October 2018

Scottish Crime and Justice Survey

Methods Workshop:

Summary of discussions

Ipsos MORI & ScotCen

A methods workshop for the Scottish Crime and Justice Survey (SCJS) was held on 12th September 2018. The workshop was convened to review the pressures and opportunities that the SCJS has faced recently, to consider what can be learned from recent developments in survey methods, and to examine potential options for changes to the survey in future, both short- and long-term. It was intentionally open and exploratory in nature.

This note summarises the balance of opinion in each of the workshop sessions and the most salient points made by participants. A detailed advance briefing paper was provided to all attendees ahead of the workshop and this summary note should be read in conjunction with the advance briefing paper.

The following question was used at the workshop to focus discussions:

Can the quality of the estimates from the SCJS, and therefore the public value of the survey, be improved by implementing any changes to the design and/or the delivery of the survey?

The purpose of the workshop was not to agree which options to pursue. Rather, it was to consider which merit further exploration, which should be simply discounted, and whether there are other options that we had missed. It was also to discuss what further evidence and experimentation would be helpful in the development and evaluation of the options worth pursuing.

The Scottish Government, Ipsos MORI and ScotCen would like to acknowledge and thank all 29 delegates for contributing their input and sharing their expertise.

Session 1: The SCJS to date and performance on the current contract

Delegates heard a presentation from Ipsos MORI and ScotCen summarising the SCJS's history up to the present day. This covered response rate patterns over time, performance under the current contract and the suite of actions that have been taken to increase survey response by improving fieldwork performance. Delegates were asked to consider two questions:

- 1. What more can be done to build/support the field force?
- 2. What else can be done to address non-response?

The main questions and points of discussion were:

• Has analysis been carried out to understand what has caused the fall in response rates on the SCJS?

Discussion: While a full analysis has not been carried out, there are no clear patterns from initial analysis of the metadata. The Scottish Government made the delivery of detailed metadata mandatory from 2012 onwards so that full analysis of changing response patterns across its three major social surveys could be undertaken.

• What can we learn from the Crime Survey for England and Wales (CSEW), which continues to have a high response rate?

Discussion: A number of reasons why CSEW has bucked the trend in relation to response rates were put forward. The importance of good regular interviewer training was noted as key to retaining a strong, motivated field team

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on the CSEW. Investment in the interviewer panel was perceived to have been very important. The dramatic increase in use of reissuing was also mentioned as a factor driving response, although it was also noted that reissuing can only do so much; if the initial response rate is low, the final response rate will be low too. It was also noted that when the same contractor ran both CSEW and SCJS, the response rate on SCJS remained considerably lower than on CSEW.

Does the unclustered sample used on SCJS make fieldwork less efficient?

Discussion: The CSEW, unlike the SCJS, uses a clustered sample. Using an unclustered sample increases the proportion of interviewer time used for travelling, reduces interviewer strike rates and increases the costs of reissuing.

Factors relating to interviewer panels

Discussion: The question of why interviewer turnover has been greater at ScotCen than at Ipsos MORI was posed. It was suggested that there are no obvious or clear reasons for the difference. While there are differences in how companies manage interviewers, there are no clear links between this and differences in turnover. ScotCen are currently reviewing the factors behind their interviewer turnover and strategies to reduce this. Generally speaking, the majority of interviewers who leave the ScotCen panel do so due to lifestyle factors, including retirement. Others leave due to under-performance. These latter cases tend to be new interviewers who leave very soon after being allocated work. Over the first two years of SCJS fieldwork, turnover was higher than average. In the last eight months this has reduced, however, and going forward ScotCen expect turnover to return to a more typical rate, similar to Ipsos MORI.

ScotCen are taking steps to improve interviewer retention, and the recent decrease in turnover rate suggests these combined approaches are having a positive effect. ScotCen now runs Interviewer Development Training (IDT) to support new starting interviewers shortly after they have started their 1st point of work. The IDT days are run by a specialist Field trainer and cover a range of topics, including: doorstep tips, how to better utilise a work day, and getting the best support from Field Performance Managers, Supervisors and other interviewers. The IDT days are designed to be interactive to encourage sharing of tips and best strategy. Feedback from new interviewers on these sessions has been very positive. New interviewers are also paired up with a supervisor for their first couple of projects. Supervisors are among ScotCen's best performers and can use their skills and experience to help new interviewers with any challenges they face in the field.

It was noted that agencies need to manage the balance between encouraging interviewers and managing performance. Response rates will be partly driven by the balance of new and more experienced interviewers on the panel. There is considerable variation in the response rate achieved by interviewers. However, analysis of both SCJS and SHS suggests that long-standing experienced interviewers have also seen their response rates drop.

• Evidence suggests that public interest in/ concern about crime is declining – should we re-brand the survey?

Discussion: There was no consensus from discussion on whether rebranding the survey would help. This has been done recently in Northern Ireland, where SCJS's counterpart survey is no longer called a 'Crime Survey' but the 'Northern Ireland Safe Community Survey'. It was noted that the trend in public concern about crime may not continue; it is possible that the crime rate may rise and public interest may increase. Therefore, continuing to

monitor what happens in Northern Ireland but not make immediate changes in Scotland may be the best course of action.

Session 2: Summary of the latest literature on response rates, survey design and survey quality

Delegates heard a presentation from Patten Smith and Chris Martin (Ipsos MORI) outlining the latest thinking on response rates, survey design and survey quality. They were then asked to consider the following questions:

- 1. What are the largest risks to the accuracy of the SCJS estimates?
- 2. Should the Total Survey Error (TSE) Framework be used to assess survey quality and how might this work on SCJS?
- 3. Are the first issue response rate, number of attempted contacts and number of reissued addresses better measures of survey quality?
- 4. Should we conduct a non-response study of past SCJS data? If so, what should such a study look like?

The main questions and points of discussion were:

• A general consensus that more should be done to identify the likely impact of non-response bias in the SCJS particularly at sub-national level.

- Previous studies have shown that reissues have very limited impact on certain estimates at the nationallevel. However, the impact does differ across different variables and evidence on the impact at a subnational level is much more limited.
- The first SHS Q-Step¹ study carried out analysis by age, area deprivation, and tenure. Further relative response rate analysis is planned for the SHS at Local Authority (LA) level. There is limited evidence so far on SCJS, but it would be possible to carry out such analysis using existing SCJS paradata².
- The first stage of any analysis would be to identify key variables. It would be useful to think about which variables to test to consider where the strengths and weaknesses of the survey are. This would also be good for transparency with users, including lay users. Key measures might include: certain population groups, geographies, repeat victimisation, low-level crime prevalence, the impact of change over time. It was seen as important to look at whether there is variation in bias across different types of crime.

¹ <u>Q-Step</u> is a programme designed to promote a step-change in quantitative social science education and training in the UK.

² Data about the process by which the data were collected

- It is important however to remain mindful of volatility in sub-group analysis, due to the low base sizes.
 This can potentially be alleviated through repeat analysis over time. There may be some learnings to be taken from previous discussions around impact on sub-groups from the time when the SCJS moved from a 12,000 target achieved sample to 6,000.
- It was suggested that discussion should focus on more than just the response rate. Consideration of the precision and quality of estimates needs to be linked to an assessment of the purpose of the survey. For example, what is the relative importance of prevalence levels and of the performance management elements (e.g. confidence in police in the local areas, changes in crime rate indicators)?
- A census-linked study of Absolute Non-Response bias may be possible following the 2021 Census.
 However, given that the Census does not include any of the key survey measures, its usefulness is likely to be limited.
- There was also discussion around how to calculate the statistical significance of the impact of reissuing on non-response bias compared to sampling error. It was suggested that using a .05 statistical significance approach still allows for a deviation of 2 standard errors, and hence bias ratio may a be better measure.
- Precision might be improved for some subgroups by accepting a lower response rate but an increased sample size, however this would need to be examined in light of any additional analysis on Relative Non-Response Bias on estimates from the SCJS.
- Beyond using response rate as a measure of quality, how can survey quality be explained to a lay audience?

Discussion: Does the TSE framework offer a potential option? Reporting first issue response rate and the extent of reissuing would give separate information on quality of fieldwork and the efforts made.

Session 3: Looking forward – options to consider

Delegates split into three groups to discuss a number of potential options for changes to the design or delivery of the SCJS. The purpose was to consider which options merit further exploration, which should be discounted, and whether there were any further options that had been missed. It was also to discuss what additional evidence and experimentation would be helpful in the development and evaluation of the options considered to be worth exploring further.

Option 1. No change

Summary of Option 1. No change³

This option is based on the continuation of the current approach, using the existing SCJS methodology. This option would maintain the current design and targets. The current fieldwork methodology has now been used on two full survey sweeps (2016/17 and 2017/18) and is also currently being used for sweep three of the current contract (2018/19).

This option was not discussed during the workshop but is included here for completeness.

Option 2. Revision of response rate targets

Summary of Option 2. Revision of response rate targets

This option suggested reducing the response rate target in the sampling assumptions to a level where the risk of failing to achieve the required number of interviews is low. This might equate to setting a response rate target of around 63% and would mean increasing the initial sample of addresses from around 9,700 to around 10,400. Evaluation of the overall impact of this option would involve examining the trade-off between increased precision and increased non-response bias.

(The advance briefing paper also provided background information on trends in response rates, measures taken to maximise the response rate including reissuing and the literature around non-response bias.)

Overall, there was broad agreement that this option should be taken forward for further consideration, but that it is not without risk. Further research is needed to inform the decision about whether to pursue this, particularly into the potential impact on the survey estimates (including estimates among sub-groups).

- Given trends in response rate, this is a pragmatic option, and better than no change. It is also likely to have a positive impact on field force morale.
- The response rate target needs to be realistic. Unrealistic targets are likely to lead to not hitting interview targets and potentially to reduced morale among the field force.
- The lower response rate is mainly due to the higher refusal rate. The question of what can be done to reduce refusals within the ethical guidelines for obtaining informed consent was posed.

³ Full details of each option are provided in the Advance Briefing Note – available alongside this paper.

- Concern was expressed that a response rate reduction might not be a one-off, and that further reduction in the future could be required. Is there a danger in lowering the targets; could a lower response rate target lead to a lower achieved response rate, i.e. contractors 'taking their foot off the gas'?
- Keeping some sample as reserve was suggested as a potential strategy. This is already done in England and Wales; however, the requirements of the harmonised Scottish Surveys Core Questions may make it difficult in Scotland, particularly given the unclustered sample design.
- There was also concern around the accumulation of marginal impacts on the precision of the survey estimates over time; each individual marginal change in response rate may not impact survey estimates, but a repeated drop in response rate targets over time could introduce bias.
- Historically on social surveys, reissuing used to be the exception, but now it is routine. It is a less efficient use of interviewer time than working first issue addresses. It was suggested that more emphasis should be placed on the first issue response rate and less on the final response rate.
- If the response rate were to be reduced, it would be important to understand the impact of this option and to be able to communicate this to users and stakeholders. How are stakeholder perceptions of the value of the survey linked to response rates?
- Any research into the likely impact of a lower response rate on the survey estimates needs to decide on key measures and subgroups for investigation.

Option 3. Introduction of a targeted reissuing strategy

Summary of Option 3. Introduce a targeted reissuing strategy

Currently, almost all non-responding first issue addresses are reissued (at least once) in the SCJS. This option would involve only reissuing a proportion of addresses, with addresses selected based on the likelihood that a reissue interview would reduce non-response bias.

This option would require accepting a lower overall target response rate. It is based on the assumption that the impact of a smaller but targeted reissuing strategy is at least as good as minimising non-response bias as the more extensive but less efficient 'reissue all' strategy.

Underpinning the utility of reissuing is the assumption that the profile of those who respond at any reissue stage is different from those who respond at first issue. The potential impact of reissuing is driven by two factors. Firstly, by the proportion of total cases that are made up from reissuing and secondly, by how different the profile of people who are interviewed at reissue stage are from those who respond at first issue.

As for Option 2, at the heart of evaluating this would be assessing the likely change to non-response bias and any change in fieldwork costs. Given that previous research on relative non-response bias suggests that the role of reissues is small, it is likely that the impact of any targeted reissues will also be small. There was a general lack of support for this option at the present time, primarily because it would require a lower overall response rate target and it would also first need the development of a good model using paradata with which to target reissues. It was felt to be a potential option for the longer-term.

Discussion:

- Users would need to be convinced that this is the best option. For example, how would you convince users of a strategy with a response rate target of under 60%, but with increased response among under-represented groups?
- Targeted reissues may be a longer-term project. The CSEW is using this approach; can we wait and see what happens with that, and learn from what they are doing? Targeting reissues is very hard to do, and has tended to be done badly; there is very little evidence available of this being done successfully elsewhere. This approach is heavily reliant on the administrative data, but currently it is unclear how this will best be applied.

Option 4: Moving to a biennial sampling approach

Summary of Option 4. Moving to a biennial sampling approach

Instead of an annual sample being drawn, the sample could be drawn for two years of the survey at once. The sample would then be batched and assigned to either Year X or Y of the survey. This would be similar to the current design of the SHeS and would allow for more efficient batching of addresses in the field.

Evaluation of this option would involve comparing the impact on fieldwork efficiency (travel time and strike rates) with the size of any increase in Design Effects on the annual data.

There was no clear overall consensus on the desirability of this option.

- There was some discussion of the advantages and disadvantages of moving the sampling to a biennial sample and whether the benefit from increased clustering at the batching stage would be outweighed by increased design effects (the four-year sampling approach used on SHeS resulted in a 30% increase in the design effect). The impact on annual reporting might preclude such a move.
- This is unlikely to impact directly on the response rate achieved but may improve the efficiency of the fieldwork (since it would involve less travel for interviewers and easier interviewer allocation). Further analysis comparing the gains against the increased design effects would need to be undertaken to know whether this would offer better value for money.
- This approach might have implications for the harmonised core questions. If so, consideration would need to be given to how the requirements of the harmonised core and the individual surveys are balanced?
- More broadly, decisions on the sampling approach need to reflect the purpose of the survey. There is a balance of priorities between a) measuring police and justice system performance, b) estimates of victimisation, c)

characteristics and experience of victims, d) breakdowns by type of crime/area/sub-group. For example, oversampling in high crime areas would reduce the precision of the prevalence estimates overall but would be likely to increase the precision around characteristics of victims.

• It was suggested that moving to a clustered sampling approach might offer better value for money. This was noted that such a move should be considered across all three major Scottish surveys and in light of implications for the Harmonised Core.

Option 5: Introducing respondent incentives (to increase response rate and reduce non-response bias)

Summary of Option 5. Introducing respondent incentives

Research evidence on the impact of incentives on response rates is consistent: incentives increase response rates by reducing refusals; response rates tend to increase with the value of the incentive, though not necessarily linearly; cash incentives have the greatest impact on response; for a fixed sum incentive, advance (unconditional) incentives are more effective than incentives that are conditional on participation. However, evidence on n value-for-money is less clear and very few published studies have examined the cost-effectiveness of incentives. Those that have done so generally find that they reduce other costs, though not necessarily totally offsetting the cost of the incentives.

Respondent incentives could be introduced in a variety of ways. They could be given at first issue or at reissue stage, and they could be targeted in a variety of different ways or given to all respondents. A targeted incentive strategy would require modelling and an experiment before use on the SCJS.

The actual cost would depend on the approach. Evaluation of the success would involve comparing the additional cost against any improvement to the sample composition that will reduce the risk of non-response bias. There are a number of potential risks such as reducing response quality, increasing the public's expectations of payment for survey participation, and perceived unfairness around targeted reissues.

There was broad agreement that this option should be given further consideration. Further work would be required to consider the optimal strategy, how it would impact on data quality and whether it would offer value for money.

- The literature is clear that unconditional up-front incentives have largest impact on response, but is more ambivalent on whether they offer value for money. CSEW uses postage stamps.
- The increased cost would need to lead to gains in order to have a positive impact on public value. The incentive strategy was dropped from the SHS due to limited impact and the drive to reduce costs. How is the balance of public value measured?
- Interviewers like incentives as they help them in the very initial doorstep conversation.

- What are the ethics of incentives targeted at certain groups? That they are likely to be targeted at underrepresented groups helps the ethical case for them. The literature suggests that a targeted approach is most effective, but defining the targeting strategy is a difficult challenge.
- Where should incentives be targeted at first issue stage or at reissue stage?
- One option would be discretionary incentives for example, interviewers getting two incentives per batch that they are able to use with households where they believe they would be most useful.
- Given the level of uncertainty around impact (e.g. on response rates and non-response bias) it would be necessary to first assess impact via a trial, for example, by giving half of the sample an incentive. This may also provide some insight into the level of impact across demographic sub-groups Although this would be limited by the sample sizes of different sub-groups.
- A risk is that if incentives are trialled and then withdrawn, would this have a detrimental impact on interviewer motivation? The consensus was that if incentives are introduced then they will need to be maintained.

Other potential options

Discussion:

- There was discussion around the use of a reissue advance letter. This was felt to be a low-risk option to test, but also one that would be likely to have a low impact. Field management specialists expressed some concern that reissue advance letters can give respondents an easier route to refusal.
- Adaptive and responsive design, and tailored data collection approaches, are all worth considering but may take time to explore.
- Part of the survey could be administered online (i.e. the collection of attitudinal data or non-victim related experience eg Civil Justice). However, the benefit of decreased costs, because of shorter interviews, is likely to be outweighed by lower quality data, because of the probable higher percentage of non-completions. One option would, following the reissue stage, to send an invite to an online survey with key measures to those who have not responded. Again this option may not offer value for money.
- It was noted that if multiple options were to be introduced at the same time e.g. a reduced response target, revised sample design and introduction of incentives then it would be difficult to untangle the different effects. It may therefore be advisable to not introduce several changes to the design and/or delivery of the SCJS at the same time the combined impact would need to be considered as well as the effects of each individual change.

Next steps

As noted previously, the workshop was not about decision-making, but about the possibilities for investigation.

The Scottish Government will be discussing the next steps with the contractors to prioritise option(s) for further investigation based on initial feedback and expectations about impact with a view to developing a workplan for testing and implementing changes in the near future. Some of these may lead to experiments in the 2019/20 SCJS, testing the feasibility of the change and the impact on survey response and trend data. Others may lead to longer-term strategic goals.

The 2018/19 survey will continue to run as planned, with no significant changes from the previous two sweeps.