Review of FSA Social Science: Annex 4A, The GSR Technical Skills Framework

GSR Technical Skills Framework (footnote 1)

Research Officer

Technical Skills Domain	Research Officer - Technical skills
Knowledge of research methods, techniques and application of these in small scale research projects	 knowledge of research and analytical methodologies and ability to demonstrate practical application of both qualitative and quantitative approaches through project-based work; for example, a suitable level of experience would be that obtained from obtaining a 1st or 2:1 degree or a postgraduate qualification in a social science discipline, that includes a substantial element of social research methods and training working knowledge of a range of research methods and an awareness of new innovative methods, including within the data science field. broad awareness of the role of quantitative and qualitative social research methods and their application, i.e., knowing when their application is appropriate and when it is not uses both qualitative and quantitative approaches to undertake small in-house pieces of work while under supervision carries out analytical tasks under directions prepares accurate statistics
Identifying research needs, designing and specifying research	 designs small scale and less complex research projects for either in-house or commissioned projects; understands how to get things done in the Civil Service helps line manager identify areas for new research writes and designs draft research specifications for less complex projects defines research questions, and re-defines where necessary

Technical Skills Domain	Research Officer - Technical skills
Analysis and interpretation	 makes use of different sources of information and carries out basic analysis of key data sets by producing frequencies and cross tabulations; interprets the key findings from this. uses computer software in the analysis and presentation of information 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 accurately interprets data (verbal & numerical) and research papers, for example, makes an accurate interpretation of the key findings from a literature search summarises verbally and numerically expressed research information accurately
Managing and commissioning social research	 aware of key departmental procurement procedures judges accurately the merits of less complex research tenders supports team members in managing more complex external research projects working knowledge of ethical issues in research; knowledge of GSR principles on research ethics and SRA's guidance; with support, is able to apply these when developing appropriate solutions/ proposals working knowledge of legal requirements surrounding research, particularly data protection and the Freedom of Information Act; knows when to seek further support sensitive to legal requirements that may surround particular departmental research agenda; knows when to seek further support demonstrates attention to detail in checking information/evidence for accuracy and validity, for example, checking an interim research report from a contractor critically assesses research findings against an established standard or specification uses logic to evaluate new ideas and alternatives, for example, critically assesses new hypotheses or new methodologies has knowledge of quality assurance methodologies required for analytical work and understands the context and relevance of quality assurance products, such as the Aqua Book.

Technical Skills Domain	Research Officer - Technical skills
Leading, communicating and championing social research	 contributing to the wider GSR network works with other social researchers and/or analysts delivers appropriate and timely analysis to support policy making and policy implementation, seeking support from senior colleagues where appropriate clear knowledge of the format and style required to report research results; able to report research information clearly in writing persuades others to support the research process, for example, industry bodies to release necessary information or policy customers of the value of social research
Understanding government context	 knows when to consult with others, for example, with GSR colleagues, other analytical professions or policy colleagues uses the GSR network to increase awareness of cross cutting research possibilities understands the role and social research needs of policy divisions and can link that to own output tailors approach and frames research output in a way that is directly relevant to the customer's needs understands the policy context of own work
Learning and development	 identify opportunities to expand knowledge and breadth of skills commit time to learning and sharing knowledge with others around approaches to research

Senior Research Officer

Technical Skills Domain Senior Research Officer - Technical Skills

Knowledge of research methods, techniques and application of these in small scale research projects

- as Research Officer plus around two years successful applied experience of working in applied social research in which strong analytical skills have been clearly demonstrated. This can include work towards successful completion of a post graduate qualification with a strong research/research methods component
- thorough and detailed knowledge of the main quantitative, qualitative and evaluation research methods and experience of their use in more complex projects
- understands the pros and cons of different research methods so can advise, critique and make independent direct use of same
- uses a range of analytical techniques to carry out inhouse analysis & briefing work
- up-to-date knowledge of methodological developments including the role of innovative methodologies; applies these methods when and where appropriate; makes use of appropriate new developments from other analytical professions and outside the Civil Service where relevant
- incorporates the latest techniques into their work where appropriate, and champions innovation and embraces new ways of working.
- good knowledge & application of analytical techniques to address key questions
- assesses the suitability for purpose of alternative research methods
- brings a fresh approach to devising research methods, for example, designing questionnaires, modifying a methodology
- generates imaginative and useful hypotheses which can be tested

Identifying research needs, designing and specifying research	 draws upon a track record of designing medium sized or more complex projects to translate a policy question into a viable research specification or in-house project. meets the social research needs of several divisions and areas, for example, through consulting with other stakeholders and analysts at an early stage, clarifying objectives and setting deliverable goals clarifies and agrees research objectives and translates broad projects aims into researchable questions, for example, turns policy requirements into well designed research specifications accurately identifies where there are gaps in the evidence base and makes sound recommendations for how this can be managed reframes a vague or unhelpful research question to one that can provide outputs that meets the customer's needs incorporates best practice guidance into research specification and management
Analysis and interpretation	 weighs up competing sources of data and identifies a clear line to take assesses relevance of research information to the task in hand identifies salient points and trends from research or other information and draws out sound, logical inferences, for example, picks out key messages from dense data sets

Managing and commissioning social research

- experience also of having had direct responsibility for management of commissioned research or for undertaking social or other relevant research projects of a significant scale. The above also needs to include some experience of having worked with other analysts, for example, economists, statisticians
- specifies, commissions and manages research projects; works within agreed budgets
- understands the basics of research planning, including bidding timetables, thinking ahead and liaising with policy divisions
- assesses whether a contractor's report is based on a sound approach and robust analysis
- as RO but for more complex projects. Overall an ability to manage independently the entire procurement process for all but the most complex projects, including budgetary requirements
- takes responsibility and action to ensure that the legal and ethical compliance needs of research projects are met; Knows when to seek further support on legal or ethical issues
- liaises successfully with ethics committees, and other monitoring/ compliance committees, for particular projects
- applies GDPR principles where appropriate to particular projects
- manages research processes and contractors so ensuring quality of results and methodological rigour
- has knowledge of, and incorporates quality assurance processes within all analytical work, making use of relevant quality assurance products, such as the Aqua Book
- monitors and reviews performance and progress of research contractors and anticipates necessary action

Leading, communicating and championing social research	 seen as a knowledgeable voice (for example, helping others understand what social research can achieve) may support other social researchers delivers appropriate and timely analysis to support policy making and policy implementation communicates written and oral information clearly; avoids unnecessary use of jargon and technical terms accurately and thoroughly evaluates complex information for the purposes of advice or recommendation; does so in a timely fashion communicates professional judgements regarding the application of social research methods; defends position/viewpoint in the face of opposition or challenge helps customers make full use out of available social research evidence, even when it is not perfect able to stimulate interest in social research and its applications; persuades others such as senior civil servants of the value of social research to the policy process able to reassure colleagues on social research issues contributes effectively to research steering groups and advisory boards
Understanding government context	 makes use of the GSR network to explore opportunities for cross cutting research develops effective communication links with other social researchers to provide appropriate collaborative support to the policy process looks beneath the surface of a request for advice or a piece of research, thinks laterally and explores different angles critically and analytically demonstrates sufficient technical 'authority' by taking the lead in recommending solutions to fill strategic gaps conducts a risk analysis of an evidence base to ensure advice is sound, for example, understands the tradeoffs in balancing quality and timing of - project delivery
Learning and Development	Proactively identifies and expands knowledge and breadth of experience where professional skills are less developed. Commits time to learning and sharing knowledge with others around new techniques and innovative methods

Principal Research Officer

Technical Skills Domain	Principal Research Officer - Technical Skills
Knowledge of research methods, techniques and application of these	 as for Senior Research Officer, plus established track record (around three/three plus years) in designing, carrying out or managing social research, and providing research based advice and briefings established track record of developing and managing research projects employing the full range of research methods has used or actively considered the use of the latest methods in recent projects, as appropriate supports SROs/ROs on selection of methods and can deal with more complex problems without detailed knowledge of project provides an overview of research methods for a wide portfolio of projects, and provides a supervisory/ sounding board for team leaders where appropriate
Identifying research needs, designing and specifying research	 sets out clear research objectives and expected outcomes; defines key delivery objectives for staff / department thinks around a problem; reframes it; questions assumptions, for example, able to reframe a research question to maximise assistance to customer looks beyond immediate issue – identifies trends, areas for further research or analysis, links proactive in helping policy divisions and directorates identify their information needs and evidence gaps; translates unfocussed requests and ideas into effective research design.
Analysis and interpretation	 provides and supervises briefing activity based on analytical work reports complex and often conflicting research information to senior non-specialists/customers, assists them to isolate key facts, discern trends and draw implications evaluates and integrates research information from a variety of sources to come to logical conclusions

Technical SkillsDomain	Principal Research Officer - Technical Skills
Managing and commissioning social research	 understands and can work within the budgetary requirements at the research project level as SRO but can draw upon more extensive experience of research procurement, contractor and financial management promotes multi -disciplinary working; understands what other analysts can contribute (for example, economists, statisticians) and how their own (& own team's) work fits in supports RO's and SRO's in resolving legal and or ethical issues as SRO, but with an overview knowledge to apply to multiple, or complex, or potentially controversial or high profile projects manages quality and product assurance issues on projects, developing quality and product assurance requirements with customers and analysts prior to projects commencing.

Technical SkillsDomain	Principal Research Officer - Technical Skills
Leading, communicating and championing social research	 manages and supports other social researchers through their career draws upon extensive experience of the design, development, commissioning and management of projects and in-house analytical activity to ensure appropriate social research input to policy decisions ensures the provision of appropriate and timely analysis to support policy making and policy implementation makes objective and timely decisions based on best available evidence and sound analysis uses evidence-based arguments, even when under pressure gets to the heart of an issue; subjects information to a thorough analysis to ensure high quality decisions and recommendations provides impartial and balanced advice, using sound application of knowledge and expertise; for example, communicates understanding of policy realities, but still represents social research evidence shapes customers' expectations and needs by educating them about what social research can achieve is an enthusiastic advocate of social research; can sell an idea or argument raises the level of debate by encouraging greater cooperation and communication between researchers across the department and further afield; provides links between academic and GSR colleagues encourages, coaches and supports others to adopt the latest social research methods and data science techniques into their work
Understanding government context	 works in partnership with other analysts and departments to achieve joint customer goals co-operates and works well with others in the pursuit of social research goals uses the GSR network effectively to actively pursue options for cross cutting research identifies gaps in the social research evidence base that relates to key policy objectives and suggests methodologically robust ways to fill them takes considered risks and assesses and manages the risks; is not deterred by incomplete or inconclusive data takes the lead on a number of 'technical' matters within the wider GSR/ analytical community, for example, this could be methodological or evidence base.

Technical SkillsDomain	Principal Research Officer - Technical Skills
Learning and Development	 is proactive in keeping abreast of new methodological and technical developments, how they might be used within department in different policy contexts

1. GSR Technical Framework (GSR,2022) PDF