

# HO/ADR UK Feasibility Study

## Lead Academic(s): Grant Specification

### Summary

ADR UK and the Home Office are looking to appoint an academic or a group of academics to conduct a feasibility study into using the new Ministry of Justice-Department for Education (MoJ-DfE) linked dataset for evaluation of early interventions for violence/crime prevention. More specifically, the applicant(s) should explore how well the dataset can be used to create robust matched control groups<sup>1</sup>.

This study will utilise the newly linked MoJ-DfE dataset. Similar matching was done in 2015 and was used to produce [a report](#) on educational backgrounds of young offenders. The current dataset includes data from Prison, Probation, Offender Assessment System (OASys), Courts, Police National Computer, National Pupil Database, Looked-After-Children (LAC) and Children In Need (CIN) and covers variables such as demographics, offending data, school exclusions and children in care. The full dataset will consist of about 15 years' worth of NPD data (approximately 20 million individuals), but when only looking at educational records that have a match with offending data, the total is around 5 million individuals. This feasibility study will form part of the wider research strategy to make better use of administrative data.

Applicants should note that the dataset is still in the development stage. The Data Sharing Agreement was signed in early September 2019 and the data should be ready to use early 2020. As there is no hard deadline on the data being ready for analysis and no confirmed timings for data access approval processes, applicants should note that a degree of flexibility in terms of start dates will be expected.

### Background: ADR UK and the HO Feasibility Study to Explore the Robustness and Readiness of the MoJ-DfE Linked Dataset for Evaluation Purposes

Since 2014/15 there has been a sustained increase in serious violence offences in England and Wales. A systematic review of early interventions conducted for [the Serious Violence Strategy](#) in 2018 found early interventions to be the most promising approach to violence prevention. However, the review also found that there is not enough robust evidence to establish what works in England and Wales. Subsequently, a total of £200 million was granted to [the Youth Endowment Fund](#) (YEF) over the next 10 years to support early intervention to prevent

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<sup>1</sup> Meaning that variables in the dataset are sufficient in both predictive ability and quality to control for confounding variables in relation to offending

violence and build the evidence base. This complements the government's action to support the police to tackle the immediate challenge of knife crime.

Evaluation of what works to prevent youth offending is key to YEF, for which a reduction in proven violent offending is the primary long-term goal. In the shorter-term, measuring educational markers associated with offending, such as exclusions and truancy (see Serious Violence Strategy 2018, Chapter 2) will be essential to indicate progress towards the primary goal (violent offending). As such, the MoJ/DfE linked dataset is the perfect tool for measuring both short- and long-term outcomes for YEF and other early interventions for violence and crime preventions (e.g. Early Intervention Youth Fund and Violence Reduction Units).

For YEF and other early intervention funds to be spent most effectively and to fill the gap in the evidence base, the Home Office aims to develop a consistent evaluation method that allows robust measurement and comparison of the effectiveness of different interventions. This feasibility study will help to identify the best approach to measuring outcomes for the Youth Endowment Fund and other early interventions.

Administrative Data Research UK (ADR UK) is one of The Economic and Social Research Council's (ESRC) most important investments. ADR UK aims to facilitate the linking of data held by different parts of government and enable safe and secure access for accredited researchers to these newly joined-up datasets.

Please note that ADR UK is commissioning this project on behalf of Home Office Analysis and Insight (Crime and Policing Analysis), who will oversee the project.

## Project Overview and Grant Deliverables

This project will consist of two key stages:

### **1. Assess the reliability of the data included in the linked dataset.**

1.1. During this step we expect the researcher to liaise with MoJ/DfE colleagues to better understand the dataset. This step will predominantly assess the reliability of variables in the linked dataset. Where possible the quality of the match will also be assessed, however this will be based on pseudo-anonymised data so it is worth noting that full checks may not be possible. MoJ and DfE will be able to share information on matching rules and matching success rates with the researcher(s). We envisage that the appointed academic should assess the six core dimensions of data quality (completeness, uniqueness, timeliness, validity, accuracy and consistency), including issues on missing data (and how this will be dealt with in the current study). The Home Office is open to alternative suggestions for conducting the variables check.

1.2. The researcher(s) will be expected to produce a data dictionary and a report with realistic and practical recommendations (if any) for improving the quality of the

linked dataset, aided by ongoing conversations with the Home Office and MoJ/DfE.

**Grant Deliverables:** a data dictionary, along with an assessment of the quality and robustness of the variables (where not previously reported), and a report with recommendations (if any) for improving the quality of the linked dataset.

**2. Conduct a feasibility study to test if the dataset can be used to create matched control groups.**

2.1. The Home Office want to see if the dataset can be used to robustly match individuals to their most similar peers to create matched control groups (independent of the programme design) to be used in systematically evaluating crime prevention interventions. We anticipate this including the following two steps:

2.1.1. Identify which variables in the dataset correlate with general offending and violent offending specifically (regression analysis); and

2.1.2. Develop a matching method based on step 1 utilising Propensity Score Matching (PSM) or other matching approaches based on educational variables.

The Home Office remains open to alternative proposals from academics that meet the research need.

2.2. The researcher(s) will be expected to write a feasibility report that should include a proposed, standardised method for creating control groups or recommendations for improving or expanding this MoJ/DfE dataset to make this possible.

2.3. The Home Office will work with the researcher(s) to disseminate the findings to key stakeholders including, but not limited to, MoJ, DfE and the Youth Endowment Fund, who fund and evaluate interventions.

**Grant Deliverable:** a feasibility report with recommendations for future use of the dataset for evaluation purposes.

### Person Specification

The researcher(s) will be required to work with a range of stakeholders including MoJ, DfE and Home Office analysts to deliver this project in a way that supports the aim to develop a consistent evaluation method of the outcomes for the Youth Endowment Fund and other early interventions.

The researcher(s) will be expected to:

1. Liaise with analysts from DfE and MoJ to develop a detailed assessment of data reliability and a metadata dictionary that is 'road tested' with potential researchers and would be available to anyone accessing the dataset via the ONS Secure Research Service and the Justice Micro Data Lab
2. Use statistical modelling techniques (e.g. regressions) to assess which variables are predictive of crime (outcome variable)
3. Use variables in the dataset to create matched control groups using Propensity Score Matching
4. Recommend a standardised method for future use and/or next steps to improve the quality of control groups (e.g. linking of another dataset)
5. Write a report summarising all the activities undertaken and described below, recommendations and guides for future use of the dataset

The Home Office is open to alternative methodological proposals relating to the development of control groups and encourage innovative and robust approaches.

The successful candidate will need to demonstrate the following:

#### **Essential Criteria**

1. Experience of working with large/complex linked datasets
2. Experience of assessing data quality and reliability
3. Understanding and experience of statistical modelling (particularly, regression analysis) and quasi-experimental design for evaluation (particularly, Propensity Score Matching and Difference in Difference)
4. Understanding of the criminal justice system and of crime prevention
5. Experience of working with government or large-scale panel datasets

#### **Desirable Criteria**

1. Experience of linking large and complex datasets
2. Knowledge of educational risk factors for crime
3. Understanding of the ADR UK programme, its objectives and vision
4. Experience of working in a governmental context

#### **Working arrangements**

You can be based anywhere in the UK, however, working remotely will be subject to Office for National Statistics (ONS) accreditation. You could also work from one of the ONS 'Safe Settings': physical labs in London, Newport (South Wales), Titchfield, Belfast and Glasgow.

You will be required to attend 6 meetings in London and establish and maintain close working relationships with the Home Office and ADR UK via fortnightly phone calls and regular email correspondence. You will be expected to deliver a presentation at the end of the project to present your work and findings.

The Home Office will have an analyst who will project manage the work from the Home Office's perspective.

## Eligibility

It is our expectation that you will apply through a UK research organisation eligible for ESRC funding for the duration of the post. For further details please see the eligibility requirements in the Research Funding Guide.

(<http://www.esrc.ac.uk/funding/guidance-for-applicants/research-funding-guide/>)

Applicants should note that if they want to work in collaboration with other academics, we will only accept joint applications. These should outline your individual roles and involvement in the project as well as the appointed lead.

## Security and other checks

Researchers are required to submit the necessary data access requests to MoJ and DfE as soon as the project commences. The request for approval should be submitted up to two weeks after the grant has been awarded or a letter of intent issued. We anticipate the process will then take around four weeks to complete. Home Office analysts will provide the relevant support in this process.

Furthermore, current MoJ and DfE policy for access to the linked data extract via the ONS Secure Research Service (ONS SRS) is that, before access to the data can be provided, the requester will need to:

- provide MoJ and DfE with a copy of a 'basic' [disclosure and baring service \(DBS\)](#) certificate that is no more than 2 years old
- sign an individual declaration form to confirm that they abide by the MoJ/DfE data sharing agreement
- be accredited under the [ONS accredited researcher scheme](#)

To ensure a swift start to the project, we encourage you to attend the ONS accreditation course on Friday 28 February. Places have been pre-booked in anticipation of your attendance<sup>2</sup>.

## Funding

ADR UK welcomes bids from a single academic or a consortium. The work will commence end of February/beginning of March 2020 and we expect the analysis to take approximately four months. Please note that data access approval and accreditation processes will also form part of the project, hence the project from its inception to its end will take approximately five to six months. The Home Office expects the successful applicant(s) to be closely involved in the approval process. This should be considered by applicants in their proposed budget.

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<sup>2</sup> We have secured two places on the course initially.

The overall limit available for the post will be £100,000 at 100 per cent of full economic cost (fEC). The maximum funding requested from ADR UK (the ESRC contribution) will be up to £80,000. The remaining balance must be guaranteed by the applicant(s) Research Organisation.

Eligible costs are set out in the [ESRC Research Funding Guide](#). All resources, travel and subsistence required to enable your proposed approach should be detailed in the costings template and are to be included in the budget. All resources must be fully justified, indicating the calculations upon which this figure is based. The applicants should ensure their bid offers value for money and their proposal is proportionate to the research need.

## How to apply

The closing date for proposals is 24 January 2020. Please send applications as detailed below to [hub@adruk.org](mailto:hub@adruk.org) and title your email 'Home Office/ADR UK Feasibility Study' when submitting your application.

Your proposal should include the following:

### 1. Skills and experience

#### 1.1. Cover Letter

Outlining relevant expertise and experience and addressing the essential and desirable criteria in the person specification (including any information on current security clearances held and on whether you are an ONS accredited researcher already), and why you are interested in conducting this research project (two pages maximum using Calibri Size 12).

#### 1.2. CV

If a joint application is submitted this will need to include the CVs of all applicants (two pages maximum).

#### 1.3. Record of relevant previous work

One page maximum per applicant using Calibri Size 12. Please note that the page limit refers to one applicant. If a joint application is submitted by three researchers, the limit for this section is three pages.

### 2. Methodology and approach

How you will undertake the required work, including proposed methodologies (two pages maximum using Calibri Size 12).

### 3. Timelines

The proposed timeline for the project including key milestones. As the timings related to the data linking exercise are not confirmed, the applicants should provide a week by week plan from the project inception rather than refer to specific dates.

### 4. Total Costings (Annex A)

To include at least the items covered in the table below. Any pricing submission exceeding the maximum budget ceiling will be rejected.

<b>MoJ/DfE approval process</b>	The required approval process in order to get access to the MoJ-DfE linked dataset. We are awaiting confirmation from MoJ and DfE on the exact process, but it includes providing an outline of the proposed work.
<b>ONS accreditation process</b>	The required ONS accreditation process to get access to the MoJ-DfE linked dataset
<b>Independent quality checks</b>	Conducting the first phase of the project
<b>Control group feasibility study</b>	Conducting the second phase of the project
<b>Presentation of findings</b>	Prepare and presentation of project and findings
<b>Preparation and attendance of meetings</b>	Attending six face-to-face meetings with the Home Office and dialling-in for fortnightly phone calls
<b>Travel costs</b>	Travel costs for six meetings and a presentation (London)

## 5. Justification of Resources

Explaining why the resources requested are appropriate. It should not simply be a list of resources required (two pages maximum using Calibri Size 12)

## 6. Head of Department Statement

Confirming support for your application and where applicable details about the potential fit the department's wider researcher/knowledge exchange programme (1 page max) – applicants are kindly requested to discuss the implication for other commitments with their institution on application, to enable take-up as soon as possible.

The successful applicant(s) will need to upload their application to the Joint Electronic System (Je-S) after the interview stage. There will be some additional sections to complete at this point which will be publicly available on Gateway to Research. These will include: Summary, Impact Summary and Academic Beneficiaries of up to 4,000 characters each. ADR UK will be on hand to support this process.

## Assessment

Applications will be reviewed by a panel comprising academics and government officials. All applications will be assessed against the essential and desirable criteria, as described above, and on their individual merit and value for money demonstrated.

Applicants will be shortlisted, and shortlisted candidates will be invited for interview. You will be expected to give a five-minute presentation during this interview, but more details on this will be given closer to the time. Interviews will take place in London.

## Timetable

- Closing date for applications: 24 January 2020
- Results from the shortlisting stage: 5 February 2020
- Interviews: 11 February 2020
- Decisions, acceptance, Letter of Intent and start Je-S application: 14 February
- Start: End of February
- ONS Accreditation Course: 28 February

## Further enquiries

Enquiries relating to the application process and the role should be addressed to:

- Karen Powell, Senior Strategic Research and Impact Manager, ADR UK
- Email: ([Karen.powell@esrc.ukri.org](mailto:Karen.powell@esrc.ukri.org) or [hub@adruk.org](mailto:hub@adruk.org))
- Telephone: 01793 759087 or 07584 113587