

# **Background Quality Report for the Royal Navy and Royal Marines Sexual Harassment Survey 2021**

## **1 Contact**

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## **2 Introduction**

### **2.1 Royal Navy Sexual Harassment Survey 2021**

The Royal Navy and Royal Marines Sexual Harassment survey 2021 (RNSHS21) is a key strategic survey for the Royal Navy (RN) and is one of the main ways it gathers information on the views and experiences of its personnel in respect of inappropriate behaviours in the workplace. The information from this survey helps the RN shape policies for training, support, and the terms and conditions of service.

The RNSHS21 is an Official Statistic and is produced and published in line with the Code of Practice for Statistics. The publication date is pre-announced on the GOV.UK Official Statistics Release Calendar.

### **2.2 Brief History**

Research into sexual harassment in the UK Armed Forces began in 2005, with a tri-Service survey of all female personnel carried out on behalf of the Ministry of Defence (MoD) by Schneider Ross in the context of an action plan agreed between MoD and the Equal Opportunities Commission (EOC) (now the Equality and Human Rights Commission). Subsequently the single Services carried out independent research and, in 2009 and 2015, the RN undertook repeated investigations using a variation of the 2005 methodology but expanding the deployment of the survey to include a sample of male personnel. Over this period the Army and Royal Air Force (RAF) used the same survey design with slight variations in overall methodology. RN undertook, in early 2021, to carry out a further investigation, using its own 2015 methodology as the basis for its survey design. This research enabled the Armed Forces to identify trends over time and assess the impact of efforts towards preventing and dealing with sexual harassment. The research data have been used to inform policy and strategy in the prevention of sexual harassment in the Armed Forces. Specifically, two notable outcomes from past research studies have been the establishment of a bullying, harassment and discrimination helpline, and a complete review of equality and diversity training.

Consistent with previous administrations within the RN, this research remained a survey-based exercise and was disseminated to all RN (including Royal Marines) Regular trained strength and Full Time Reserve Service (FTRS) female personnel and a representative sample of male RN (including Royal Marines) Regular trained

strength and FTRS personnel. It aimed to gather information on the prevalence and nature of sexualised behaviour within the RN with a view to revealing both the nature and extent of this issue and understanding group differences in the experience of sexualised behaviours. It also aimed to gather opinions about the effectiveness of current initiatives in place to prevent and manage sexual harassment. Gathering this information enables the RN to better understand how successful its efforts in tackling this issue have been to date, and what still needs to be done to ensure that the moral, ethical and legal obligations to Service Personnel are met.

The survey data was gathered over a 10 week period between July and September 2021.

### **3 Statistical Processing**

There are eight stages in the survey production and analysis process. Each of these stages is described below.

#### **Stage 1: Questionnaire design**

A working group comprised of staff from the RN's research psychology and equality and diversity teams agreed the questionnaire. In order to assess trends, the core questions of the RNSHS21 were not changed from the previous 2015 version. The 2021 survey, deriving directly from the quantitative element of the 2005 MoD research, has been reviewed against surveys from other Defence forces such as the Canadian Forces Workplace Harassment Survey (CFWHS). It was also reviewed against established standardised measures of sexual harassment such as the Psychological Climate for Sexual Harassment Scale, the US Department of Defence (DoD) Sexual Experiences Questionnaire (SEQ-DoD) and the US DoD Workplace and Gender Relations Survey of Active Duty Members.

There have been some changes to the previous RN survey question set reflecting, in part, amendments to response options effected by Army and RAF in their 2020 iteration of the survey. The principal amendments have been the addition of response options concerning social media, which are necessary to reflect current research. These additional response options provide the Royal Navy with greater insight on the prevalence, nature and impact of social media on sexual harassment.

The RNSHS21 survey reflects closely those deployed across the Army and RAF in 2020 albeit with some differences in nomenclature to reflect individual Service conventions, for instance, rank, and the omission of supplementary response options and a small number of additional questions which are specific to the identified needs of the other Services.

The final deployed survey design incorporated 40 items.

#### **Stage 2: Sample design, selection and cleaning**

The survey sample includes both Regular and Full-Time Reserve Service (FTRS) personnel and was based on Defence Statistics figures of RN trained personnel as

at June 2021. It was calculated, in consultation with Defence Statistics, based on a 95% confidence interval and a 5% margin of error, and adjusted to account for typical survey response rates for each rank. This sampling methodology is used widely in Defence surveys, so is recognised as appropriate for this research. Previous single Service and tri-Service surveys have shown substantial response rate differences between Officers and Ratings and, hence, sample sizes are calculated separately by rank group.

The survey questionnaire was administered to all Regular and Full Time Reserve Servicewomen. Women are significantly under-represented in the Royal Navy and therefore conducting a census of Servicewomen, rather than a sample, increased the likelihood of Servicemen and Servicewomen being equally represented. Previous research also suggests that Servicewomen are more likely (but not exclusively) to experience sexual harassment than Servicemen.

The survey sample of male personnel was selected using a stratified simple random sampling technique, stratified according to rank. This is to ensure sufficient representation across each rank group.

A disproportionate stratified random sample of approximately 9,900 trained UK Regular and FTRS personnel was selected for RNSHS21.

### **Stage 3: Survey distribution and communications**

The survey was distributed via the Lime Survey platform to the selected sample with clear participant information enabling personnel to make an informed choice about whether to participate. The survey was anonymous and response data was only accessible to the RN research psychology team. Prior to launch, the survey was promoted throughout the RN by senior and local leadership, and via a range of diversity and inclusion networking and communications mechanisms.

The survey was prefaced with a comprehensive Participant Information Sheet and was able to be completed over a ten week period between July and September 2021. Periodic reminders were sent to selected personnel periodically throughout this survey window to encourage participation.

### **Stage 4: Data input**

Online survey responses are held securely on MOD servers.

### **Stage 5: Data validation**

Only data from participants clearly indicating their consent was used. This meant excluding the data of all respondents who had failed to fully complete the survey since it was not possible, given the survey's anonymous nature, to otherwise identify where participants had withdrawn their consent for their data to be used.

For ease of analysis and presentation, some question response options were recoded to simplify the output. Multi-point Likert-type responses were in some cases recoded into a 2-point binary scale. Responses were weighted by rank and gender. This counters bias caused by disproportionate stratified sampling and differing levels

of response by rank and gender. The effect of weighting is to permit, for appropriate sections of the data, an estimation of response pattern had the entire RN population been surveyed, rather than just the proportion of the sample which actually took part. Further details of the weighting of response data is included within the methodology section of the main report. Finally, the data was transferred into the Statistical Package for the Social Sciences (SPSS) for analysis.

### **Stage 6: Data compilation and results production**

Tables of results were produced using SPSS Complex Samples to ensure estimates and their corresponding standard errors were correctly weighted. Where year-on-year comparisons were possible, Z-tests at the 95% confidence level were carried out. In-year tests between different cohorts (rank groups, gender groups) were also carried out, and non-significant changes are not described as changes in the narrative reporting.

### **Stage 7: Further quality assurance**

There are several stages of manual validation built into the data cleaning process. A copy of the RN SPSS data set and draft output tables were analysed two RN psychologists and checked by Defence Statistics statisticians for quality assurance purposes. Each section of tables, along with the content of the narrative report, undergoes several layers of scrutiny. These include cross-checking by at least two members of the RN People & Training Research team.

### **Stage 8: Publication**

The Royal Navy and Royal Marines Sexual Harassment Survey 2021 is published on [www.gov.uk](http://www.gov.uk)

## **4 Quality Management**

### **4.1 Quality Assurance**

The MoD's quality management process for Official Statistics consists of three elements: (1) Regularly monitoring and assessing quality risk via an annual assessment; (2) Providing a mechanism for reporting and reviewing revisions/corrections to Official Statistics; (3) Ensuring BQRs are published alongside reports and are updated regularly.

## **5 Relevance**

**5.1** The principal users of the RNSHS21 publication are the RN People and Training Directorate, and Central MoD and RN policy makers. The statistical information is used to assess Service personnel strategy and policy, and identify areas of continuing concern which will benefit from additional policy or resource focus.

RNSHS21 is the only large scale survey of RN personnel which specifically addresses inappropriate sexualised behaviours and personnel attitudes towards them. The range of topics covered by RNSHS21 mean that it is one of the most

comprehensive focused attitudinal surveys of Service personnel within the MOD, and the results are valued and widely used within the RN and across wider Defence to monitor various projects and programmes and the “lived experience” of personnel. The information can also be used to answer parliamentary questions and Freedom of Information requests.

## **6 Accuracy & Reliability**

### **6.1 Overall Accuracy**

RNSHS21 collected mainly attitudinal data from a disproportionate stratified random sample of approximately 9900 trained Regular and Full Time Reserve Service (FTRS) Royal Navy personnel. The sample size is designed to achieve a margin of error of plus or minus five percentage points for each of the estimates. A number of questions are only asked of a subset of respondents and they typically carry a larger margin of error. For example, questions relating to the context of an experience of harassment deemed especially upsetting were only asked of those reporting such an experience.

The raw data is passed through a range of manual validation and editing routines. Where year-on-year comparisons are possible, 95% confidence level Z-tests are carried out. This level is used to minimise the possibility of finding false positive differences that can be expected when performing a large number of significance tests.

The narrative report and supporting data tables do not present any results where the responding group size is less than 30 as results for groups of this size are considered too unreliable, yielding margins of error far outside the target range of plus or minus five per cent.

### **6.2 Non-sampling error**

As the RNSHS21 did not achieve 100% response rates there is always the risk that those who returned survey responses have differing views from those who did not. We assume that all non-response is Missing At Random (MAR) within each weighting class. This means we have assumed that those people who did not return a response do not differ from those who did respond in their perceptions and experiences.

One area of concern is low response rates among certain groups. Response rates tend to be lower among the more junior ranks. This may be partly due to distribution issues; a large number of the invitation emails to this group ‘bounce’ suggesting they do not access the Intranet or electronic systems. This group is oversampled to compensate for expected low response rates.

### **6.3 Sampling error**

The results are weighted to account for the differing response rates observed across most Defence surveys of personnel. This ensures that the results reflect the distribution of Service and rank within the population of trained Regular Service and FTRS personnel. A lower response rate means that those at the lowest ranks had relatively high weights when compared to other ranks.

### **6.4 Data Revisions**

Data revisions are handled in accordance with the [MOD's Official Statistics Revisions and Corrections Policy](#).

## **7 Timeliness and Punctuality**

### **7.1 Timeline**

The RNSHS takes approximately 8-9 months from agreeing the questionnaires to publishing the narrative report and data tables. The survey fieldwork period is 10 weeks, with the remaining time spent on creation and distribution of questionnaires, data cleansing, analysis and report production. The complex nature of the survey means that there is a gap between the beginning of fieldwork and publication of the report, so findings are not current.

### **7.2 Punctuality**

All pre-announced publication deadlines have been met.

## **8 Coherence and Comparability**

### **8.1 Coherence**

RNSHS21 is the definitive source of attitudinal data about RN personnel's experiences of sexual harassment. There are no other single Service data sources that collect the same attitudinal information with which to ensure coherence.

There is coherence with other MOD surveys. The RNSHS21 uses a very similar core question set to equivalent surveys undertaken by the Army and the Royal Air Force.

### **8.2 Comparability over Time**

RNSHS21 is considered to be broadly comparable to the equivalent RNSHS conducted in 2015. However, developments in research and improvements to the clarity of items within the 2021 survey has meant that a number of questions, whilst broadly similar, have changed sufficiently to prevent comparisons over time. These are highlighted in the Main Report and background tables.

## **9 Accessibility and Clarity**

### **9.1 Access to publications**

All RNSHS publications dating back to 2015 are available free of charge in pdf format and, from RNSHS21, copies of the statistical tables in Excel and Open Database Format online: [www.gov.uk](http://www.gov.uk)

In addition to this Quality Report, the RNSHS21 report highlights the main findings in an executive summary, contains a narrative section which aids users' interpretation of the data, a methodology section including target population, information on the sample, respondents, weighting, statistical tests used, and notations and definitions used.

Excel and ODF versions of tables with detailed results are made available to accommodate different user preferences. Relevant footnotes are shown below tables to indicate any filters that have been applied to the data, data quality issues or time series comparisons.

## **10 Trade-offs between Output Quality Components**

### **10.1 Timeliness and costs versus Quality**

The main trade-off is between timeliness, quality and clarity. The tables are broken down by gender and summary rank status and more complex cross tabulation of data has only been conducted and reported on those variables demonstrating clear differences. This is so that the basic statistical information can be made available to policy users and the public as soon as possible in a clear and accessible format.

Additional analysis for policy users is available on request and external requests for further information would be considered under the usual Freedom of Information process.

## **11 Cost and Respondent Burden**

**11.1** Costs are closely monitored, and the Royal Navy strives to balance quality and timeliness against costs. The sample size is calculated to be the most efficient in order to meet the levels of precision outlined in Section 3.

Response to RNSHS21 was entirely voluntary. Participant information was provided within the questionnaire to encourage informed consent. Participants were free to withdraw from the survey at any point prior to completion and submission and only complete submissions associated with respondents indicating their clear consent were included within the analysis.

## **12 Confidentiality and Security**

### **12.1 Confidentiality - policy**

RNSHS21 is an anonymous survey. Person level data does not include a personal identifier and there is no way of associating data with the individual who provided it. Only the RN Research Team have access to person-level data. No person from any respondent's Chain of Command is able to access individual level data. No record-level data is provided to anyone not directly involved with the analysis, unless covered by a Data Access Agreement signed by the survey sponsor.

### **12.2 Confidentiality - policy**

The narrative report and supporting data tables do not present any results where the responding group size is less than 30 as results for groups of this size are considered too unreliable and may be disclosive.

### **12.3 Security**

All staff involved in the RNSHS21 production process adhere to the MoD and Civil Service data protection regulations. In addition all members of the research team follow codes of practice for the Government Statistical Service (GSS) and the Government Social Research (GSR) Service. All data is stored, accessed and analysed using the MoD's secure IT system.