

**MAPPING  
UNREPORTED  
HATE CRIMES USING  
RESPONDENT-DRIVEN  
SAMPLING:  
A METHODOLOGY**





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# INTRODUCTION

This publication provides a methodology for mapping unreported hate crimes against selected communities using a respondent-driven sampling (RDS) technique. It has been developed as part of a project developed by the OSCE Office for Democratic Institutions and Human Rights (ODIHR) to build a comprehensive criminal justice response to hate crime.<sup>1</sup>

The methodology will allow states to assess the scale of unreported hate crimes against selected communities, as well as the social and psychological consequences of such crimes. It is based on the experience of the pilot survey that ODIHR and the Office of the Commissioner for Human Rights of Poland (OCHR) conducted in 2017 and 2018.<sup>2</sup>

The publication focuses on the organizational and methodological aspects of the research process and presents its key components, from the initial research to reporting the survey results. By providing expert knowledge and best practices, the publication aims to encourage authorities at the local, regional and national levels, as well as non-governmental organizations and universities, to carry out similar research projects with the aim of revealing the true extent of hate crimes in their countries.

The RDS technique is innovative and differs from classic victimization surveys in that it relies on survey participants to further recruit respondents and analyse their social networks. It then compares the survey results with official data on

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1 The project “Building a Comprehensive Criminal Justice Response to Hate Crime” is co-funded by the European Union and the United States, and implemented by ODIHR.

2 “Survey on the nature and scale of unreported hate crimes against members of selected communities in Poland” Ipsos, 2018: <<https://www.osce.org/projects/criminal-justice-response-hate-crime>>.

hate crimes. As shown by the experience of conducting the pilot survey in Poland, this sampling technique facilitates a serious public debate on the problem of hate crime under-reporting. Collecting data on unreported hate crimes contributes to the development of an effective and long-term criminal justice response to hate crimes in OSCE participating States.

The publication begins by presenting the hate crime definition and RDS technique applied in the project. The subsequent section contains guidelines for reviewing national legislation and official data on hate crimes.

The publication provides detailed information on the different stages of conducting an RDS research project and the steps taken to implement it, as follows:

1. Designing the project;
2. Analysing legislation and official data on hate crimes;
3. Selecting the communities and types of crimes covered by the survey;
4. Selecting a suitable entity (service provider) to conduct the survey;
5. Conducting a formative study to prepare for the survey;
6. Holding a consultative meeting with relevant stakeholders;
7. Conducting the RDS survey and fieldwork;
8. Analysing and reporting data;
9. Interpreting data/drawing results; and
10. Presenting results.

# HATE CRIME UNDER-REPORTING

Hate crimes are criminal acts motivated by bias or prejudice toward particular groups of people. To be considered a hate crime, the offence must meet two criteria: first, the act must constitute an offence under criminal law; second, the act must have been motivated by a bias.<sup>3</sup>

Bias motivations can broadly be defined as preconceived negative opinions, stereotypical assumptions, intolerance or hatred directed at a particular group that shares a protected characteristic, such as “race”, ethnicity, language, religion, nationality, sexual orientation, gender, mental or physical disability or other fundamental characteristic (“protected groups”).

Hate crimes can include threats, property damage, assault, murder or any other criminal offence committed with a bias motivation. Hate crimes do not only affect the members of protected groups. People associated with a protected group, or people mistakenly perceived to be members of such groups, as well as the property associated with these groups, can also be the targets of hate crime and can include human rights defenders, community centres or places of worship.

Hate crimes affect the security of individuals, communities and societies as a whole. Effective responses to hate crimes are necessary to prevent them from posing a serious security challenge. In extreme situations, hate crimes can lead to conflicts within and across national borders.

The true prevalence of hate crimes is unknown, making such crimes very difficult to address.<sup>4</sup> There are many reasons for hate crime under-reporting, including:

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3 “What is hate crime”, OSCE/ODIHR Hate Crime Reporting website, 15 October 2018, <<http://hatecrime.osce.org/what-hate-crime>>.

4 For example in the European Union, according to the Second European Union Minorities and Discrimination Survey, about 90 per cent of hate crimes are believed not to be reported to the authorities. See: “Second European Union Minorities and Discrimination Survey – Main results”, Fundamental Rights Agency, 15 October 2018, <<http://fra.europa.eu/en/publication/2017/eumidis-ii-main-results>>.

a belief that nothing will happen or change as a result of reporting; a lack of trust in the police and/or a fear of secondary victimization; and the “normalization” of such crimes to the extent that victims see a hate crime incident as minor and not worth reporting. It is often the case that hate crimes target the same people repeatedly who, as a result, tire of reporting them. Moreover, some victims do not report such crimes due to their unresolved or undocumented residence status.

Local or national victimization surveys constitute one method of carrying out research into hate crime under-reporting and victimization. For example, the United States Department of Justice conducts a nation-wide National Crime Victimization Survey, administering 135,000 household interviews across the country. Interviewers return to the same household every six months over three-and-a-half years.<sup>5</sup> Such large-scale surveys harvest robust data on the frequency, characteristics, and consequences of criminal victimization and are representative of the society as a whole. Due to their broad scope, these surveys may fail to reach marginalized communities, such as people with disabilities, isolated ethnic communities and others who are vulnerable to hate crimes and require a targeted approach.

Another approach is to have the survey conducted by a civil society organization with access to a particular vulnerable community. Results obtained from this method cannot be considered representative of all hate crime victims, however.

None of the above-mentioned techniques overcome concerns over privacy or feelings of shame that often account for people’s reluctance to take part in surveys based on their membership in a vulnerable group. The RDS technique resolves such problems by engaging respondents to identify other members of the target population. Thus, it increases the chances that people who would otherwise avoid being surveyed are represented in the survey results.

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5 *Hate Crime Data-Collection and Monitoring Mechanisms: A Practical Guide* (Warsaw: OSCE/ODIHR, 2014), <<https://www.osce.org/odihr/datacollectionguide?download=true>>.

# RESPONDENT-DRIVEN SAMPLING AS A RESEARCH TECHNIQUE FOR COLLECTING AND ANALYSING DATA

## Terminology used in the RDS technique

The following definitions explain the most important concepts associated with the RDS technique:<sup>6</sup>

**Coupon** – An invitation that a respondent can give to other individuals, ideally members of the target population, to take part in a survey. Coupons have a unique number linking them with the recruiter.

**Equilibrium** – The point when the proportion of respondents with a sample characteristic is assumed to be independent from the characteristics of the “seeds” (see below). This is based on the assumption that there is a point (defined by the number of “waves” or respondents) in the recruitment chain whereby the proportion of each variable being tested no longer changes despite the chain accumulating more waves or respondents.

**Homophily** – The tendency for individuals to recruit others with similar characteristics to themselves, rather than recruiting randomly from within their network. The term is also used to describe similar characteristics among members of the target population.

**Recruit** – An individual who receives a coupon from a survey respondent and who agrees to enrol in the survey.

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6 These definitions are taken from: Guri Tyldum and Lisa Johnston, *Applying Respondent Driven Sampling to Migrant Populations: Lessons from the Field* (London: Palgrave Macmillan, 2014), pages 12–14.

**Recruiter** – An individual who recruits someone to take part in a survey by giving them a coupon.

**Recruitment chain** – The set of all respondents linked to a specific “seed”. The seed and the waves make up a recruitment chain (also sometimes called a “recruitment tree”).

**Personal network size** – The number of reciprocal relationships a respondent has to other members of the target population.

**Seed** – A member of the target population who is recruited by a researcher to start a recruitment chain. All RDS studies begin with the selection of at least one seed.

**Wave** – The number of links between a respondent and individuals recruited after the seed. When there is more than one wave, there is a recruitment chain.

Some communities can be described as “hidden” populations, as researchers do not have a list of community members from which to draw survey respondents. Researchers’ access to hidden populations can be impeded by two factors: first, no sampling framework exists, so the size and boundaries of the population are unknown; and second, there exist strong privacy concerns, for example where the group is stigmatized and/or where its members’ residence status is irregular. Such privacy concerns can make individuals reluctant to co-operate or cause them to give unreliable answers to protect their privacy.<sup>7</sup> Such problems are often encountered when attempting to survey undocumented migrants, who may avoid taking part for fear of disclosing their residence status or providing false answers. At the same time, migrants are particularly vulnerable to hate crimes and are particularly affected by the problem of hate crime under-reporting.

The RDS technique overcomes these challenges to allow for a quantitative survey that is also representative of members of the hidden population. The technique

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7 Douglas Heckathorn, “Respondent-Driven Sampling: A New Approach to the Study of Hidden Populations”, *Social Problems*, Vol. 44, No. 2, May 1997.

finds its theoretical justification in the theory of social networks, which sees networks as the building blocks of society. Importantly, this theory has been repeatedly confirmed empirically. Translated into research practice, the implication of this theory is that if the surveyed population is networked then it is possible to reach all its members from a single survey respondent. Therefore, each member of the population has an equal opportunity to be included in the sample. Based on this theory, the RDS technique has been developed to make it possible to apply the rules of sampling with replacement (whereby a respondent may be selected multiple times).

In the RDS technique, the sample is selected according to the snowball rule. This means that the first survey respondents are asked to recruit further respondents from their network of contacts. This allows fragments of the social network of the survey's target population to be reproduced. By calculating the weights and coefficients of variables, various types of biases related to the adopted sampling method can be controlled and, once an appropriate number of respondent interviews have been conducted, the data obtained are representative of the entire target population.

It should be added that, in order to motivate respondents to take part in the study, they can be rewarded both for their participation in the interview and for effectively recruiting other respondents. Incentives can include cash payments, vouchers or donations to an organization representing the group to which respondents belong. The incentives should be culturally sensitive and adjusted to the needs of a vulnerable group.

The main objection to the snowball sampling technique is that the arbitrary selection of the first respondents can make a survey unrepresentative. Therefore, the sample is undermined by homophily, according to which people predominantly interact with others of similar social and demographic characteristics. In the case of an RDS survey, however, this effect is controlled by special indicators, and the decision to conclude the survey is made after eliminating the impact of selection bias on the obtained results.

Typically, the RDS technique achieves equilibrium with fewer interviews in cases where survey respondents have different demographic characteristics and the recruitment chain is long. This means that the survey benefits from having fewer

initial respondents (the so-called seeds) and a long recruitment chain, rather than inviting more respondents at the beginning of the survey and keeping recruitment chains short. Unfortunately, the number of interviews that would need to be conducted remains unknown when the fieldwork begins. That is why it is so important to constantly analyse the progress of the fieldwork and to choose the first survey respondents appropriately.

It should also be emphasized that quantitative research must be preceded by a formative study to verify whether the target population is properly networked, to clarify the scope of the population and to identify its social situation. The formative study is also an opportunity to gather practical insights, including the opening hours of research centres, the languages spoken by respondents and the existence of any subgroups within the community (such as students, highly qualified professionals and manual labourers).

In conclusion, the RDS technique enables quantitative research to be conducted among populations that classic social surveys cannot reach. Typically, researchers are restricted to conducting qualitative research among marginalized communities. Another advantage of the RDS technique is that it can control for the homophily effect and allows researchers to monitor the social network parameters of survey respondents. By relying on respondents to recruit others to the survey, the RDS technique allows researchers to identify hard-to-reach members of the population.

It should be noted that there are a number of disadvantages associated with the RDS technique. Key among these is the relatively high cost of conducting such surveys, owing to the need to provide respondents with incentives for participating in and recruiting others to the study. The RDS technique also requires that fieldwork be planned very thoroughly, and that progress be closely monitored. In addition, during fieldwork respondents' networks must be analysed and calculations made. The survey response rate is also difficult to monitor. Finally, it is necessary to verify whether those applying to participate in the research meet the sample selection criteria.

## STEP 1: DESIGNING THE PROJECT

An RDS survey can be commissioned by a government, an academic research institution, a civil society organization or any other organization interested in conducting such a survey. The survey itself will need to be conducted by a professional body (or service provider) that has the relevant resources and experience. For a successful RDS survey it is recommended that the institution commissioning the survey and the service provider co-operate to ensure that the survey's methodology and findings are verified by academia or research institutions. This will ensure that the research is based not only on a review of materials but also on first-hand experiences of similar surveys.

### Partnering with relevant institutions

For the pilot RDS survey in Poland, ODIHR partnered with the Office of the Commissioner for Human Rights. With the aim of gathering knowledge and experience, the Commissioner reached out to the Centre of Migration Research at the University of Warsaw (CRM), which had previously conducted economic research using the RDS technique.

When designing a research project that employs the RDS technique, it is important to undertake desk research and review the literature and existing studies about certain communities, national legislation, data and policy documents regarding activities to address hate crime, and analyses of the results of hate crime surveys. The purpose of this desk research is to provide a more nuanced perspective of the situation of different communities in the country, with the aim of selecting the communities and types of crimes to be included in the survey. It will then be possible to develop detailed terms of reference for the service provider commissioned to conduct the survey.

The RDS technique makes it impossible to know at the design stage how many interviews will need to be conducted. Consequently, developing a budget that accounts for all costs is challenging. However, the following costs must be foreseen: adequate compensation for respondents (including for participation in the survey and for recruiting other respondents); translation services; the extra time required during fieldwork to control survey responses and avoid the over-representation of certain groups; costs related to the printing of necessary materials (such as the coupons used to recruit respondents); and the costs of co-ordinating the research. The budget should also account for the extra time needed for researchers who may not be familiar with the RDS technique or be proficient in using the relevant software.

Proper budgeting is extremely important to the success of the entire project. Due to the limited experience of many research agencies in carrying out such RDS research projects, negotiations should be held with potential service providers to ensure that they fully account for the above costs, in order to maintain the scope of the study. It should also be noted that the most significant expense associated with RDS surveys is the cost of reaching respondents. Therefore, when designing the project, it is worth making sure that effective contact can be made with the communities being surveyed.

## STEP 2: ANALYSING NATIONAL HATE CRIME LEGISLATION AND DATA

Before developing the survey questionnaire, it is important to analyse the relevant national legislation and data. This information is of particular interest, as it informs the types of crimes to be covered by the study and allows the survey results to be compared with official data. Although different countries have developed different legislative provisions to address hate crime, a number of general points can be made regarding hate crime legislation.

Hate crime provisions are very often scattered throughout a country's penal code, which may not include a chapter dedicated to hate crimes. Hate crime provisions can take different forms, and most penal codes combine several different types of hate crime provisions.<sup>8</sup>

It is essential to analyse the country's existing hate crime provisions and identify any hate crime data collection systems with which to compare the survey results. In order to correctly interpret official data on hate crimes, efforts to address hate crime should also be taken into account. In addition, the initial desk research should investigate the existence of the following: hate crime training programmes and whether these tackle the problem of hate crime under-reporting; guidelines on identifying and processing hate crimes; efforts to modernize hate crime data-collection systems; and civil society projects relevant to hate crime reporting.

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8 *Hate Crime Laws: A Practical Guide* (Warsaw: OSCE/ODIHR, 2009), <<https://www.osce.org/odihr/36426>>.

After reviewing the legislation, the official data on hate crimes should be analysed. This is necessary in order to select the population and types of crime covered by the survey. It will also allow for a comparison of the data obtained from the survey with official data, if that is one of the aims of the project. It should be stressed that official data sources can differ in their data collection methodology. Therefore, in addition to mapping and analysing official data sources, it is worthwhile looking for any gaps and discrepancies in the data.

### **Analysing official hate crime data in Poland**

In Poland, official hate crime data are collected by the National Public Prosecutor's Office and the Ministry of the Interior and Administration (via the police). Hate crime figures presented by the prosecutor's office were slightly higher than those provided by the police. This was a result of different methodologies (data provided by the prosecutor's office includes cases that did not lead to criminal proceedings), as well as features specific to Polish criminal procedure. At the same time, data provided by the Ministry were very detailed, allowing for a complex statistical analysis of raw data.

According to a 2016 report by the National Public Prosecutor's Office, hate crimes in Poland are most often committed against Muslims, Jews, Roma and persons of African descent. These results suggest that these communities should be included in research on hate crimes. The data also reveal the specific types of crime committed against each minority. For example, persons of African descent and Muslims are often subject to physical attacks, including the use of violence, and insults made in person. Official data record similar hate incidents against Ukrainians, in addition to the preparation or dissemination of insulting publications and articles. In the case of Roma, the most frequently recorded incidents include threats and insults made in person, as well as via mass media and online. Jewish people are primarily subject to hate speech disseminated in articles and posted on the Internet, as well as attacks against property, including anti-Semitic graffiti in public spaces.

By analysing the nature and scale of hate crimes recorded in official data, it should be possible to obtain basic information on their frequency, the most prevalent bias motivations and the types of offences committed under a country's criminal law. Such data allow researchers to make informed decisions when selecting the group to be included in the study or determining the sample size. In addition, data on the types of crime committed can determine the most appropriate research method; for example, where the most prevalent incidents feature crimes in which the primary target is not an individual but the entire community, a research method other than victimization surveys might be applied.

## STEP 3: SELECTING THE COMMUNITIES AND TYPES OF CRIMES COVERED BY THE SURVEY

As noted above, a victimization survey is not appropriate for researching crimes targeting entire communities but rather specific individuals. When crimes affect entire communities, one crime is likely to be reported multiple times by different respondents (such as when the crime is widely reported in the media) or not at all (such as when an incitement to hatred against the community is posted on websites rarely visited by members of the community). Therefore, victimization surveys should only be used to research crimes that are directed at individual members of the community.

### Selecting the communities and types of crime to be surveyed in Poland

Taking into account the above-mentioned data collected in Poland, crimes committed against individuals mainly target persons of African descent, Muslims and Ukrainians. With regard to Roma, however, it should be noted that the Roma in Poland predominantly live in isolated communities, and crimes targeting them can be better researched using techniques other than RDS. Meanwhile, the Jewish community in Poland is relatively small and most anti-Semitic incidents involve incitements to hatred and insults posted online, as well as the desecration of graves in Jewish cemeteries. Therefore, conducting victimization surveys among the Jewish community could produce misleading results.

With regard to crimes motivated by racism, xenophobia and anti-Muslim bias, the RDS survey in Poland collected data on the basis of respondents' country of origin and not their skin colour or religious identifier (such as the *hijab*), even though such features may have been used by a perpetra-

tor to select their victim. This is because the RDS technique requires that the surveyed population be part of the same network, and research has shown that the selected communities in Poland form social networks based primarily on their place of origin. Therefore, an RDS research project identified communities' countries of origin when studying attacks motivated by racism, xenophobia and bias against Muslims.

Researchers must also determine the list of crimes to be covered by the study. Ideally, this list would be compatible to the list of crimes for which there are official data on hate crimes. These crimes usually are threat, physical assault, property damage and similar. In addition, it is important to include sexual assaults as a type of crime in the survey, particularly as such crimes are often under-reported. It should be noted, however, that researching sexual assault requires providing special training for interviewers, arranging safe spaces for interviews and considering gender when assigning interviewers. Doing this creates a safe environment for responding to questions that require gender sensitivity.

In particular, incidents of hate speech should not be included in such surveys as they usually target an entire community. However, insults made in person and targeting a specific individual may be covered by the survey.

## STEP 4: DEVELOPING THE TERMS OF REFERENCE AND CONTRACTING A SERVICE PROVIDER

One of the biggest challenges of an RDS research project is developing detailed terms of reference to contract a service provider to carry out the survey. This is especially true in cases where potential service providers do not have sufficient experience in implementing RDS projects. Thus, almost all the major decisions regarding the project's methodology must be taken when developing the terms of reference. At this stage, it is strongly recommended that the project's lead institution establish co-operation with academics with experience of conducting RDS research projects in the country or internationally to gather information.<sup>9</sup>

The terms of reference should set out the following objectives:

- 1) Evaluate the magnitude of hate crimes in the country and develop a typology of the groups covered by the study (including a comparison of the survey results with official data);
- 2) Classify the surveyed communities according to their experience of hate crimes and identify particularly vulnerable groups;
- 3) Identify the reasons for hate crime under-reporting, including barriers to reporting such crimes to law enforcement agencies;
- 4) Identify the impact of hate crimes on victims, their families and communities;
- 5) Identify the needs of hate crime victims; and
- 6) Ensure that views of both men and women are taken into consideration.

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<sup>9</sup> For the terms of reference used in the RDS survey in Poland, see: <<https://www.osce.org/projects/criminal-justice-response-hate-crime>>.

The tasks of the service provider should consist of:

- 1) preparing the final research methodology;
- 2) ensuring that women and men are equally represented in data collection techniques and gender equality and diversity perspectives are mainstreamed in all deliverables;
- 3) preparing research tools (such as questionnaires) and all materials needed to conduct the RDS survey, including recruitment coupons;
- 4) conducting qualitative research in preparation for the survey;
- 5) conducting the RDS survey, including submitting data as it is collected during fieldwork and monitoring the survey's progress;
- 6) creating an electronic database of quantitative results in the SAV format, according to the requirements described in the terms of reference;<sup>10</sup>
- 7) drafting a report on the survey; and
- 8) preparing infographics summarizing the key findings of the research project.

At this stage, it is also necessary to determine other essential elements of the survey on which the fieldwork will be based. This includes a formative study – a qualitative preliminary study that precedes the RDS survey and aims to determine the feasibility of conducting research on the groups selected for the project.

The formative study should evaluate the size and density of community networks and the frequency of social interactions within the group. It should identify the community-defining parameters (such as affiliation with a religious, national or regional association), respondents' daily routines, the languages used by respondents and any subgroups within the community. The formative study should also determine the method used to select first respondents (the “seeds”), convenient opening hours for the research centre, an appropriate mode of compensation for respondents (taking into account their culture and identity) and any other aspects of the community that may affect the results of the survey.

The service provider selected to conduct the survey should retain a large degree of freedom in choosing the methods for conducting the formative study. These

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10 SAV is a file extension used for the saved date of SPSS (Statistical Package for the Social Sciences).

can include individual in-depth interviews, focus group interviews and other ethnographic research techniques, such as participant observation, diary studies and day-in-the-life ethnographies (whereby researchers spend time with study participants to observe their behaviour). Any interview tools – such as the use of an interview scenario – should be agreed with the lead institution in advance. Where the lead institution has experienced researchers among its staff, the formative study can be carried out by the institution in order to save funds and time.

The terms of reference should also describe the major rules for recruiting respondents as part of the survey. For example, they might require that researchers recruit a set of initial respondents, who then recruit a fixed number of persons for the same interview, after which respondents receive coupons to recruit another respondents.

The number of coupons to be issued to respondents must be determined before implementing the survey. This is to prevent respondents with large social networks from disseminating a large number of coupons, leading to the over-representation of their friends and relatives in the sample.

Limiting the number of coupons given to each respondent allows for longer recruitment chains that reach more people within the social network, reducing dependence on the first respondents.<sup>11</sup> At the same time, limiting the number of coupons lengthens the duration of the fieldwork, as it is likely that respondents with one coupon will give it to a close friend with similar demographic characteristics. It is essential that each respondent receives the same number of coupons; otherwise, the probability of being covered by the sample will not be equal for all members of the population and the survey will not be representative, while analytical calculations will be significantly hampered.

It also essential that a respondent recruited by another is not interviewed until two days after the initial respondent's interview, to avoid the over-representation of those who are more available than others, such as students. Researchers must also verify whether respondents are members of the population being surveyed. Interviews should ideally be held in a research centre, although

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11 Tyldum and Johnston, *op. cit.*, note 6, pages 29-31.

interviews may also be conducted outside the research centre provided there is a justification for doing so.

As noted above, the RDS technique makes it impossible to determine the number of interviews required before the fieldwork begins. However, to help potential service providers calculate research costs, the terms of reference should indicate the approximate range (for example, 200 to 350 interviews per community). The pilot survey in Poland found that the sample achieves equilibrium when between 200 to 350 interviews have been conducted. However, not enough answers were obtained for some questions, including those related to reporting hate crimes to the police. Considering the very low rates at which hate crimes are reported to the police, a significantly larger sample size is needed to obtain reliable data. A larger sample size will also reduce statistical error.

Sampling ends either when the sample has reached a stable composition (achieves equilibrium) or when a maximum target sample size has been reached. The decision to stop recruiting respondents should be made in consultation with the institution that commissioned the research project. Since some sample populations reach equilibrium after fewer interviews, the terms of reference should also allow any remaining interviews allotted to a surveyed population to be transferred to another.

The first draft of the research questionnaire (or similar) should be developed by the institution that commissioned the project, as many research institutions lack knowledge of the subject matter. It is worth to emphasise that in the case of an RDS survey the interview might be quite long, even up to one hour. This is because the interview covers many issues related to hate crimes, including reasons for under-reporting, the psychological and social impact of hate crimes and an analysis of hate crimes victims' needs. The terms of reference should also indicate how data will be collected. For example, the pilot survey allowed for computer-assisted personal interviewing (CAPI) or paper and pen personal interviewing (PAPI). The estimated average length of questionnaire responses was 30 minutes. It should be noted, however, that it is difficult to estimate the length of questionnaire responses in such research projects. This is because those who have not experienced such crimes require less time to complete the questionnaire than those who have been the target of crimes and reported them to the police.

It should also be added that research is currently being carried out into conducting RDS surveys using the computer-assisted web interviewing technique. Particular challenges when employing this technique include defining its territorial scope, verifying the eligibility of respondents and providing a mechanism for compensating respondents.<sup>12</sup> Therefore, it is recommended that less experienced researchers conduct the survey using the CAPI or PAPI techniques.

The mechanism for compensating respondents should be specified in detail in the terms of reference, including the amount of compensation granted for participating in the survey and for effectively recruiting others to the survey. Compensation should be higher than that provided for participation in classic surveys, due to the respondent's involvement in the recruitment process and the research topic, which may be difficult for some respondents. However, excessively high incentives can lead to "masquerading", whereby non-eligible persons attempt to take part in the survey.<sup>13</sup>

Respondents of the survey's final wave who do not receive recruitment coupons should be compensated for the fact that they cannot be remunerated for recruiting new respondents.

## Compensation for respondents

The terms of reference for the pilot survey in Poland required that the service provider give each respondent 40 Polish zlotys (approximately 10 euro) for their participation in the survey interview and 20 Polish zlotys (approximately 5 euro) for effectively recruiting one person to the study. Each respondent received coupons to give to the respondents recruited by them.

Respondents of the last wave, who do not receive coupons for recruitment, were paid the same compensation for the fact that they do not have a possibility to receive remuneration for a recruitment of new respondents.

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12 Justyna Salamońska and Olga Czeranowska, "How to Research Multiple Migrants? Introducing Web-based Respondent-Driven Sampling Survey", Centre of Migration Research Working Paper 110/168, September 2018, <<http://www.migracje.uw.edu.pl/wp-content/uploads/2018/09/WP110168.pdf>>.

13 Tyldum and Johnston, *op. cit.*, note 6, page 71.

Compensation can be paid in cash or equivalent, including coupons or vouchers. The type of compensation should be determined by the project's lead institution and the service provider before the fieldwork begins and on the basis of the formative study. The terms of reference should also provide instructions on providing compensation in a way that protects respondents' anonymity.

Terms of reference should also indicate the working language and languages of the interviews. It should be noted that some minorities may not speak the official language of their country of origin. The languages used to conduct interviews should be identified during the formative study and following consultations with local organizations that represent minority communities.

### Languages of the interviews

When conducting interviews with respondents from Ukraine as part of the pilot survey, the service provider had to ensure that interviewers in addition to Ukrainian, also spoke Russian.

Considering the innovative nature of the research and the complexity of the research project, it is important that the service provider is not selected based on the cost of conducting the survey alone. Rather, criteria for selecting the service provider should also include their knowledge and understanding of the subject matter, the objectives of the study, the fieldwork procedure and data analysis methods.

### Additional issues

In addition to the above, the terms of reference should also regulate certain organizational aspects of the study, including:

- **A general consultation clause** – The terms of reference should require that the service provider consult the lead institution before making arrangements that may affect the results obtained.
- **Supervising fieldwork** – The lead institution should be able to monitor and

review the service provider's implementation of the research project. This includes being present during interviews, listening to telephone conversations with respondents and receiving weekly progress reports.

- **Ensuring quality standards** – The service provider should be obliged to ensure that the research meets relevant standards, in particular interviewing standards.
- **Providing qualified staff** – The terms of reference should specify the size and composition of the research team (including the number of qualitative researchers, quantitative researchers, operations co-ordinators and interviewers), as well as the requirements for team members' qualifications, experience and language proficiency. These requirements can be verified using résumés submitted by the service provider. Operations co-ordinators are required to arrange interviews with potential respondents and evaluate their eligibility for the study. For this reason, their language proficiency is extremely important. It is recommended that operations co-ordinators be recruited from the community selected for the study. Furthermore, gender equality considerations need to be taken into account throughout the hiring process, in terms of achieving gender balance of staff hired, giving the same opportunities to men and women, and creating a gender-sensitive working environment.

## STEP 5: CONDUCTING A FORMATIVE STUDY

The main purpose of the formative study is to map the populations being surveyed, verify whether the community is appropriately networked and gather the information needed to organize the quantitative study. The scope of the research may also include the study of victims' experience of hate crimes and readiness to report it, as well as other relevant issues.<sup>14</sup> At a minimum, the formative study should aim to establish:

- **The scope of the population selected for the study.** It may transpire that the population selected is too broad or that it is necessary to exclude or include some groups.
- **The social situation of the population selected for the study.** When selecting the seeds and planning recruitment criteria, it is important to recognize the social status of members of the population and their migration flow.
- **Information and insights needed to organize the quantitative study.** This includes the opening hours of research centres, the languages spoken by respondents and the existence of any subgroups within the community (such as students, highly qualified professionals or manual labourers).

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14 For the interview scenario used in the pilot survey in Poland, see: <<https://www.osce.org/projects/criminal-justice-response-hate-crime>>.

The formative study will also need to identify the content of the research tool (such as a questionnaire) used during the quantitative study. As such, it will need to establish:

- The identity (self-identification) of members of the surveyed population;
- The structure of the surveyed population and any existing subgroups;
- The languages spoken by the population's members;
- Networks within the surveyed population;
- The weekly routine of members of the surveyed population;
- Respondents' preferred type of compensation;
- The time and place to meet members of population;
- Respondents' understanding of hate crime;
- Respondents' assessment of the magnitude of hate crimes and most prevalent types of hate crime; and
- Suggested ways to identify seeds and recruit them into study.

There is no need to conduct a large-scale formative study. Instead, in-depth interviews (IDI) or focus group interviews involving ten members of the surveyed population should be enough to gather all the necessary information, especially if the interviewees have detailed knowledge about their communities.

### **Findings from the formative study conducted in Poland**

The formative study conducted as part of the pilot survey in Poland established that understanding of hate crimes varied among the different populations included in the study. Most respondents – with the exception of civil society activists – lacked clarity as to what a hate crime is. Many spontaneously equated hate crime with “discrimination”, and did not think of hate crimes as an offence under criminal law. Such observations underscore the need for interviewers to be appropriately trained, as well as the need to analyse the incidents and events reported by respondents.

## Identifying the structure of the surveyed population in Poland

Below is a brief description of the structure of the Ukrainian population developed during the formative study prior to conducting the pilot survey in Poland. It can be used as an example when describing the structure of other surveyed populations.

### *Ukrainians*

The Ukrainian community in Poland is made up of three distinct groups: Poles with Ukrainian roots, Ukrainians from Western Ukraine and Ukrainians from Eastern Ukraine. Migrants from Western Ukraine have been settled in Poland for a long time and speak both Polish and Ukrainian well. They are susceptible to hate crimes owing to historically difficult relations between Poland and Ukraine. Ukrainians from eastern Ukraine are mostly newly arrived migrants. They mainly speak Russian and are often mistakenly identified as Russians. The formative study identified the following subgroups: students; manual labourers who have been settled for a long time; blue-collar workers, including seasonal workers, who recently arrived as migrants; and skilled professionals.

Ukrainian students can be found in large numbers at almost every university and are the dominant community in some private universities. They work in cafés, shops and the tourist industry, and are increasingly taking up more demanding professions. Students are vulnerable to hate crimes as they socialize in nightclubs and cafés and are visible in public places. Speaking Ukrainian in public can trigger negative comments. Ukrainian students were considered willing participants in the study and can be identified via Ukrainian student associations or other civil society organizations focused on Ukraine.

Manual labourers who have been living in Poland for a long time are settled in, and many of them have or plan to bring their family members to the country. They work in home services and renovation and are susceptible mainly to minor verbal incidents and nuisance behaviour.

These migrants may be difficult to recruit to the study due to their long working hours.

Manual labourers who have recently arrived or are seasonal migrants work in construction or factories located on the outskirts of cities and in smaller towns.

Seasonal workers are often employed via employment agencies or brokers. They come for short periods (three to six months) and work intensively. Seasonal workers are susceptible to labour rights violations and may be victims of everyday abuse. They may be hard to reach as their activities are limited to their home and work place while their employers are often reluctant to help contact them.

Information obtained during the formative study can form the basis for discussions during the consultation meeting, as well as when developing the quantitative research methodology and determining the criteria for selecting the initial respondents (seeds).

## STEP 6: HOLDING A CONSULTATION MEETING

After completing the formative study and preparing a draft of the questionnaire, it is recommended that a consultation meeting be held. The main purpose of the meeting is to discuss the most important issues concerning the methodology for conducting the RDS survey, in particular determining the criteria for selecting first respondents (seeds), developing the research tool and establishing the number of hate crimes according to official data.

It is recommended that representatives of the following institutions participate in the meeting:

- The lead institution commissioning the study;
- The service provider;
- Civil society organizations working with the surveyed communities;
- Academics, including quantitative researchers and those specializing in migration or with experience of conducting RDS surveys;
- The public institutions responsible for collecting official hate crime data; and
- Experts on hate crime, including hate crime legislation.

The meeting should begin with a presentation on the RDS technique by an individual with experience of carrying out such surveys. It should be noted that statisticians and sociologists are often unfamiliar with the details of this technique. In particular, the meeting should focus on identifying subgroups in the community and determining the criteria for selecting the seeds, as well as estimating the size of the surveyed population.

Bearing in mind the significant correlation between socio-economic status and susceptibility to hate crimes, social class should be included as a variable when selecting the seeds.

The formative study will have identified the general characteristics to look for when recruiting seed respondents with the aim of ensuring the best possi-

ble representation of the target populations. Seed respondents should also be selected from among each of the identified subgroups, as they are likely to have a limited social network. When analysing the findings of the formative study, special attention should be paid to socio-demographic variables (such as gender, age, occupation and geographic location), as these are usually linked to lifestyle and, consequently, to an individual's vulnerability to hate crime.

Based on the subgroups identified during the formative study and discussions held at the consultative meeting, the optimal profiles for seed respondents should be developed to ensure that they provide the best possible access to the surveyed population. Therefore, seed profiles should include students, manual labourers and professionals. It is also worthwhile controlling for the seeds' gender, age or country of origin if these variables are distinct from those expected for their particular subgroup.

<b>Selecting seed profiles for the pilot survey in Poland</b>		
<b>Target group</b>	<b>Seed profiles</b>	
Ukrainians	Two students	<ul style="list-style-type: none"> <li>• One from East Ukraine, One from West Ukraine</li> <li>• One male, One female</li> </ul>
	Two manual labourers	<ul style="list-style-type: none"> <li>• One from East Ukraine, One from West Ukraine</li> <li>• One male, One female</li> <li>• At least one over 35 years of age</li> </ul>
	Two professionals	<ul style="list-style-type: none"> <li>• One civil society worker or affiliate</li> <li>• One not affiliated with a civil society organization</li> </ul>

# STEP 7: CONDUCTING THE RDS SURVEY

## Developing the research tool

When developing the research tool, it is important to bear in mind that the questionnaire does not have to be designed to measure hate crime, but can also serve to verify one or more hypotheses. In both cases, the information obtained can enhance understanding of hate crime and assist efforts to address them.

### Developing the research tool for the pilot survey in Poland<sup>15</sup>

Since social research on hate crime focuses primarily on the psychology of such crimes, including how biases develop into stereotypes and discrimination, a sociological approach was taken when developing the research tool for the pilot survey. In particular, this process was largely informed by the work of Erving Goffman, the 20th century sociologist who described and analysed the social phenomenon of stigma, including the methods and symbols used to stigmatize groups of people.<sup>16</sup> This theoretical approach can be applied to the problem of hate crime to conclude that skin colour and other visible signs of belonging to a social minority constitute a social

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15 For the research tool used in the project's pilot survey in Poland, see: <<https://www.osce.org/projects/criminal-justice-response-hate-crime>>.

16 Erving Goffman, *Stigma: Notes on the Management of Spoiled Identity* (Englewood Cliffs, N.J.: Prentice-Hall, 1963).

stigma. As described by Goffman, members of a social minority often adopt strategies of concealment to hide such visible signs and avoid stigma. The theory's validity in the context of hate crime was verified during the formative study, during which representatives of the surveyed groups mentioned everyday behaviours and activities aimed at concealing their identity. Such behaviours include wearing long-sleeved shirts even in summer, concealing a *hijab* under a hood and not speaking in the language of their country of origin in public.

The research tool included a number of scales and sets of questions aimed at categorizing hate crime perpetrators in Poland according to a widely used typology developed by Jack Levin and Jack McDevitt.<sup>17</sup> The questions also helped to verify the implementation in Poland of European Union Directive 2012/29 on the minimum standards in terms of the rights, support and protection of crime victims.<sup>18</sup> In addition, diagnostic tools were included to measure symptoms of depression, post-traumatic stress disorder and secondary victimization among hate crime victims. Questions were also asked about respondents' levels of trust, lifestyles and attitudes to enable comparisons with the relevant findings of the European Social Survey conducted in Poland.<sup>19</sup>

It should be emphasized that, in order to calculate the weights of different variables needed to conduct surveys based on the RDS technique, the questionnaire should include questions about the respondents' recruitment coupon number, as well as the coupon numbers of coupons distributed to others. The question-

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17 Jack Levin and Jack McDevitt, "Hate Crimes", *The Encyclopedia of Peace, Violence, and Conflict (Second Edition)* (Cambridge, Massachusetts: Academic Press, 2008), <<https://jacklevinsonviolence.com/articles/HateCrimesencyc92206FINAL.pdf>>.

18 Directive 2012/29/EU of the European Parliament and of the Council of October 2012 establishing minimum standards on the rights, support and protection of victims of crime, and replacing Council Framework Decision 2001/220/JHA, 14 November 2012, L 315/57, <[https://ec.europa.eu/anti-trafficking/legislation-and-case-law-eu-legislation-criminal-law/directive-201229eu\\_en](https://ec.europa.eu/anti-trafficking/legislation-and-case-law-eu-legislation-criminal-law/directive-201229eu_en)>.

19 "ESS8 - 2016 Edition 2.0", European Social Survey website, Norwegian Centre for Research Data, 15 October 2018, <<https://www.europeansocialsurvey.org/data/download.html?r=8>>.

naire should also seek to determine the size of the social network of the surveyed population (the number of people). This information should be accurately recorded by researchers as it is crucial for analysing data collected in the survey.

Test interviews should be conducted using the research tool to assess the duration of interviews and the time taken to answer individual questions among representatives of all groups covered by the study. The duration of the test interviews will depend on whether the respondent has experienced hate crime. The test interviews should be identical to the actual interviews conducted as part of the study.

During fieldwork, data collection can be affected by slow or rapid recruitment. Slow recruitment may be caused by many factors and is defined as the inability of respondents (including the seed) to recruit others, resulting in very short recruitment chains. It can be addressed by replacing a seed with another that fits the same profile. Slow recruitment may be caused by low levels of trust in the researchers or reluctance to arrange an interview. The issue may also be linked to the research centre, such as the participation of members of another population in the study or the presence of security guards.<sup>20</sup> Another reason for slow recruitment may be the improper selection of seeds and insufficient or unclear instructions on recruiting other respondents. Slow recruitment can significantly lengthen fieldwork and must be dealt with swiftly. The research team should develop a list containing the contacts details of potential replacement seeds in advance.

Rapid recruitment may create logistical issues in terms of providing sufficient staff and space for conducting interviews.<sup>21</sup> If rapid recruitment is a problem with only certain seeds and affects only some demographic groups (such as students), it can result in the over-representation of these groups in the sample. This can be solved by discontinuing recruitment from these groups. This will help to ensure that all subgroups are proportionately represented in the sample and will prevent bias in the results (since, for example, students may be more vulnerable to hate crimes than other subgroups covered by the survey).

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<sup>20</sup> Tyldum and Johnston, *op. cit.*, note 6, pages 97 and 98.

<sup>21</sup> *Ibid.*, page 99.

## Co-operation with civil society in the pilot survey

A lesson learned during the pilot survey in Poland was that the survey benefited from existing co-operation with relevant civil society organizations. The research could not have been conducted without the early endorsement of the survey by leaders of these civil society organizations. They also provided essential information during the formative study, helped to identify people to act as seeds and, in one case, became a translator and operations co-ordinator for the research team. Indeed, the seed suggested by one civil society leader was the most effective at recruiting other respondents and established the longest recruitment chain. Therefore, engaging civil society and community leaders is deemed crucial to the success of any research project that employs the RDS technique.

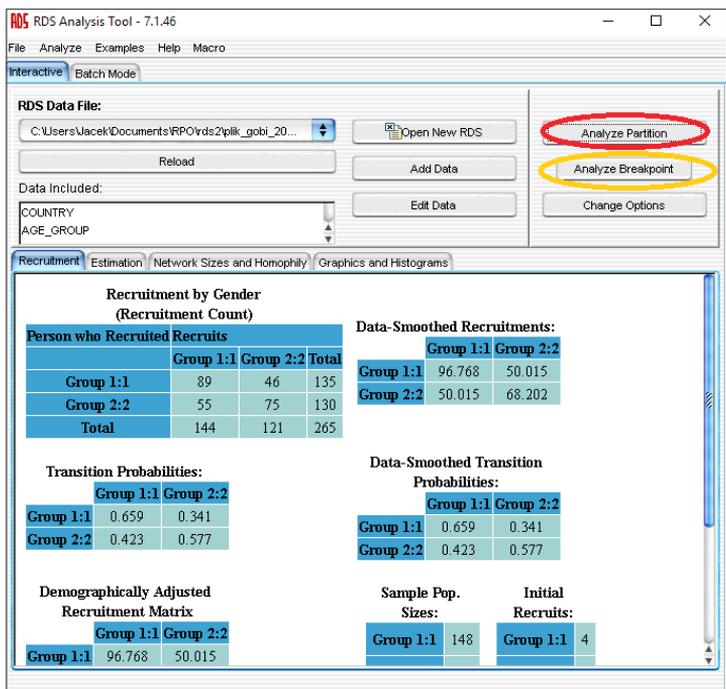
The pilot survey also demonstrated the importance of a positive response to the survey among the surveyed community. For this reason, attention should be paid to the atmosphere in the research centre, and interviewers should be trained to cultivate respondents' positive engagement.

Fieldwork should be concluded once the demographic variables of the sample reach equilibrium or when the maximum number of interviews has been conducted (as stipulated in the terms of reference). The next section describes in detail the methods for analysing data, although it should be noted that data should be analysed multiple times through the fieldwork.

## STEP 8: ANALYSING DATA AND REPORTING

The next step is to analyse the data obtained in the survey and report the findings. It is essential that dedicated software be used for projects employing the RDS technique, including RDS-Analyst and the RDS Analysis Tool (RDSAT). This software is available free-of-charge and enables users to calculate the coefficients and weights of variables specific to RDS surveys. However, there are many issues related to the use of this software to consider, in particular the selection of appropriate weights and socio-demographic variables. Official hate crime data should also be analysed in the same way. The RDSAT software is recommended for monitoring the progress of fieldwork and calculating the number of waves required to achieve equilibrium for each demographic variable. In the pilot survey conducted in Poland, equilibrium was reached at around the fifth wave of respondents for the majority of socio-demographic variables monitored (gender, age, occupational status and size of the household). The dichotomous variable of respondents' experience of hate crime was also monitored, and reached equilibrium at the first wave. The strong result for this variable validated the decision to determine seed profiles based on socio-economic status. It also meant that people who had been targeted by hate crime recruited both those who had experienced and those who had not experienced such crimes, and vice versa.

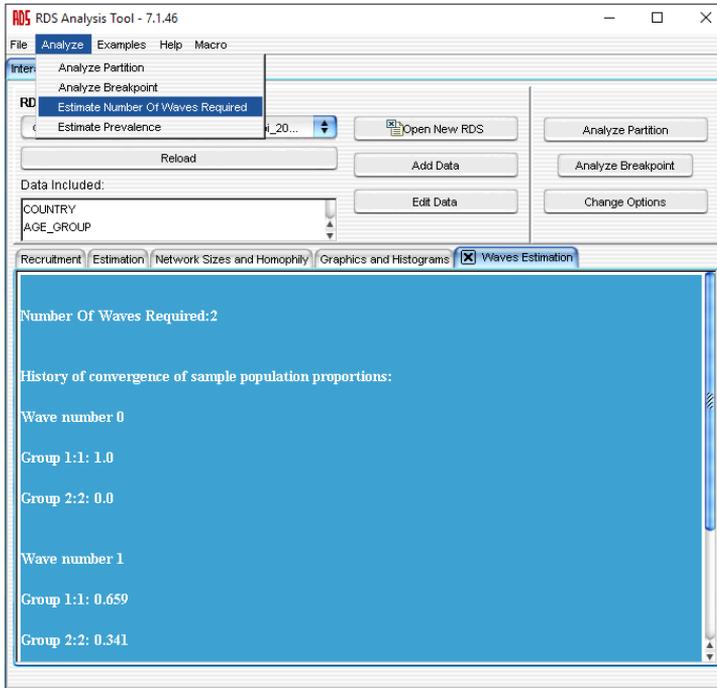
The RDSAT software and a detailed manual can be downloaded at: <<http://www.respondentdrivensampling.org/main.htm>>. The software requires that a file containing appropriate data be prepared, including the identity of the respondent, size of the respondent's network within the surveyed population, the number of a respondent's coupon, the number of coupons provided to recruit others and the demographic variables to be monitored during the fieldwork.



Above: A screenshot of the RDSAT software.

To analyse whether a particular variable has achieved equilibrium, click on the “Analyze partition” button (circled in red) for nominal or discrete variables, such as gender or experience of hate crimes, or on the “Analyze breakpoint” button (circled in orange) for continuous variables, such as income or size of the household. It is worthwhile analysing the coefficients “Homophily  $H_x$ ” and “Affiliation Homophily ( $H_a$ )” in the “Estimation” sheet. “Homophily  $H_x$ ” measures a respondent’s preference for connections within their own group and ranges between  $-1$  (completely heterophilic) and  $+1$  (completely homophilic). For example, if males exclusively recruit other males, this would be an example of complete homophily. “Affiliation Homophily ( $H_a$ )” is a homophily measure based on the equilibrium proportions, and takes into account the differential network sizes across groups.<sup>22</sup>

22 Michael Spiller, Chris Cameron and Douglas Heckathorn, *RDS Analysis Tool 7.1: User Manual*, (Cornell University, 2012), <[http://www.respondentdrivensampling.org/reports/RDSAT\\_7.1-Manual\\_2012-11-25.pdf](http://www.respondentdrivensampling.org/reports/RDSAT_7.1-Manual_2012-11-25.pdf)>.



Above: A screenshot of the RDSAT software.

It is then possible to check if the variable being analysed has achieved equilibrium by clicking on “Analyze” and then “Estimate Number of Waves Required”. If the sample has reached the number of waves indicated, then it can be concluded that the variable has achieved equilibrium. However, it is recommended that equilibrium be achieved not only across the entire sample but for each recruitment chain generated by a particular seed. If all the variables applied to ensure that the research is representative of the surveyed population reach equilibrium, fieldwork is complete.

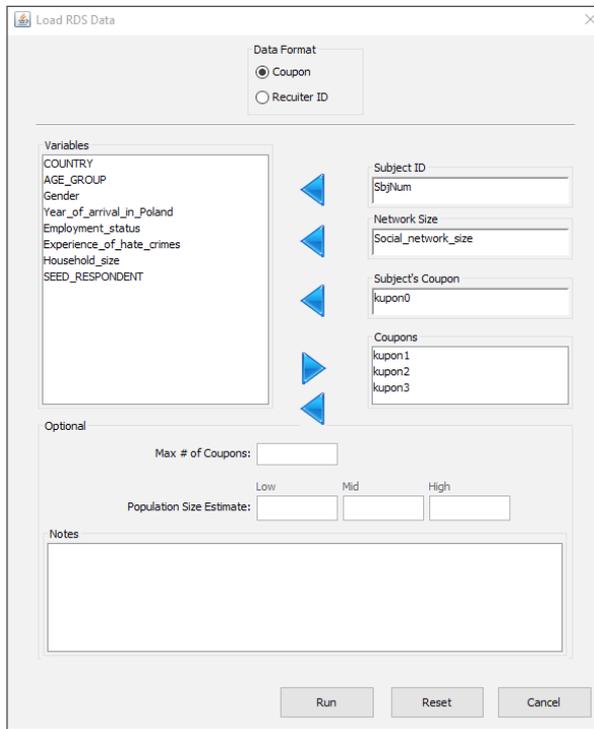
Once the fieldwork is complete, the seed respondents’ seeds should be removed from the sample. This is because respondents acting as seeds have a higher probability of being included in the sample than other members of the surveyed population. This can be done manually by deleting the relevant rows in the data spreadsheet to remove the seed respondents. The control sum in the file (circled in red in the screenshot below) should then be corrected so that the cell above the table displays the number of respondents minus the seeds. Not correcting the control sum will make further analysis impossible.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	RDS													
2	273	3	-1				COUNTRY	AGE_GRO	Gender	Year_of_a	Empl	Experienc	Househol	SEED_RESP
3	59151899	20	-1	A544	A545	A543	1	1	2	2017	6	2	1	1
4	59327719	5	A543	A562	A563	A564	1	1	2	2017	2	2	4	2
5	59327720	3	A544	A553	A554	A555	1	1	2	2017	7	2	3	2
6	59327721	5	A571	A576	A574	A575	1	1	1	2017	15	1	1	2
7	59327722	1	A573	A580	A581	A582	1	1	1	2016	15	2	3	2
8	59327723	10	A586	A585	A583	A584	1	1	1	2017	7	2	1	2
9	59327724	7	A565	A594	A593	A592	1	1	2	2017	6	2	2	2
10	59355874	6	A555	A559	A560	A561	1	2	1	2017	3	2	4	2
11	59355875	20	A553	A565	A566	A567	1	1	2	2017	5	1	0	2
12	59355876	20	-1	A571	A572	A573	1	1	1	2017	3	1	4	1
13	59355877	1	A572	A577	A578	A579	1	1	1	2016	2	2	4	2
14	59355878	5	A545	A586	A587	A588	1	1	2	2017	3	1	1	2
15	59355879	10	A567	A589	A590	A591	1	1	2	2017	6	1	1	2
16	59446879	4	A575	A600	A599	A598	1	1	2	2017	6	2	1	2
17	59447889	15	A574	A619	A620	A621	1	1	2	2017	7	2	4	2
18	59449324	5	A576	A616	A617	A618	1	1	1	2017	7	2	2	2
19	59450571	5	A598	A603	A602	A601	1	1	2	2017	6	1	1	2
20	59452107	8	A599	A595	A596	A597	1	1	2	2017	7	2	1	2
21	59453275	5	A600	A604	A605	A606	1	1	2	2017	6	2	0	2
22	59455785	90	A616	A609	A608	A607	1	1	2	2017	3	2	4	2
23	59456619	1	A618	A610	A611	A612	1	1	2	2017	5	1	4	2
24	59457690	2	A617	A613	A614	A615	1	1	1	2017	7	1	3	2
25	59490964	6	A611	A539	A540	A538	1	1	2	2017	7	2	1	2
26	59492592	1	A612	A535	A536	A537	1	1	1	2017	6	1	1	2
27	59494106	3	A615	A533	A532	A534	1	1	2	2017	6	2	1	2

Above: A screenshot of a data spreadsheet.

Unfortunately, the RDSAT application only allows RDS-I and RDS-II weights to be computed. These weights are used much less frequently than the SS analytical weight, which also takes into account the size of the population studied. The SS estimator requires that the approximate size of the surveyed population be estimated. To compute the SS estimator, other freely available software must be installed – RDS Analyst.

A detailed manual on installing and using the RDS Analyst is available at: [http://wiki.stat.ucla.edu/hpmrg/index.php/RDS\\_Analyst\\_Install](http://wiki.stat.ucla.edu/hpmrg/index.php/RDS_Analyst_Install). Before beginning the analysis, the data file must be prepared (as for the RDSAT program but without cells for control sums) or the RDSAT file uploaded directly. The main program menu includes a link to the user manual and a video tutorial.



Above: A screenshot of the RDS Analyst software.

The RDS Analyst software requires users to indicate the respondent's identity ("Subject ID"), the size of the respondent's social network ("Network Size"), the respondent's coupon number, and the coupons received by the respondent to recruit other respondents ("Coupons"). It also requires an estimate of the size of the surveyed population.



## STEP 9: INTERPRETING FINDINGS

The basic principle guiding the interpretation of the data should be an attempt to compare the results obtained with official data. Depending on the list of crimes drawn up under the previous steps and introduced to the questionnaire, additional analyses may be necessary to compare the data.

The results of the RDS survey are primarily representative for the cities in which the study was carried out and its surroundings. Hence, the official data should be available for the regions in which the study was conducted.

After calculating the number of hate crimes recorded in the official data for the population covered by the study within the regions in which the survey was conducted, the number and types of crimes experienced by the respondents should be analysed. Next, the size of the studied populations should be estimated and proportionally generalized to the surveyed population. It is possible to use two types of calculations:

- estimating the number of victims of hate crime - determine what percentage of respondents experienced a given crime and then multiply that by the estimated population size; and
- estimating the number of hate crimes cases - sum up the number of hate crimes experienced by respondents and then extrapolate that to the size of the surveyed population.

It is recommended to apply both of these approaches. If the level of detail of official data allows, researchers should estimate the number of all hate crimes, but also for each particular type of crime.

## Estimating the scale of hate crimes<sup>23</sup>

For the pilot survey in Poland, data on the size of the population came from the Office for Foreigners, which also approved the estimates presented on the frequency of hate crimes.

The findings showed that in 2016 and 2017, in the Mazovian Voivodeship, official criminal proceedings were held in only 31 cases while the survey estimated a total of 4,300 hate crimes against Muslims and persons originating from Arab countries. In the same region, official proceedings were initiated in 47 out of an estimated total of 3,000 hate crimes cases against persons originating from sub-Saharan Africa.

In the Lesser Poland Voivodeship, only 18 criminal proceedings were conducted in cases of hate crimes against Ukrainians, while the total number of such crimes was estimated to be 44,000 using the RDS survey technique.

Further analysis of the survey results also provided estimates of the number of particular types of hate crimes committed.

The results obtained may be many times higher than the official data. However, it should be underlined that this difference depends on the type of crimes covered by the study. Usually, less serious crimes, such as verbal threats, are less frequently reported than heinous crimes, such as physical assaults causing severe injuries.

It is also worth calculating the frequency of reporting hate crimes to law enforcement agencies. The results of the survey can become an important element in discussions of the under-reporting problem. If there are victimization surveys of the scale of reporting of common crimes, the results of such surveys can be compared with the data obtained from the RDS survey to show that hate crimes are more often under reported.

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23 “Survey on the nature and scale of unreported hate crimes against members of selected communities in Poland”, *op. cit.*, note 2.

## STEP 10: PRESENTING RESULTS

It is important that the results of the study be presented publicly, ideally with the active participation of high-level officials. Representatives of the national, regional and local authorities should also be present, as well as those representing civil society organizations, law enforcement and academia. It is also recommended that information about the RDS technique be presented at the beginning of the meeting, since most participants will be unfamiliar with it and may, therefore, question the scientific character of the study.

During the presentation, it is worth reporting on the frequency of particular hate crimes and providing an estimate of the total number by multiplying the findings to reflect the size of the population being studied. It must be noted, however, that the figures obtained are likely to be representative of the city or region in which the surveyed population resides. The presentation should also compare the survey results with official data on hate crimes collected by the relevant authorities.

The public presentation event should also give the floor to representatives of the communities covered by the study. This will not only help to reinforce the survey's findings, but will be an opportunity to demonstrate gratitude to those who were instrumental in raising awareness of the study among their communities and in identifying and recruiting the initial respondents.

## CONCLUDING REMARKS

Although RDS surveys necessitate special preparation and greater resources than required for classic surveys, they have been found to be the most effective method for conducting quantitative research on hard-to-reach populations. The prior analysis of official data and hate crime legislation helps to ensure that the research project fully reflects the hate crime context in the country. It also helps to generate public debate and discussions and facilitate the development of evidence-based policy to better address hate crime. Conducting such an ambitious research project can also help to establish co-operation with civil society organizations, academia and other institutions working to address hate crime. Finally, such projects send a clear signal to vulnerable communities that efforts are being made to tackle such crimes, including by enhancing understanding of the problem and tackling under-reporting through the use of innovative research methods.

