ability to undertake, specific methodological techniques. They are also self-reported responses for which no independent verification of knowledge or ability was possible.

Findings

Research Officers (ROs)

The three ROs in the social science team reported 'good ability' or 'very good ability' in most of the technical skills required for their grade. The full list of the technical skills in which the ROs expressed having 'some ability' or 'no ability' is presented at Annex 4B. These were mainly methodological skills, though some were organisational (e.g., "uses the GSR network to increase awareness of cross cutting research possibilities").

Two of the three ROs reported having 'no ability' in:

- working knowledge of relevant data analysis packages, particularly SPSS and Excel, and qualitative packages. Packages to be determined by the particular role and job content.
- introductory level knowledge of data science techniques.
- having knowledge of quality assurance methodologies required for analytical work, and understanding the context and relevance of quality assurance products, such as the Aqua Book.

• persuading others to support the research process, for example, industry bodies to release necessary information or policy customers of the value of social research.

Given that RO is the entry level into the Government Social Research Service it is perhaps not surprising that ability in all the required technical skills is not yet fully developed. This suggests some areas in which professional development would be appropriate.

Senior Research Officers

There were no technical skills in which the six SROs thought they had 'no ability' (Annex 4B).

Two of the six SROs reported only 'some ability' in:

- Using a range of analytical techniques to carry out in-house analysis and briefing work.
- Having up-to-date knowledge of methodological developments including the role of innovative methodologies; applying these methods when and where appropriate; making use of appropriate new developments from other analytical professions and outside the Civil Service where relevant.
- Demonstrating sufficient technical 'authority' by taking the lead in recommending solutions to fill strategic gap.

These three skills represent the more methodological aspects of social research, though the question of having technical 'authority' may also be a matter of experience.

Just one of the six SROs reported having only 'some ability' in the skills associated with commissioning, influencing, representing GSR and managing research independently.

Three of the SROs offered comments on the range of technical skills that are expected for their grade by the framework. Two of these comments referred to the limited amount of research undertaken by the team in-house:

"Most of our work is contracted out so some of the technical skills we have less experience of as we don't do as much in-house research".

"My understanding of the competency framework is that you don't have to hit every element to perform well at your grade. For example, most work at the FSA is commissioned, so those who have spent their social research career solely at the FSA will have less experience in in-house research. However, this doesn't mean that they aren't able to do it, they've just not had the opportunity to do so".

"As a department, I feel that opportunities to do in-house research should be made available to avoid researchers who do have the experience becoming de-skilled in this area".

These comments suggest that the contracting out of much of the FSA's social research may limit researchers' opportunities to maintain and develop their technical research skills. The balance of in-house versus contracted-out social research might need reviewing to avoid skills fade.

The third comment from an SRO was about training in the technical skills of social research:

"I'd like more training on technical analytical skills (e.g., regression analysis) and when it's appropriate to use these techniques. I'd like more training on evaluation skills".

Principal Research Officers

The six PROs reported 'good ability' or 'very good ability' to undertake most of the technical skills required for their grade by the GSR Technical Skills Framework (Annex 4A).

Annex 4B present the skills in which some of the PROs reported having only some or no ability. Two responses stand out. One is the apparent limitations of four PROs to "use the GSR network effectively to actively pursue options for cross cutting research". Three of the six PROs thought they had only "some ability" with this skill, and a fourth PRO claimed to have no such ability.

The second notable response was that four of the six PROs reported having only 'some ability' to "take the lead on a number of 'technical' matters within the wider GSR/analytical community, for example, this could be methodological or evidence based".

Given that PROs provide the leadership and management of SROs and ROs, some of whom also expressed limited ability to undertake these skills, these would seem to be areas in which the professional development of some PROs would be appropriate.

Similarly, the responses of two PROs indicating that they have only 'some ability' to "encourage, coach and support others to adopt the latest social research methods and data science techniques into their work" may require further consideration about their professional development.

Summary

The team reported 'good ability' or 'very good ability' to undertake most of the technical skills required across all three grades.

All three grades, however, reported having only 'some ability' or 'no ability' with a few of the methodological and organisational skills required by the GSR Technical Skills Framework. This indicates a need for some professional development of some of the technical skills mentioned above.