

RESEARCH PROTOCOL

Evidence Review: Poverty and Youth Violence

UCL

Caitlin Clemmow, Bettina Rottweiler, Zoe Marchment,
Paul Gill, Phil Doherty, Amber Seaward and Cigdem Unal

Evidence Review: Poverty and Youth Violence

Caitlin Clemmow, Bettina Rottweiler, Zoe Marchment, Paul Gill, Phil Doherty, Amber Seaward, Cigdem Unal

Department of Security & Crime Science
UCL

June 2023

Proposal Summary

To understand how poverty impacts upon youth violence, a 6-month program of research consisting of two work packages is proposed. The first will systematically review the literature to synthesise evidence for **how** poverty relates to youth violence, and **when and for whom** poverty is **relevant** to engaging in violence. The second will apply the same systematic review methodology to scope interventions that aim to reduce poverty and impact upon youth violence, including a quality assessment of the evidence.

Background

Background

Poverty is correlated with high levels of violence (Gennetian et al., 2012). However, most people who grow up in poverty will not go on to engage in criminal or violent behaviour. Valdez et al. (2007; pg. 595) suggest that this is because any link between poverty and crime and violence “involves a complex interrelationship among mediating individual and community-level variables.” In other words, experiencing poverty might be one of many risk factors for crime and violence which **interact** to drive crime and violence – poverty in and of itself is unlikely to be the sole driver. How poverty impacts upon youth crime and violence is not well understood. Evidence suggests there may be a relationship, but the nuances of **when** poverty is relevant to children and young people’s involvement in serious crime and violence is unclear. The purpose of this 6-month program of work is to systematically review and evaluate the evidence for any relationship between poverty and youth crime and violence (WP1), and to scope interventions on poverty which impact upon youth crime and violence to identify the potential for a future systematic review (WP2).

The following section details the methodology and rationale of both of these packages separately.

Work Package 1. A systematic literature review & meta-analysis of the links between poverty and youth violence

Background

In the first instance, the review seeks to determine the nature of the relationship between poverty and youth violence. A narrative synthesis will be facilitated by content analysis of both qualitative and quantitative research, extracting themes relevant to the research questions to identify the strength and nature of the relationship. Second, we will identify the key mediators and moderators of any relationship – in other words, the *mechanisms* via which poverty impacts upon youth violence. Finally, the narrative synthesis will be complemented by a meta-analysis of quantitative research to determine the magnitude and nature of the overall effects. The parameters of the meta-analysis will be defined after the research team have scoped the literature landscape.

Objectives & Review Questions

WP1 will address the following research questions:

1. What is the strength and nature of the relationship between poverty and violence?
 - a. How much does the extent and persistence of poverty matter across childhood for predicting involvement in violence?
 - b. What is the relationship between poverty at individual level and area level in predicting violence?
 - c. Does poverty have a different relationship with crime and violence depending on the specific offence type?
2. What are the key mediators and moderators of this relationship?
 - a. What are the key factors that affect the relationship between poverty and youth violence?
 - b. Do these factors interact differently for different types of children/families?

Method

Defining the scope

The first step is to agree a definition of poverty which reflects people's experiences of it in the UK. To generate a definition of poverty for both WP1 and WP2, we propose a

collaborative process between UCL and key stakeholders, facilitated by YEF. Virtual focus groups, surveys, and iterative feedback will be employed to elicit expertise about how poverty is experienced in the UK, alongside lived experience. Stakeholder input will be sought from subject matter experts in poverty, practitioners working in service delivery, young people living in poverty, and YEF's youth advisory board. This will ensure the review is tailored to meet the requirements of the project and wider stakeholders, by engaging a range of views and lived experiences.

Developing the search protocol

Most often, evidence for synthesis is identified by search protocols designed by research teams. A series of keyword and search terms are refined to produce a search protocol to guide literature searches for systematic review. However, identifying search terms in this way may be subject to bias. For instance, researchers will be limited by the extent of their own knowledge and understanding of a topic – no one can know everything. As such user-generated search terms may be limited in that they are subject to bias.

An alternative is to use automated learning, alongside human judgements. Given the breadth of the literature to be reviewed in WP1, we will implement automated text-mining and keyword co-occurrence networks alongside expert judgements to generate comprehensive keyword search terms for the search protocol. The quasi-automated approach is conducted in *R* (an open-source programming software) via the *litsearchr* program and has been applied extensively in systematic reviews on various topics to generate search protocols. A further advantage is the speed at which search strategies can be developed. This can take as little as 2 hours, compared to the typical 17 – 34 hours to assemble a search strategy. Once generated, the search strategy will also be subject to expert-review (beyond the research team) and refined as necessary.

Pre-registration

The review will be registered with Prospero. Prospero is an international prospective register of systematic reviews. Prospective registration is important to ensure open and replicable scientific practice across different types of reviews. It is also useful to ensure against unnecessary duplication.

Database searches

Literature searches will be conducted across relevant electronic databases such as Web of Science, Medline, PsychINFO, Pro Quest, and International Bibliography of the Social Sciences (IBSS). Terms used can be found in Annex 1.

Grey literature searches are an important source of information for systematic reviews. Particularly in this space, there are many examples of relevant work ongoing which would not necessarily be captured by scientific database searches. Therefore, it is necessary to

attend equally to devising a grey literature search protocol. Three different searching strategies will be incorporated: 1) grey literature database searches, 2) customised Google search engine queries, and 3) targeted website searches.

The grey literature search strategy is described in Annex 2.

Inclusion criteria, sifting, and data extraction

References obtained from database and grey literature searches will be subject to quasi-automated sifting via ASReview. ASReview is a tool which uses machine learning (active learning) to facilitate more efficient systematic review by ‘learning’ from human inputs about which texts are more relevant to your inclusion criteria than others. After adequate learning the texts are organised by (likely) relevance. There will be a point where the research team can determine with some confidence that all remaining texts are irrelevant, and therefore do not require manual review. ASReview reports significantly reducing manual sifting, therefore greatly reducing the time it takes to conduct a systematic sift on title and abstract.

Inclusion/exclusion criteria are as follows. The study:

1. Reports an explicit aim of understanding how poverty impacts upon youth crime and violence
2. Meets the agreed upon definition of ‘poverty’
3. Meets the agreed upon definition of ‘crime and violence’
4. Meets the definition of ‘youth’. Samples with a mean age over 18 years will be excluded. For longitudinal studies at least one measurement must be between ages 5 – 18 years old to be included
5. Is empirical (either qualitative or quantitative). Single case studies will be excluded
6. Participants are from a comparable country to the UK. Include UK, Canada, Australia, New Zealand, W Europe. Exclude USA and developing countries
7. Is available in English

Once search results are identified, full text searches will be conducted. Eligible references will be imported into EPPI 4 Reviewer – a web-based tool for managing and conducting systematic reviews.

Risk of bias assessment

A validated risk of bias tool will be applied to all included studies. This is a form of critical appraisal used in systematic reviews to assess the quality of included studies. The features of included studies are examined to identify if any aspects of the design or conduct of the study could lead to unreliable or misleading results. A final judgement can be made about whether to include or exclude a study, or quality assessment can be used to identify studies

which may be more or less reliable. Which tool to use will be determined by the nature of the studies we extract. In some instances, it is appropriate to modify a validated risk of bias tool to meet a specific project's needs – we may elect to do so.

Narrative synthesis

Developing & applying the coding framework. Content analysis applies a coding framework to qualitative data to extract common themes and then examine the relationships between them. The coding framework will be guided by the research questions and will be generated by deductively coding a random dip sample of texts. The team will reconcile their codes to generate a coding framework to be applied to the remaining included studies. We will implement double coding (more than one person codes the same text) of a subsample to assess and quantify inter-rater reliability and ensure quality control. Several iterations are often required before no additional codes emerge. The final coding framework will be applied to all remaining texts resulting in a matrix of themes for configurative synthesis.

Synthesis. Textual narrative synthesis will be applied to all included studies. Textual narrative synthesis is useful for synthesising evidence across different types of studies, i.e., quantitative, and qualitative. Initially, deductive codes will be organised around the review questions, however inductive coding will extract relevant themes which may emerge naturally during the review process. EPPI-Reviewer 4's line-by-line PDF coding functionality will be used to organise qualitatively coding. As in previous stages, we will implement double coding of a random dip sample of texts to assess and quantify interrater reliability and ensure quality control.

Meta-analysis

Given the complexity of the literature, including understanding the multiple dimensions of poverty and its various outcomes, the scope of the meta-analysis will be defined once we have systematically reviewed the literature. Once all included studies have been indexed, the research team will evaluate different options for a meta-analysis to be presented to YEF for consideration. A process of collaborative decision-making will ensure any meta-analysis addresses stakeholder needs and achieves the most robust outcome. Once agreed, the meta-analysis will proceed roughly as follows, subject to modification once we determine the exact research questions:

Measures of effect. For correlational studies, correlation coefficient r and will be subsequently transformed to Fisher's Z to approximate a normal sampling distribution and achieve a more stable variance across different values (Borenstein et al., 2009). For experimental studies, for differences between means, Cohen's D will be coded and subsequently transformed to Fisher's Z to approximate a normal sampling distribution and achieve a more stable variance across different values (Borenstein et al., 2009).

Data extraction. Five investigators will extract study information and effect sizes to create a codebook in Excel. All coders received data extraction and data coding training and received detailed codebooks and coding guidance documents. Investigators will code independently. Inter-rater reliability assessment will be conducted. A minimum of 90% agreement will be achieved. Disagreements will be resolved by consensus. Where a consensus cannot be met, the PI will review all available information and make the final decision.

Data synthesis. We expect to find non-independence of effect sizes due to studies including several outcome measures in one study. Therefore, we aim to run a multilevel meta-analysis in R using the package "metafor" rather than a random-effects (or fixed effects) meta-analysis. If we only find a small number of studies ($k < 4$), we will consider using robust variance estimation with small-sample adjustment using the R package "robumeta" instead of the multilevel approach. Robust variance estimation also accounts for non-independence of effect sizes.

Heterogeneity. Heterogeneity will be assessed using the Tau squared statistic, the Cochran's Q (and its associated χ^2 p value) as well as the I^2 statistic.

Publication Bias. We will assess publication bias with PET-PEESE and selection models.

Work Package 2. A scoping review of interventions that aim to reduce poverty and impact upon youth crime and violence

Background

WP2 will run concurrently to WP1, focussing particularly on scoping the evidence for interventions that aim to reduce poverty *and* impact upon youth crime and violence. A systematic review should focus on a single intervention or approach. Hence, we propose a broader scoping review, which identifies the different types of interventions, assesses the quality of the evidence, and provides recommendations on the feasibility of future systematic reviews. A scoping review is an exploratory type of review which systematically maps the literature on a particular topic. They are the ideal tool to determine the size, scope, and coverage of an evidence base. A similarly systematic process of literature search and identification will be applied to identify relevant studies. A quality assessment with a formal risk of bias tool will provide an easily interpretable assessment of the evidence base. Included studies will be organised into an accessible evidence and gap map to visually summarise the evidence base.

Objectives & Review Questions

WP2 will address the following research questions:

1. What is the scope and range of interventions that aim to reduce poverty and impact upon crime and violence?
2. What is the quality of the evidence?
3. Is there scope and direction for future systematic reviews?

Method

Database searches

WP2 will follow the same methodology as WP1 to systematically identify studies to be included in the scoping review, though additional searches will be conducted to ensure coverage. These are detailed in Annex 3.

Grey literature search strategy is described in Annex 2.

Inclusion criteria, sifting, and data extraction

Inclusion criteria are proposed as follows. The study:

1. Reports on an intervention with an explicit aim of reducing poverty
2. One reported outcome of the intervention is crime and violence (not limited to youth)
3. Meets the agreed upon definition of 'poverty'
4. Meets the agreed upon definition of 'primary outcome' (see YEF primary outcomes framework, [here](#))
8. Target population is not exclusively 0 – 5 year olds, or older adults (UN defines older adult as 60 years and above)
5. Is empirical (either qualitative or quantitative). Single case studies will be excluded
6. Participants are from a Western country (exclude developing countries)
7. Is available in English

Quality assessment

A pre-existing risk of bias tools for evaluating interventions will be applied to all included studies. As previously, we may adapt an established tool to meet the specific requirements of the project.

References

Gennetian, L. A., Sanbonmatsu, L., Katz, L. F., Kling, J. R., Sciandra, M., Ludwig, J., ... & Kessler, R. C. (2012). The long-term effects of Moving to Opportunity on youth outcomes. *Cityscape*, 137-167.

Valdez, A., Kaplan, C. D., & Curtis Jr, R. L. (2007). Aggressive crime, alcohol and drug use, and concentrated poverty in 24 US urban areas. *The American journal of drug and alcohol abuse*, 33(4), 595-603.

Borenstein, M., Cooper, H., Hedges, L., & Valentine, J. (2009). Effect sizes for continuous data. *The handbook of research synthesis and meta-analysis*, 2, 221-235.

Annexes

Annex 1: Grey literature search strategy

Grey literature includes non-academic sources, such as government or third sector reports, which may not be identified by traditional database searches. It's important to conduct additional grey literature searches to ensure comprehensive coverage of the relevant literature.

The following grey literature databases will be searched:

- [OpenGrey](#) A multidisciplinary European database which includes theses, reports, conference proceedings and official publications
- [OAlster](#) Cross searches all university repositories worldwide
- [PsycEXTRA](#) Technical and government reports, conference papers, newsletters, magazines, videos, press releases, and consumer brochures in the field of psychology, behavioural sciences and health
- [Social Care Online](#) Legislation, government documents, practice and guidance, systematic reviews, research briefings, reports and journal articles relating to social work and social care
- [Social Science Research Network](#) Abstracts, working papers and articles relating to social science research

Additionally, backwards and forwards citations of included studies should generate any additional grey literature. Further, the following websites will be hand searched using the inclusion/exclusion criteria discussed above.

Websites

Arigatou International <https://arigatouinternational.org/>
 ATD Fourth World
[Australian Databases: Kidsmatter Intervention Database](#) (now seems to be beyond blue)
 Barnardo's www.barnados.org.uk
[Best Evidence Encyclopaedia \(BEE\)](#)
[Best Evidence Synthesis Iteration \(Education Counts\)](#)
[Blueprints for Healthy Youth Development](#)
 Bristol Poverty Institute - <https://research-information.bris.ac.uk/en/organisations/bristol-poverty-institute>
[California Evidence-Based Clearinghouse for Child Welfare](#)
 Campbell Collaboration Systematic Reviews <https://www.campbellcollaboration.org>
[CASEL](#)
 Centre for Analysis of Social Exclusion <http://sticerd.lse.ac.uk/case>
 Centre for Analysis of Social Policy www.bath.ac.uk/casp
 Centre for Economic and Social Inclusion www.cesi.org.uk
[Centre for Excellence and Outcomes in Children and Young People](#)
[Centre for Homelessness Impact](#)
 Centre for Housing Policy www.york.ac.uk/inst/chp
 Centre for Poverty and Inequality Research <https://www.sussex.ac.uk/cpir/>
 Centre for the Study of Poverty and Social Justice
<https://www.bristol.ac.uk/sps/research/centres/poverty/>
 Child Poverty Action Group www.cpag.org.uk
[Child Trends US](#)
 ChildFund Alliance
 Children in Scotland www.childreninscotland.org.uk
[Cochrane Database of Systematic Reviews;](#)
[Early Intervention Foundation Guidebook](#)
[Education Endowment Foundation Projects](#)
[ESDC Evaluation Reports, Government of Canada](#)
 EuroChild <https://www.eurochild.org/>
[Evidence Based Practices \(European Platform for Investing in Children\)](#)
[Evidence for ESSA \(Centre for Research and Reform in Education at John Hopkins\)](#)
[Evidence for Policy and Practice Information and Coordinating Centre \(EPPI-Centre\)](#)
[Evidence-Based Practices Project \(Suicide Prevention Resource Center\)](#)
[Evidence4Impact \(E4I\);](#)
 Family Policy Studies Centre www.apsoc.ox.ac.uk/fpsc
 Global Coalition to End Child Poverty <http://www.endchildhoodpoverty.org/>
[Health Evidence \(McMaster University\)](#)
[Home Visiting Evidence of Effectiveness \(U.S. Department of Health & Human Services\)](#)
[HomeVEE](#)
 Households in Conflict Network <https://hicn.org/working-papers/>

<http://coalition4evidence.org/>

<https://discovery.ucl.ac.uk/cgi/search/advanced>

<https://www.arnoldventures.org/work/>

<https://www.eif.org.uk/report/what-works-in-enhancing-social-and-emotional-skills-development-during-childhood-and-adolescence>

<https://yjresourcehub.uk/>

[Incredible Years Library](#)

Institute for Social and Economic Research www.iser.essex.ac.uk

Institute of Education Social Science Research Unit www.ioe.ac.uk

Institute of Fiscal Studies www.ifs.org.uk

Institute of Public Policy Research www.ippr.org.uk

[Investing in Children: Dartington Social Research Unit \(now known as Dartington Lab\)](#)

Joseph Rowntree Foundation www.jrf.org.uk

London Met Lab: Poverty & Deprivation <https://www.londonmet.ac.uk/about/london-met-lab/poverty-and-deprivation/>

[Mental Health Compass EU Database of polices and good practice](#)

[Ministry of Social Development, New Zealand, Evaluation Report website](#)

National Centre for Social Research www.natcen.ac.uk

[National Council for Crime Prevention \(Sweden\)](#)

[National Dropout Prevention Center and Network](#)

[National Institute on Drug Abuse \(NIDA\)](#)

[National Research Council UK.](#)

New Policy Institute www.npi.org.uk

OECD

[Office of Adolescent Health](#)

[Office of Justice Programmes Criminalsolutions.gov](#)

OPHI <https://ophi.org.uk/.ioewebsserver.ioe.ac.uk/ioe>

[PennState Clearinghouse for Military Family Readiness](#)

Personal Finance Research Centre www.ggy.bris.ac.uk/research/pfrc

Plan International

Policy Studies Institute www.psi.org.uk

Poverty Alliance <https://www.povertyalliance.org>

Poverty Research Network - <https://www.gla.ac.uk/research/az/poverty/>

PSE: Poverty and Social Exclusion <https://www.poverty.ac.uk>

Poverty, Inequality & Inclusive Growth Research Group

<https://www.kcl.ac.uk/research/poverty-inequality-and-inclusive-growth-research-group>

Project Oracle- Synthesis studies e.g. [crime](#), [RCTs](#), [Education/NEETs](#)

[Promising Practices Network \(RAND\)](#)

[Public Policy Institute for Wales](#)

Research Circle for the Study of Inequality and Poverty

<https://www.qmul.ac.uk/busman/research/research-centres/cgr/research-circle-for-the-study-of-inequality-and-poverty-rqip/>

Save the Children www.savethechildren.org.uk

Scottish Poverty and Inequality Research Institute

<https://www.gcu.ac.uk/aboutgcu/academicschools/gsbs/research/spiru>

Social Disadvantage Research Centre <http://www.apsoc.ox.ac.uk/sdrc>

Social Exclusion Unit www.socialexclusionunit.gov.uk

Social Policy Research Unit www.york.ac.uk/inst/spru

[Social Programs That Work](#)

[Substance Abuse and Mental Health Services Administration \(SAMHSA\)](#)

[The European Monitoring Centre for Drugs and Drug Addiction \(EMCDDA\)](#)

Townsend Centre for International Poverty Research www.bris.ac.uk/poverty

[UK College of Policing](#)

[UK Home Office](#)

Unicef

[University of York National Health Service Centre for reviews and dissemination](#)

[UQ database](#)

Urban Institute <https://www.urban.org/tags/poverty>

[US Office of Juvenile Justice and Delinquency Prevention](#)

[Washington State Institute for Public Policy \(WSIPP\)](#)

[What Works Centre for Children's Social Care](#)

What Works Centre for Crime Reduction <https://www.college.police.uk/research/what-works-centre-crime-reduction>

[What Works Centre for Wellbeing](#)

[What Works Clearinghouse](#)

[What Works Scotland](#)

[WHO programmes and projects.](#)

World Vision

Youth Endowment Fund <https://youthendowmentfund.org.uk>

[Youth.gov](#)

Annex 2- Search terms

Violence

(abus* OR aggress* OR "antisoci* behavio?r" OR "externali?s* behavio?r*" OR arrest OR assault OR bully* OR burglary OR crime OR criminal OR delinqu* OR devian* OR exploit* OR firearm OR gang OR gun OR homicid* OR "justice involv*" OR "justice system" OR offend* OR perpetr* OR prison* OR violence OR violent OR weapon OR knife OR knives OR robbery OR murder OR vandal* OR recidivis* OR rape OR "sexual harass*" OR theft OR steal* OR shoplift* OR fraud OR "stop and search" OR "gender-based violence" Or stabbing OR reoffend* OR unlawful OR convict* OR "hot spot" OR court OR lawbreaking)

AND

Youth

(adolesc* OR boys OR child* OR girls OR juvenile OR minor OR student OR teen* OR young OR "early years" OR "school-age" OR youth)

AND

Poverty

("adverse childhood experiences" OR "built environment" OR "social class" OR depriv* OR disadvantage* OR dispar* OR earn* OR "child benefit*" OR econom* OR financ* OR "universal credit" OR "employment and support allowance" OR "personal independence pay*" OR "food insecurity" OR hardship OR homeless OR housing OR impoverish* OR income OR money OR "neighbourhood characterist*" OR "neighbourhood condit*" OR "neighbourhood context" OR "neighbourhood disadvantage" OR "neighbourhood effect" OR "neighbourhood factor" OR "material resources" OR "social disorgan*" OR "social exclusion" OR "socio-econom*" OR sociodemograph* OR socioeconomic* OR unemploy* OR welfare OR employ* OR destitu* OR salar* OR debt OR cash OR money OR "standard* of living" OR "living standard" OR "cost of living" OR expense* OR "free school meals" OR poverty OR inequality)

Annex 3- Search terms intervention inclusions

UNIVERSAL/PLACE-BASED

("universal income" OR "universal basic income" OR "guaranteed income" OR "basic income" OR "Mincome" OR regenerat* OR "free school meals" OR "universal credit" OR "child benifit*" OR "food bank" OR "affordable housing" OR grassroots OR "neighbourhood enterprise" OR "community enterprise" OR "social enterprise" OR "local economy" OR "Local Exchange Trading System*" OR "community currenc*" OR "community-led housing" OR "community housing" OR "community asset*" OR "built environment" OR "housing benefit*" OR "housing voucher*" OR "food voucher*" OR "social action" OR "poverty deconcentration" OR revitali?* OR "community improvement" OR "community development" OR "area development" OR gentrif* OR "housing assistance" OR "economic development")

AND

Intervention

(evaluat* OR intervent* OR longitudin* OR prevent* OR program OR "protective factor" OR "public health" OR "random* control* trial" OR service OR support OR system OR project OR "multi-agency" OR multiagency OR campaign OR strategy OR initiative OR assistance OR alleviat* OR mitigat* OR promot* OR upgrad*)



youthendowmentfund.org.uk



hello@youthendowmentfund.org.uk



[@YouthEndowFund](https://twitter.com/YouthEndowFund)

The Youth Endowment Fund Charitable Trust

Registered Charity Number: 1185413
