THE CAMPBELL COLLABORATION

2014 CAMPBELL COLLABORATION COLLOQUIUM
BETTER EVIDENCE FOR A BETTER WORLD
16–19 JUNE
QUEEN’S UNIVERSITY BELFAST

#C2Belfast

www.campbellcollaboration.org/next_colloquium
We are delighted to welcome you to the Campbell Colloquium, held this year on the campus of Queen’s University Belfast.

The Campbell Collaboration is an idealistic network with a straightforward mission: to improve lives. The path to that goal is far from straightforward, however. Our primary role is to provide better evidence of the impact of a given intervention or programme, through the rigorous examination of existing studies. We see this as an important step towards better informed decisions, which in turn can deliver better outcomes to people relying on services.

The Lancet has called our Colloquium “a radical and impressive gathering that promised new ways to address urgent issues in health and social care.” We feel that this week’s programme lives up to that billing. Plenary sessions address how to identify the questions that need to be addressed; how to build global capacity for evidence-based approaches; how to use science and research to improve social care, policing and education; and how to tackle poverty more effectively. Workshops and panels are designed to allow discussion of many parts of the evidence cycle, including problem formulation, user engagement and the perennial challenge of bringing findings to those who need them. As in previous years, we place a special emphasis on the methods of research synthesis, an area in which the Collaboration can point to high-level international expertise.

The members of the Scientific Programme Committee, chaired by Gary Ritter and coordinated by Sean Grant, had a key role in putting this together, and we owe a special thanks for their work.

We are excited to come to Belfast, a vibrant city with a rich and sometimes difficult history that in recent decades has seen a major transformation. The origins of this change are complex, but it also owes something to a shared desire to build a better future, and to the ability to talk about divisions and differences. In this sense, the story of Belfast can also be an inspiration for our own gathering.

We are extremely grateful to the Centre for Effective Education at Queen’s University Belfast for hosting the Colloquium this year (HYPERLINK www.qub.ac.uk/cee). We are particularly grateful to Paul Connolly and his local organising committee from the Centre, Kelly Gaw, Laura Dunne, and Sarah Miller, for all of their support and hard work in making the Colloquium possible.
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## Conference at a Glance

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<td>Youth Gangs in Low-and Middle-Income Countries: A Systematic Review of</td>
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<td>Predictors and Interventions. Angela Higginson.</td>
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<td>Risk Factors for Child and Adolescent Conduct Problems and Youth Crime</td>
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<td>and Violence in Low-and Middle-Income Countries. Joseph Murray and</td>
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<td>Preventing the Educational and Psychosocial Consequences of Poverty:</td>
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<td>A Multinational Meta-analysis. Sabrina Maichrowitz.</td>
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<td>What Works Clearinghouse Computer-Assisted Reading Interventions: Can</td>
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<td>Technology Help Students Score Higher in Reading? Andrei Streke and</td>
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<td>Evidence for the Effectiveness of Educational Interventions: The</td>
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<td>Quality of Meta-analyses. Monica Melby-Lervág.</td>
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<td><strong>Chair: Hugh Waddington</strong></td>
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<td>Management on Deforestation and Poverty in Low and Middle Income</td>
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<td>Countries: A Systematic Review. Cyrus Samii.</td>
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<td><strong>Chair: Mark Petticrew</strong></td>
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<td>A tale of two reviews. Policy and Program Lessons from two Reviews and</td>
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<td>Process Evaluations of Feeding Programs for Children in Developing</td>
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<td>Countries. Elizabeth Kristjansson.</td>
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<td>16.00-16.30</td>
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## Thursday 19 June

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| **Session 4a** | **Chair:** Emily Tanner Smith  
**Discussant:** Ian Shemilt | **LAN 01/052**  
Lanyon Building  
1st Floor          |
| Sub No:    | **Incorporating Evidence from Quasi-experimental Studies into Systematic Reviews (Evidence Cycle 4)**  
An Interactional Initiative to Develop Methods Guidelines to Support the Appropriate Inclusion of Evidence. **Ian Shemilt.**  
Assessing Risk of bias in Quasi-experimental Studies. **Hugh Waddington.**  
Synthesizing Evidence for bivariate and Partial Effects from Quasi-experimental Studies. **Ariel Aloe.** | **Whitla Hall** |
| **Session 4b** | **Discussant:** John Westbrook | **Whitla Hall**   |
| Sub No:    | **Knowledge Translation and Implementation: Moving from Evidence to Recommendations**  
Implications of the External Validity Debate for Systematic Reviews: a Perspective from the Economic Literature on Class Size Effects. **Seán M. Muller.**  
Secular Trends and Evaluation of Complex Interventions: the Rising Tide Phenomenon. **Yen-Fu Chen.**  
Systematic Reviews in Social Care Guidance Development: the Experiences of the NICE Collaborating Centre for Social Care. **Kristin Liabo.** | **LAN 01/052**  
Lanyon Building  
1st Floor          |
| **Session 4d** | **Chair:** Mark Petticrew  
**Discussant:** Sandra Wilson | **Whitla Hall**   |
| Sub No:    | **Linking primary evaluation research with systematic reviews**  
A New Reporting Guideline for Trials of Social and Psychological Interventions: **CONSORT-SPI. Paul Montgomery and Geraldine Macdonald.**  
Prioritisation of Topics for New and Updating Systematic Reviews: the Past and Future in the Cochrane Collaboration. **Ed Wilson and James Thomas.** | **College Park 01/037**  
Whitla Hall          |
| 10.15-10.45 | **Coffee/Tea**                                                         | **Whitla Hall**               |
| 10.45-11.45 | **Plenary 5**  
**Kitty Stewart and Kerris Cooper:** Combatting Poverty | **Whitla Hall**               |
| Lunch      | **Lunch**                                                              |                              |
| 11.45-12.45 | **Lunch**                                                              |                              |
### Thursday 19 June (continued)

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<td>Chair: Gary Ritter</td>
<td>Taking Stock of Systematic Reviews on Teaching Evidence-Based Health Care (Ebhc): Overview of Systematic Reviews. T. Young.</td>
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<td>Discussant: Sean Grant</td>
<td>Developing Logic Models for a Systematic Review on E-Learning to Increase Evidence-Based Health Care Competencies. Anke Rohwer.</td>
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<td><strong>Session 5c</strong></td>
<td><strong>International Development Reviews</strong></td>
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<td>Community Monitoring Interventions to Curb Corruption and Increase Access and Quality in Service Delivery in Low -and Middle-income Countries: A Systematic Review. Laura Carella.</td>
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<td>Chair: Brandy Maynard</td>
<td>The use of Qualitative Synthesis to Inform the Large-scale Implementation of Evidence-based Parenting Programmes. Mairead Furlong.</td>
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<td>Discussant: Aron Shlonsky</td>
<td>Continuity of Care and the Psychosocial Development of Children and Youth Living in Residential Settings: a Mixed-methods Systematic Review. Karianne Thorine Hammarston and Mairead Furlong</td>
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<td><strong>Brief Address:</strong> Professor Patrick Johnston, President and Vice-Chancellor, Queen’s University Belfast</td>
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<td><strong>Jerry Lee Lecture:</strong> Peter Neyroud Using Science to Improve Policing</td>
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<td><strong>Closing Remarks from C2</strong></td>
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Map of Belfast

Key
- Crescent Town House
- Dukes Hotel
- Europa Hotel
- Holiday Inn Express
- Ibis Queen’s Quarter
- Malone Lodge Hotel
- Wellington Park Hotel
This year at the C2 Colloquium in Belfast, our Methods Coordinating Group will be offering two separate series of training workshops for participants: Introduction to Campbell Systematic Review Methods and Applied Topics in Campbell Systematic Review Methods. Both workshop series will take place over the first two days of the Colloquium, June 16-17.

Introduction to Campbell Systematic Review Methods
These introductory level workshops are appropriate for audiences with minimal or no experience in systematic reviewing, or those who simply need a refresher course. Participants can attend the introductory workshops individually or attend all five as a series in Campbell systematic review methods.

Problem Formulation
This workshop will review the types of research questions that are appropriate for Campbell systematic reviews, provide instruction on how best to construct research questions for systematic reviews, and discuss some of the issues Campbell authors may face at the problem formulation stage of a systematic review. Sean Grant will lead this workshop. Mr. Grant is former Managing Editor of the Education Coordinating Group of the Campbell Collaboration and a Doctor of Philosophy Student in the Department of Social Policy and Intervention at Oxford University.

Literature Searching
This workshop will review best practices of comprehensive literature searches and literature retrieval in Campbell systematic reviews, discuss common issues that arise during literature searches, and review key concepts from the Campbell Collaboration information retrieval guide. Karianne Hammerstrøm will lead this workshop. Ms. Hammerstrøm is a Managing Editor and Information Retrieval Specialist at the Campbell Collaboration.

Coding
This workshop will offer guidance on how to extract information from primary studies when conducting a systematic review, review different approaches to study quality coding, and discuss common issues that arise during the coding phase of a systematic review. Sandra Wilson, Ph.D., will lead this workshop. Dr. Wilson is the Editor of the Education Coordinating Group of the Campbell Collaboration and Associate Director of the Peabody Research Institute at Vanderbilt University.

Calculating Effect Sizes
This workshop will cover how to calculate the most common effect size metrics typically encountered in a Campbell review (e.g., standardized mean difference, odds ratio, and risk ratios), providing guidance on how to estimate or approximate effect sizes based on different types of primary study data, and discuss common problems that may arise when calculating effect sizes. David Wilson, Ph.D., will lead this workshop. Dr. Wilson is Co-Chair and Editor of the Crime and Justice Coordinating Group of the Campbell Collaboration, and Professor of Criminology, Law & Society at George Mason University.

Introduction to Meta-analysis
This workshop will cover introductory meta-analysis methods for synthesizing effect sizes, demonstrate software available for conducting meta-analyses, and review common issues that may arise when conducting a meta-analysis for a Campbell Review. Jeffrey Valentine, Ph.D., will lead this workshop. Dr. Valentine is a former Editor of the Methods Coordinating Group of the Campbell Collaboration and Associate Professor in Educational and Counseling Psychology at the University of Louisville.

Applied Topics in Campbell Systematic Review Methods
These workshops are appropriate for audiences with a basic understanding of systematic review methods, as well as more advanced participants. Participants can attend the applied workshops individually, or attend all five as a series on applied methods issues in Campbell systematic reviews.
2014 Colloquium Workshops

**Moderator Analysis**
This workshop will review methods for assessing effect size moderators in a meta-analysis, covering analysis of variance and meta-regression models, and the strengths and limitations of various moderator analysis methods. Jeffrey Valentine, Ph.D., will lead this workshop. Dr. Valentine is a former Editor of the Methods Coordinating Group of the Campbell Collaboration and Associate Professor in Educational and Counseling Psychology at the University of Louisville.

**Network Meta-Analysis**
This workshop will provide an introduction to network meta-analysis, including a demonstration of software resources available to review authors. Dimitris Mavridis, Ph.D., will lead this workshop. Dr. Mavridis is a Statistician and Lecturer in Mathematics and Statistics in Education at the University of Ioannina.

**Robust Variance Estimation**
This workshop will provide an overview of the use of robust standard errors for analyzing dependent effect size estimates, including a review of software resources available to review authors. Emily Tanner-Smith, Ph.D., will lead this workshop. Dr. Tanner-Smith is Editor of the Methods Coordinating Group of the Campbell Collaboration, and Research Assistant Professor of Human & Organizational Development at Vanderbilt University.

**Individual Participant Data Meta-Analysis**
This workshop will provide an introduction to methods for conducting individual participant data meta-analysis, and common issues that arise when conducting this type of analysis. Terri Pigott, Ph.D., will lead this workshop. Dr. Pigott is Editor of the Methods Coordinating Group of the Campbell Collaboration, Professor and Associate Dean of Academic Programs at Loyola University Chicago.

**Multilevel Meta-Analysis**
This workshop will review methods for conducting multilevel meta-analysis, including a discussion of software resources available to review authors, and common issues that may arise when conducting this type of analysis. Joshua Polanin, Ph.D., will lead this workshop. Dr. Polanin is Managing Editor of the Methods Coordinating Group of the Campbell Collaboration and Post Doctoral Fellow at the Peabody Research Institute at Vanderbilt University.

**Knowledge Translation and Implementation Workshop**
For the first time, Campbell's recently re-named Knowledge Translation and Implementation (KTI) Coordinating Group (formerly the Users Group) will also offer a two-part KTI workshop, June 17, which will:

1. Bring together practitioners, policy makers and decision makers with intermediary organizations that produce and/or use KTI focused systematic reviews,
2. Discuss the various components required for an effective knowledge translation plan for systematic reviews
3. Discuss approaches to systematic reviews that promote KTI outcomes
4. Share and discuss current best practices in planning for high quality implementation from knowledge produced by systematic reviews
Dr. Mona Nasser is the Clinical Lecturer in Evidence Based Dentistry in Peninsula Dental School, Plymouth University and affiliated researcher with the Cognition Institute (Plymouth University). She is the founder and one of the co-convenors of the Cochrane Agenda and Priority Setting Methods Group and the Author representative on the Steering Group of the Cochrane Collaboration. Before joining the dental school, she worked as a research associate and methodologist in the Department of Health Information at the German Institute for Quality and Efficiency in Health care, the German equivalent of the National Institute for Health and Care Excellence (NICE) in the UK. Her current research interest focuses on systematic reviews, research priority setting methodology and clinical decision making in dental environment. She qualified DDS (Doctorate in Dental Surgery) from the Shahid Beheshti University of Medical Sciences in Iran. She has also done a MSc in Dental Public Health with King’s College of London/University of London.

Dr. Sandy Oliver is Professor of Public Policy and Deputy Director of the Evidence for Policy and Practice Information and Coordinating Centre (EPPI-Centre). She came to systematic reviewing as a service user and has since accrued extensive experience of systematic reviews that incorporate qualitative and quantitative research findings. She leads the EPPI-Centre’s support for systematic reviews about health systems and international development, which includes supporting teams elsewhere who are new to systematic reviews. She is an editor of the Cochrane Consumers and Communication Review Group, and a member of the WHO Expert Advisory Panel on Clinical Practice Guidelines and Research Methods and Ethics. Her particular interest is the range of perspectives that policy makers, practitioners and the public bring to reviews and the implications this has for framing review questions and choosing appropriate review methods.

Professor Paul Connolly is Professor of Education and Head of the School of Education at Queen’s University Belfast. He is internationally recognized for his research on: diversity and inclusion in early childhood; evaluating the effectiveness of educational programmes and interventions; and quantitative methods and statistical analysis in education. He is: founding Director of Una: The Global Learning Initiative on Children and Ethnic Diversity; founder and former Director of the Centre for Effective Education; Chair of the Improving Children’s Lives initiative at Queen’s; Co-Chair of the Campbell Collaboration Education Review Group; and founding editor of Effective Education. For Further Information see: www.paulconnolly.net.

Dr Howard White is the Executive Director of 3ie, co-chair of the Campbell International Development Coordinating Group, and Adjunct Professor, Alfred Deakin Research Institute, Deakin University. His previous experience includes leading the impact evaluation programme of the World Bank’s Independent Evaluation Group and before that, several multi-country evaluations. Other experience includes leading large projects like the World Bank published report African Poverty at the Millennium, and developing the overall direction of poverty training for 2,000 DFID staff at country offices around the world. Howard has worked extensively on development-related issues in countries across Africa and Asia and has published over 60 papers in internationally refereed journals and several books, focusing on aid effectiveness and poverty reduction. He is Managing Editor of the Journal of Development Studies and the Journal of Development Effectiveness. He has taught at the Institute of Social Studies in The Hague and the Institute of Development Studies at the University of Sussex, and continues to engage worldwide via workshops and training opportunities for policymakers on topics related to development effectiveness and impact evaluation.

Tony Hunter is the Chief Executive of the Social Care Institute for Excellence (SCIE). Previously Mr. Hunter worked as a frontline social worker, a senior hospital social worker and a training and development officer before moving to Barnsley where he ran day and domiciliary services. In 1986 Tony became principal officer of research and service development at the UK’s leading children’s charity Barnardo’s. He then moved to Price Waterhouse management consultants, where he worked on a range of health and social care projects in Britain and abroad. In 1995 Tony became Director of Social Services, Housing and Public Protection with the new unitary East Riding of Yorkshire Council. In 2003 he joined Liverpool City Council to assist in the recovery of its social services functions. Before joining SCIE, Tony was Chief Executive of North East Lincolnshire Council, where was passionate about promoting the area’s resurgence. He was awarded the OBE in the Queen’s Birthday Honours List in 2010, for services to social care. Tony is a Board member of Scope, and sits on various national health and social care groups.
Dr. Kitty Stewart is Associate Professor of Social Policy at the London School of Economics and Political Science, and Research Associate at the Centre for Analysis of Social Exclusion (CASE). She has a PhD in Economics from the European University Institute in Florence. Her research interests lie in the impact of income poverty and inequality on individuals and on society at large, and in the effectiveness of different policy solutions. Recent publications include Towards a More Equal Society? Poverty, Inequality and Policy 1997-2010 (edited with John Hills and Tom Sefton, Policy Press 2009) and An Equal Start: Providing High Quality Early Education and Care for Disadvantaged Children (edited with Ludovica Gambaro and Jane Waldfogel, Policy Press 2014).

Kerris Cooper is a researcher at the Centre for Analysis of Social Exclusion (CASE) and a PhD student in the Department of Social Policy at the London School of Economics and Political Science. Her research interests are in poverty and social exclusion. She has previously conducted research into people’s experiences of stigma at the Jobcentre and worked on Reading the Riots, a joint research project with the LSE and the Guardian newspaper into the causes of the UK riots in 2011. Her current research is focused on the relationship between economic hardship and parenting.

Peter Neyroud is a Resident Scholar at the Jerry Lee Centre for Experimental Criminology in the Institute of Criminology at the University of Cambridge, as well as a retired British police officer. Peter Neyroud joined Hampshire Constabulary in 1980, rising through the ranks within Hampshire to Detective Superintendent. He was appointed Assistant Chief Constable of West Mercia Constabulary in 1998 and reached Deputy Chief Constable two years later. He was appointed Chief Constable of Thames Valley Police in 2002. In January 2006 he took up the post of CEO (Designate) within the National Policing Improvement Agency. He retired from the police service in December 2010. In his 30 year policing career he pushed through significant changes, many in controversial areas such as ethics, human rights and firearms. Peter Neyroud was awarded the Queen’s Police Medal for services to the police in 2004 and is a widely published author on policing. He was appointed Commander of the Order of the British Empire (CBE) in the 2011 Birthday Honours.
5. Title: Taking Stock of Systematic Reviews on Teaching Evidence-based Health Care (EBHC) Overview of Systematic Reviews

Introduction
We used systematic approaches to gather, evaluate and organise evidence from systematic reviews on the effects of teaching evidence-based health care (EBHC), considering factors such as type of teaching and target audience. Our aim was to improve access to the evidence and to inform EBHC teaching. The work is relevant to teaching evidence-based practice more generally.

Methods
We included systematic reviews which evaluated educational interventions for teaching EBHC, to compare the effects of different strategies. We searched for publications from 1990 to April 2013 in seven databases with no language restrictions. Two reviewers independently selected studies, extracted data and evaluated methodological quality using the ‘assessment of multiple systematic reviews’ (AMSTAR) instrument.

Results
Sixteen completed systematic reviews evaluated educational interventions of varying duration, frequency and format (lectures, tutorials, journal clubs, workshops, online courses and integrated methods) to teach various components of EBHC. Outcome assessment tools varied within and between reviews.

The median AMSTAR score for included reviews was 5 (range 3 to 10). Aspects which scored poorly included lack of comprehensive searches, lack of lists of included and excluded studies, inappropriate methods to combine studies, not using scientific quality appropriately in formulating conclusions, not assessing publication bias and not declaring conflicts of interest.

Collectively, 171 studies were included in the reviews, relating to a total of 81 separate studies, of which 37 are included in more than one review. Therefore, we also examined the findings of each study, to organize and present a clear picture of the review level findings, while avoiding double counting of studies, which would have given extra weight to studies used in more than one review.

The evidence showed that multifaceted, clinically integrated interventions, with assessment, led to improvements in knowledge, skills and attitudes. These interventions improved critical appraisal skills and integration of results into decisions, and improved knowledge, skills, attitudes and behaviour amongst practicing health professionals.

Conclusions
Teaching and learning strategies to enhance EBHC competencies need to focus on implementing multifaceted clinically integrated approaches. Future studies and systematic reviews should focus on minimum components for multifaceted interventions, assessment of EBHC knowledge, attitude, skills and behaviour in the medium to long term using validated assessment tools, and how best to implement these interventions. Adherence to rigorous methodology and good reporting are important to ensure future studies contribute to evidence informed decisions. Our findings should be considered by those teaching evidence-based practice outside health care.

Author: T Young, Centre for Evidence-based Health Care, Faculty of Medicine and Health Sciences, Stellenbosch University

Additional Authors: A Rohwer, J Volmink and M Clarke

6. Title: What Works for Smallholder Farming in Africa: A Systematic Review?

Agricultural interventions for smallholder farming remain paramount as efforts aimed at improving agricultural practices in Africa are continually being made by various stakeholders. Smallholder farming is integral to livelihood and food security in the continent and as such it is imperative that adequate attention is given to the effectiveness of farming interventions. The use of systematic review methodology on smallholder agriculture is valuable as it informs both national and international agencies on the interventions that work and do not work. The evidence of such findings can contribute towards policy and key decisions that relate to small-scale farming. Such evidence can also be used to improve and strengthen current farming systems and practices employed by smallholders. This paper presents the findings of a Campbell systematic review of the effectiveness of agricultural interventions on smallholder farming in Africa.
Our systematic review included a review of overlapping systematic reviews, a systematic map of relevant impact evaluations and a focused systematic synthesis of evidence. The target population was smallholder farmers and the geographical scope was limited to Africa. The review of systematic reviews focused on smallholder agriculture interventions which were identified through academic databases and systematic review library searches. This then formed the basis of a systematic map of impact evaluations on four core interventions, which were training, innovation and new technology, agricultural infrastructure and finance interventions. The outcomes that were assessed were yield, productivity, innovation and new technology, food security and income. Our review of reviews and systematic map informed discussions with our funders and advisory group of key stakeholders about where to focus our in-depth review.

This in-depth review discusses findings of a focused systematic synthesis of evidence on the effectiveness of innovation and new technology, and training interventions in promoting outcomes of food security and household income. This final stage of our work used traditional methodology for effectiveness reviews, including comprehensive searching, structured screening, and the use of Cochrane's Risk of Bias tool for non-randomized studies.

In this presentation, we report the findings of both our narrative synthesis and statistical meta-analysis. This paper concludes with a discussion on the strengths and weaknesses of the synthesis methods applied in this review and potential implications for policy, practice and research.

Author: Prof Thea de Wet and Ms Natalie Rebelo Da Silva Centre for Anthropological Research, University of Johannesburg

Additional Authors: Hazel Zaranyika (hazelz@uj.ac.za) Ruth Stewart, Yvonne Erasmus, Evans Muchiri, Marcel Korth, Laurenz Langer, Nolizwe Madinga and Nicola Randall

16. Title: Introducing the Collaboration for Environmental Evidence

Founded in 2008, the Collaboration for Environmental Evidence (CEE) supports the conduct of systematic review (SR) on questions of concern in the environmental sector. To date it has a Library of over 60 SRs and new protocols and SRs are published in its open access journal ‘Environmental Evidence’. The CEE is establishing a global presence with the formation of a network of Centres and works with a range of commissioners and stakeholders interested in developing an evidence base to support decision making on environmental issues. Recent SR questions have been interdisciplinary in terms of outcome of interest with both environmental and social measures being sought, frequently within the area of international development. This interdisciplinarity has forged links with the Campbell Collaboration and, most recently, led to the joint registration (C2/CEE) of some SRs. The development of appropriate evidence synthesis methodology for these challenging interdisciplinary questions is a major objective for CEE and we welcome stronger links with C2 to forge a common view of how to develop work in this area. This talk will describe some of the recent CEE SRs, the development of the network of Centres and the plans for updating our guidance for Review Teams.

Author: Andrew Pullin (presenter = Ruth Stewart) Collaboration for Environmental Evidence (CEE)

Additional Authors: Teri Knight, Rob Richards, Sif Johansson and other CEE leads

22. Title: How to Use R for Meta-Analysis

As a research synthesis, meta-analysis has been widely utilized across many disciplines of science. With the widespread use of meta-analysis among researchers, a number of software packages have been developed and made available. A number of commercial packages currently available, such as MetaWin and Comprehensive Meta-Analysis (CMA) are dedicated to meta-analysis, while other software packages such as SAS, SPSS, and Stata have also been expanded to include meta-analytic features; Stata in particular offering many add-in capabilities. However, most of this software is not free, and some of it costs quite a lot to use.

Free software includes RevMan and R, available from the Cochrane Collaboration and the R project (http://www.r-project.org), respectively. Among these, the better quality free alternative is R, which is a general purpose statistical package and has been equipped with several meta-analysis programs, including meta, rmeta, and metafor. While meta and rmeta packages currently provide limited capabilities for conducting meta-analyses, the metafor package provides very comprehensive features for conducting meta-analysis.
In this panel, I would like to present a demonstration of how to use several R packages in conducting meta-analysis, focusing primarily on the *metafor* package, which includes such features as moderator analysis, publication bias analysis, and various plot functions. The purpose of this presentation is to provide a general overview of the *metafor* package so that researchers can freely and effectively use it to conduct their own meta-analyses.

**Author:** Sung-Dong Hwang, Kyungpook National University

### 24. Title: Implications of the External Validity Debate for Systematic Reviews: A Perspective from the Economic Literature on Class Size Effects

The increasing use of randomized evaluations in economics has been controversial, not least because of premising strong policy claims on the results. While much has been achieved in understanding the econometric limits to inference from randomized evaluations, there has been notably less enthusiasm among practitioners to address or acknowledge these. One critical issue that has been alluded to, but rarely interrogated, is that of external validity: are estimated effects informative about likely programme effects in different populations? Systematic evaluations of multiple studies across different contexts may be valuable in addressing this question and many proponents of these methods therefore argue that criticism ought to be answered through replication in other samples.

An analysis of constraints to external validity suggests a more subtle position: replication and systematic evaluation can help but only under certain conditions. Specifically, the replication-evaluation approach relies on adequate knowledge of the functional form of causal relationships and stability in these relationships of interest over geographical contexts and time. The extent to which the latter property is likely to be satisfied may vary dramatically depending on the field of study and research question: immune system reactions to vaccinations or the effect of parasites on lethargy may be largely reliable across contexts, whereas the efficacy of educational interventions may be entirely context specific. I illustrate this point with the example of studies of the effect of class size reductions in economics. Building on separate research I argue two specific points. First, that almost all class size studies fail to adequately interrogate the role of interacting/mediating factors and contain inadequate information for even the most diligent systematic reviewer to remedy this. Second, that the apparent stability in effect sizes across one subset of studies depends entirely on a single assumption about functional form that has little independent support.

One of the fundamental questions of systematic analysis is: ‘how much evidence is enough?’ Where there is inadequate knowledge of the relevant mechanisms and variation in these, or at least their parameters, the preceding analysis of external validity suggests that no amount of evidence is adequate. I argue that more attention should be devoted to ex ante identification of such questions in order to avoid the (direct and indirect) costs of never-ending evidence cycles, which is more likely in areas such as economics than medicine.

**Author:** Seán M. Muller, University of Cape Town

### 25. Title: Does User Involvement Produce Higher Quality Reviews?

This abstract addresses the question of user engagement, specifically the engagement of people who use the services that are the subject of the systematic review. However, the process of user engagement also influences the formulation of the research question and the selection of further research.

In many developed welfare states, the involvement of people who use welfare services is regarded as an essential part of maintaining service quality. Similarly, involving people who use services is an integral part of the requirements of many research funding bodies in social welfare. Although this is sometimes seen as a moral obligation to use research to empower people, there is increasing evidence that ‘user involvement’ improves the scientific quality of the research.

This abstract describes a pilot systematic review of the views of people living with dementia. This is a group whose involvement in service development or in research is rare. Yet our initial searching has located over 200 studies of the views of people living with dementia from 14 countries, including Europe, North America and the Far East. The development of early diagnosis has also changed the population of people living with dementia, so that many more are diagnosed at a stage when they retain capacity and interest to influence the services they receive.
The pilot work included the initial search, recruiting people living with dementia to be members of the review team, establishing methods of addressing key questions in the review process, undertaking initial qualitative synthesis, and gathering their views of the relevance of the findings.

The pilot work shows how people living with dementia can influence:

- the in- and exclusion criteria;
- quality appraisal;
- interpretation of findings;
- recommendations for further research.

The presentation will describe the issues in working with a lay group experiencing cognitive impairment. This changes both processes and productivity: it requires different ways of presenting material, formulating discussion, and undertaking feedback. It also requires a different pace of work.

The conclusion from this work is that the involvement of people who use services should become an integral part of the practice of systematic reviewing. This position is reflected in the Cochrane Collaboration’s longstanding involvement of healthcare ‘consumers’, and addresses the aspiration in the Campbell Collaboration to a range of processes for user involvement (see User involvement in the systematic review process: http://www.campbellcollaboration.org/artman2/uploads/1/Involvement_in_review_process.pdf).

Author: Mike Fisher, University of Bedfordshire

26. Title: Community Monitoring Interventions to Curb Corruption and Increase Access and Quality in Service Delivery in Low and Middle-income Countries: A Systematic Review

This systematic review assesses and synthesizes the evidence on the effects of community monitoring interventions (CMI) on access and quality of service delivery and corruption outcomes. These programs can be broadly defined as interventions where the community is given the opportunity to participate in the process of monitoring service delivery, where monitoring means being able to observe and assess providers’ performance and provide feedback to providers and politicians (examples include information campaigns, scorecards, report cards, social audits, and grievance redress mechanism).

We introduce a theoretical framework to understand the pathways of change of the CMIs interventions. Using this framework, we systematically collect and synthesize evidence from high quality impact evaluations of CMIs. Outcomes are synthesized along the causal chain, from intermediate outcomes such as participation in the monitoring activities through to public officials and providers’ responsiveness, to final outcomes such as corruption and access to and quality of the services provided.

The review provides evidence on the following questions:

1) What are the effects of CMIs on access and quality of service delivery, and corruption outcomes in LMICs?

2) What are the mechanisms through which CMIs have an effect (or lack thereof) on improving service delivery outcomes and reducing corruption?

3) Do factors such as region, income level or length of exposure moderate the effects of CMI on intermediate and final outcomes?

This review answer these questions by synthesizing evidence from both quantitative and qualitative studies. The review follows Campbell and Cochrane Collaboration approaches to systematic reviewing (Higgins & Green, 2011; Shadish & Myers, 2004; Shemilt et al., 2008) and is also informed by theory-based impact evaluation (White, 2009). To ensure the review is adequately oriented towards both reporting effects and explaining the reasons for them, we synthesize effects along the causal chain, including qualitative evidence where appropriate, using the effectiveness plus approach (Snistveit, 2012; Snistveit et al., 2012). For the quantitative synthesis we use meta-analysis to pool study effects where studies are judged to be sufficiently similar to do so, based on the thresholds we established in our registered protocol.

Author: Laura Carella, World Bank and CEDLAS (Argentina)
Additional Authors: Ezequiel Molina, Leonardo Gasparini, Guillermo Cruces, and Malena Arcidiácono (All are affiliated with La Plata National University and CEDLAS)

27. Title: What Works Clearinghouse Computer-Assisted Reading Interventions: Can Technology Help Students Score Higher in Reading

The proposed presentation will outline our findings from applying the meta-analysis technique to intervention evaluation studies that have been reviewed by the What Works Clearinghouse (WWC) in the content area of Reading (http://ies.ed.gov/ncee/wwc/). The study addresses the following research questions:

- Does the evidence in WWC intervention reports indicate that computer-assisted programs increase student reading achievement?
- Are computer-assisted reading programs more effective than traditional reading programs in improving student reading achievement?

Computer-assisted learning programs have become increasingly popular as an alternative to the traditional teacher/student interaction intervention on improving student performance on various topics. Many schools and school districts adopt such programs to address their students’ needs. With districts facing substantial costs of hardware and software, concerns naturally arise about the contribution of the computer-assisted programs to students’ learning.

To address our first research question, a meta-analysis was performed to synthesize existing WWC-reviewed research on computer-assisted interventions (i.e., software products, Web-based learning). We synthesized the outcome measures of 73 studies that evaluated 22 computer-assisted interventions with a total sample size of over 30,000 participants in four WWC topic areas – Adolescent literacy, Beginning Reading, Early Childhood Education, and English Language learners – first by a fixed effect model and on 3 of the topics, also by a random effect model. Synthesized outcomes calculated from both models across these various studies and interventions lead us to conclude that computer-assisted Reading interventions are effective in improving reading achievement, particularly in the topic area of Beginning Reading.

Within the Beginning Reading topic area, we conducted the modified weighted multiple regression analysis for mixed effects (Lipsey & Wilson, 2001) to compare the effectiveness of computer-assisted interventions (33 studies; 11 interventions; 2,600 students) with traditional reading interventions (47 studies; 15 interventions; 7,600 students). The regression model included the following study characteristics: type of population, evaluation design, sample size, type of comparison group, and outcome domains. We find that traditional reading interventions appear to be better (p<0.05) than computer-assisted programs at producing positive reading achievement outcomes for students in grades K-3.

Whether sample size in evaluations is large or small and whether these evaluations use “business-as-usual” or another intervention as counterfactual are also important factors for understanding differences in effect sizes. These findings are discussed in terms of their implications for education policies and future research.


Author: Andrei Streke, Mathematica Policy Research

Additional Authors: Tsze Chan, American Institutes for Research
29  Title: Risk Factors for Child and Adolescent Conduct Problems and Youth Crime and Violence in Low-and Middle-Income Countries

Rationale: Violence is a major global health issue, recently listed as a priority for the post-2015 development agenda. Levels of interpersonal violence in many low- and middle-income countries (LMICs) are much higher than in high-income countries (HICs). To design and target effective interventions, it is necessary to identify causal risk factors for targeted problems. We are using systematic review approach to summarize evidence about risk factors – characteristics of a person or his/her environment that predict an increased probability of engaging in antisocial behaviour in LMICs.

Several extensive reviews of risk factors for violence are available in HICs but to our knowledge no similar review has been conducted for LMICs. While several previous reviews did not explicitly exclude research from LMICs, they did not actively search in other languages, had relatively exclusive methodological eligibility criteria and might not have captured some of the more recent research in LMICs.

Question: The project reviews risk factors for aggression, Conduct Disorder, Oppositional Defiant Disorder, and conduct problems for 0-18 year-olds, and violence and crime among 10-29 year-olds in LMICs.

The presentation will focus on longitudinal studies investigating risk factors for interpersonal violence perpetrated by young people to explain:

– What are the predictors of youth violence in LMICs?
– How do the predictors of youth violence in LMICs differ from those established in HICs?

Methods: The search strategy was developed using the Cochrane Collaboration’s Effective Practice and Organisation of Care Group search strategy for LMICs, combined with selected MeSH/DeCS terms, database subject headings and free text terms relating to the key concepts of interest (LMICs, children and youth, and antisocial outcomes). We have searched PsycINFO, MEDLINE, EMBASE, CINAHL, EconLit, Criminal Justice Abstracts, Russian Academy of Sciences Bibliographies, Sociological Abstracts + Social Services Abstracts, Applied Social Sciences Index and Abstracts, International Bibliography of the Social Sciences, ERIC, Web of Science, LILACS, SciELO, National Criminal Justice Reference Service Abstracts Database, JOLIS, World Bank, Open Grey (45,664 records after duplicates removed). Furthermore, 12 non-English databases in Arabic, Chinese, French, Russian, Spanish, and Portuguese were searched, and the presentation will highlight challenges and opportunities connected to multi-language searching, an approach that few review to date have implemented. In addition, about 200 researchers and organizations were contacted. The review is currently at the full-text screening stage.

Author: Dr. Joseph Murray, University of Cambridge, Yulia Shenderovich will be presenting

Additional Authors: Prof. Manuel Eisner, Dr. Maria Ttofi, Dr. Chris Mikton and Professor Frances Gardner

35. Title Prioritisation of Topics for New and Updating Systematic Reviews: the Past and Future in the Cochrane Collaboration

Be sure to be clear on question being addressed and methods employed.

In order to remain informative and relevant to policy, systematic reviews need to answer important and relevant questions and must be up to date. The Campbell Collaboration website states that “Campbell systematic reviews should be updated as relevant information emerges, and amended in the light of criticisms and advances in methodology”. Two of the key principles of Campbell Collaboration are striving for relevance and keeping up to date, by a “commitment to ensure that Campbell reviews are maintained through identification and incorporation of new evidence”. Whilst a specific timeframe is not mandated by the collaboration for updating, a maximum of five years is implied by collaboration guidance.

The Cochrane Collaboration faced a similar challenge and started an initiative in 2008 on developing, implementing and evaluating priority setting strategies. This led to the establishment of a new Methods Group in 2011, the Agenda and Priority setting Methods Group. The Methods Group primarily focused on further developing methods around stakeholder engagement to prioritise new topics for Cochrane Reviews. Recently, it is expanding to explore the use of economics methods for prioritising updates of Cochrane reviews.
Value of information analysis (VoI) is a quantitative method to measure the expected value of reducing uncertainty in decision making. It is based around the principle that additional research reduces the probability of making a ‘wrong’ decision and therefore reduces the expected opportunity loss of the decision. Comparing the expected gain from additional research with the expected cost informs the decision as to whether the research is likely to be efficient.

Such an approach has the potential to be adapted to assist prioritisation of systematic reviews in need of updating, thus allowing concentration of finite research effort to where it can be most useful.

We propose a session comprising three oral sessions followed by a group discussion, which together would form a useful session introducing priority setting techniques to select topics for new systematic reviews or updating existing ones, and adapting existing techniques for Cochrane reviews to inform decisions:

Cochrane Agenda and Priority Setting Methods Group: concepts, methods and future research.

Using the principles of value of information analysis to inform prioritization of future research: a case study with NETSCC*.

Preliminary results of adaptation of the NETSCC tool for the Cochrane Collaboration: feasibility, barriers, challenges and usefulness.

**Discussion:** the applicability and feasibility of using research priority setting methods to inform the selection of new topics and updating Campbell reviews

*UK National Institute for Health Research Evaluation, Trials and Studies Coordinating Centre.

**Author:** Ed Wilson, Campbell & Cochrane Economics Methods Group, 2. Cochrane Agenda and Priority Setting Methods Group, 3. University of Cambridge

**Additional Authors:** Mona Nasser Plymouth University, Claire McKenna University of York, Sally Crowe, Crowe Associates

**37. Title:** Development of a Quality Scoring System for Autism Reviews

**Objective:** Traditional quality measurement approaches for systematic reviews conducted through Evidence Based Practice Centers have been most often applied to biomedical therapeutic topic areas. Applying these same quality methods within systematic reviews focusing on the treatment of complex neurodevelopmental disorders, such as autism spectrum disorder (ASD), presents unique challenges to interpreting an extremely complex intervention literature. Specifically, many some common approaches to autism spectrum disorders involve treatments delivered at intensities (10-40 hours a week) and of durations (over the course of years) uncommon within biomedical intervention. In the current work, we developed and assessed an approach to measuring quality of studies in a systematic review of autism treatment with potential application to future reviews of (ASD) and other neurodevelopmental conditions.

**Methods:** For a systematic review of autism treatments for children under age 12, we sought an appropriate method for assessing the rigor (quality) of included studies. We reviewed available, published approaches, and determined that none would adequately assess the breadth and complexity of the literature and intervention approaches utilized in the autism field. Again, these approaches were quite limited in separating out characteristics of intensive and comprehensive behavioral interventions delivered across an extremely heterogeneous patient population. As such, we developed a novel evidenced quality grading and synthesis methodology, tested it internally and deployed the system for the now-published review. This method combines the approach typically used at the Evidence-based Practice Center, most commonly for biomedical topics, with particular areas of concern for the behavioral literature. We are now assessing the degree to which our approach yielded the same or different assessment of study quality of included studies in similar reviews conducted by 6 other groups (NAC, SIGN, Blue Cross Blue Shield, plus 3 Cochrane reviews). We are further assessing the degree to which the quality assessments directly affected overall each of these reviews.

**Results:** Our new tool was easy to use with high internal consistency on the project team. Elements added to the standard EPC approach included explicitly assessing fidelity of behavioral interventions, manualization of interventions and statistical approaches to assessing multiple outcomes.

**Conclusions:** Systematic reviews attempting to synthesize complex behavioral intervention packages in the field of autism and serious neurodevelopmental disorders may require novel methods for effectively understanding and disseminating the rapidly evolving evidence base to key stakeholders.
Panel Abstracts

Author: Melissa McPheeters, PhD, Vanderbilt University Medical Center

Additional Authors: Zachary Warren, PhD, Nila Sathe, MLIS

39 Title: A New Reporting Guideline for Trials of Social and Psychological, Interventions: CONSORT-SPI

Problem: Many interventions in psychology and related fields are complex. Understanding randomized controlled trials (RCTs) of these complex interventions requires detailed reports of the interventions tested and the methods used to evaluate them. However, RCT reports often omit important information, hindering proper critical appraisal and the effective transfer of this research evidence to policy and practice decision-making. A new reporting guideline is needed to address this issue in psychological intervention research.

Objective: To discuss a new extension of the Consolidated Standards of Reporting Trials (CONSORT) Statement for social and psychological interventions: CONSORT-SPI.

Procedure and Participants: Two sequential consultation studies are being conducted to develop the CONSORT-SPI guidelines. Firstly, an online, modified Delphi process is currently underway. Participants (n = 384) from 32 countries include researchers, practitioners, journal editors, funders, policy-makers, practitioners, and client representatives in the area of social and psychological intervention. Participants are asked to rate the importance of including proposed reporting standards in the CONSORT-SPI guidelines and to comment on their views on the proposed items as well. The results of the Delphi process, along with previous systematic literature reviews, will be used to inform the second consultation study—a formal consensus development conference in March 2014. At this meeting, 25-30 international stakeholders in social and psychological intervention research will discuss each recommended reporting standard and vote on the final guideline content. Recruited participants for this consensus meeting include key researchers, journal editors, and funders in the area of social and psychological interventions.

Results: The CONSORT-SPI checklist of reporting standards will pertain to the essential content of the Title, Abstract, Introduction, Methods, Results, and Discussion sections of all reports of social and psychological intervention RCTs. Items in this checklist will be based on empirical evidence of and expert consensus opinion about their importance to internal and external validity of intervention trials. An explanation and elaboration (E&E) document will provide detailed advice for each reporting item, as well as examples of good reporting from trials in psychology and related disciplines.

Conclusions: This guideline is an important step toward improving reports of many designs for evaluating social and psychological interventions. As demonstrated by previous CONSORT guidelines, the development of an evidence-based reporting guideline for social and psychological intervention RCTs should improve the accuracy, comprehensiveness, and transparency of study reports. This, in turn, promises to improve the critical appraisal of research and its use in policy and practice decision-making. Endorsement of the guideline by journals, research funders, and professional organizations will facilitate use of and feedback on the guideline, which in turn will help to raise the quality of standards in this research area.

We invite readers to stay informed about the project by visiting our website (http://tinyurl.com/CONSORT-study).

Author: Prof Paul Montgomery, Centre for Evidence-Based Intervention, University of Oxford

Additional Authors: Prof. Paul Montgomery, Centre for Evidence-Based Intervention, University of Oxford and Dr. Evan-Mayo Wilson, Center for Outcomes Research and Effectiveness, University College London

48. Title: Developing Logic Models for a Systematic Review on E-learning to Increase Evidence-based Health Care Competencies

Introduction: A logic model helps to map the complexities of a system. It describes the components of complex interventions and the relationships between them, making underlying theories of change and assumptions about causal pathways between the intervention and multiple outcomes at different levels explicit; it can also reveal interactions between the intervention and the system within which it is implemented. We developed two logic models to inform the protocol development of an ongoing Campbell Review of a complex educational intervention: E-learning of evidence-based health care (EBHC) to increase EBHC competencies in healthcare professionals.

Methods: As part of the EU-funded INTEGRATE-HTA project (www.integrate-hta.eu) we developed logic model templates for systematic reviews of complex interventions, focusing either on the underlying system (system-based logic model) or the
processes involved (process-orientated logic model). These templates guided us in the development of logic models related to our systematic review. The content was informed by a review of international literature on EBHC and e-learning, and consultation with experts in the field.

**Results:** The system-based logic model describes the system in which the interaction between participants, interventions and context takes place. It is based on the PICO question and contains important variables related to the target population (type of healthcare worker, level of education), the educational context (setting; learner, institutional and socio-economic context), the intervention design (educational components, duration, intensity, dose, timing) and delivery (e-learning dimensions, delivery agent, organization and structure), various outcomes (process outcomes e.g. cost, satisfaction with learning, attrition; surrogate outcomes e.g. EBHC knowledge and skills; behavior outcomes e.g. EBHC behavior; non-health outcomes e.g. evidence-based guideline implementation; and health outcomes) and healthcare contextual factors that influence evidence-based practice (socio-cultural, epidemiological, ethical, socio-economic, legal, political).

The process-based logic model aims to explain how the intervention exerts its effect. It graphically depicts the pathway from the educational intervention to the direct effects (EBHC knowledge, skills and attitude); the intermediate outcomes (EBHC behavior, implementation of evidence-based guidelines, evidence-based practice) and the ultimate outcomes (improved healthcare delivery, improved health outcomes). It depicts interactions and feedback loops between outcomes and interventions.

**Conclusion:** The logic models informed the search strategy, data extraction form, data synthesis methods as well as subgroup and sensitivity analysis of the protocol. A priori logic models are useful tools for authors of systematic reviews. Although they are particularly helpful at the protocol stage of a review, they can be used as an anchor throughout the review process.

**Author:** Anke Rohwer, Institute for Medical Informatics, Biometry and Epidemiology University of Munich, Germany

**Additional Authors:** Prof Taryn Young and Dr Eva Rehfuess

### 50. Title: The Effects of Economic Self-Help Group Programs on Women’s Empowerment: A Systematic Review

The concept of women’s empowerment as an essential component of international development has gained increased attention over the past two decades. There has been a shift from thinking of women as targets for fertility control to acknowledging women as autonomous agents who, through a process of empowerment, should be able to make strategic life choices. There has been an explosion of conceptual and empirical work that attempts to gain a deeper understanding about how empowerment works, how it can be fostered and what kind of impacts it can have on the lives of women and their families, especially in low-resource settings. Along with the burgeoning development of empowerment as a concept came grassroots movements aimed at empowering disenfranchised communities with women playing a central role. These movements led to the birth of grassroots economic self-help group programs that were designed as poverty reduction strategies but had the unexpected consequence of empowering women by enabling them to take more active roles in decision-making across several sectors, from household finances to healthcare.

The objective of this review is to determine the impact of women’s participation in economic self-help groups on their empowerment in low and middle-income countries and that factors that moderate that impact. We base our methodology on the understanding that a great deal of evidence has been generated from both quantitative and qualitative research, much of which can be useful in informing policy and practice. We conducted an integrated mixed-methods review in order to benefit from data generated through both qualitative and quantitative methodologies and to enhance the review’s utility and impact for policymakers. Our search strategy included searching relevant electronic databases, searching the grey literature, hand searching relevant journals and websites, conducting bibliographic back referencing, conducting program-specific searches, and obtaining key contact recommendations.

Our integrated analysis produced: 1) a summary of impacts from quantitative research, 2) a summary of moderators from qualitative research, and 3) a synthesis of both summaries that goes beyond the primary studies and generates a new interpretation. From over 3000 original hits, 331 full text articles reviewed and 31 were included in the final analysis. From the 31 included studies, twelve quantitative indicators were identified that described impact and eight qualitative moderating factors were identified. We conducted a meta-analysis within groups of like indicators from the quantitative evaluations and a meta-ethnography to develop the list of moderators.
51. **Title: Effects of Payment for Environmental Services and Decentralized Forest Management on Deforestation and Poverty in Low and Middle Income Countries: A Systematic Review**

We present the results of a systematic review of the impact of payments for environmental services (PES) and decentralized forest management (DFM) studies on deforestation and poverty in developing countries. The review is motivated by debates over whether the pursuit of conservation and poverty reduction in developing countries tend to conflict or whether they might be complementary. A search for rigorous evaluation studies turned up eleven quantitative and nine qualitative evaluation studies on PES, and eight quantitative and five qualitative evaluation studies on DFM. The methodological rigor of these studies varied widely, meaning that the evidence base for the impact of PES and DFM policies is extremely poor. Nonetheless, given the evidence available, we find little reason for optimism about the potential for current PES and DFM approaches to generate both conservation and poverty reduction benefits. For PES, while conservation benefits are evident, they tend to be produced in a tremendously inefficient manner. We call for the production of much better impact studies, employing randomized field experiments when possible, to assess whether the apparent incompatibility of conservation and poverty reduction might be overcome, and how this might be done with reasonable efficiency.

**Author:** Carinne Brody, DrPH, Touro University

**Additional Authors:** Brody, Carinne, Dworkin, Shari, Dunbar, Megan, Murthy, Padmini, Pascoe, Laura
Author: Ian Shemilt, University of Cambridge and Campbell Methods Coordinating Group

Additional Authors: Ariel M. Aloe, University of Northern Iowa and Campbell Methods Coordinating Group and Hugh Waddington, International Initiative for Impact Evaluation (3ie) and Campbell International Development Coordinating Group

60. Title: Preventing the Educational and Psychosocial Consequences of Poverty: A Multinational Meta-analysis

Background. There is strong scientific confirmation that children and adolescents with low socioeconomic status (SES) have a greater risk of developing academic and psychosocial deficits such as lower reading achievement or behavior problems than children with higher SES. There have been programs aiming to prevent and compensate this unequal precondition for more than 50 years, resulting in hundreds of primary studies.

Objectives. This quantitative meta-analysis synthesizes studies investigating the effectiveness of programs to prevent or compensate the negative educational and psychosocial consequences of poverty.

Search strategy. We conducted an extensive, multimodal literature search for published and unpublished articles. Along with scanning 13 electronic databases (e.g. MEDLINE, ERIC, PsycINFO, Web of Science, The Cochrane Library, C2, ProQuest), we screened the reference list of each included article as well as thematically related reviews. Moreover, we contacted the first author of each integrated study to request additional literature.

Selection criteria. Studies were eligible if the authors investigated (1) the effectiveness of a psychosocial or educational program (2) designed to prevent the negative educational consequences of poverty. Additionally, (3) the sample had to consist of children and adolescents up to the age of 18 years, who (4) predominantly (at least 70% of the sample) lived in low socioeconomic circumstances. Furthermore, studies were only included if (5) the assignment of participants to the intervention and the control group was by random allocation and if (6) each group contained at least of 25 participants.

Data collection and analysis. The literature search revealed about 5,300 articles. Of those, 300 studies met all the eligibility criteria. A coding sheet was developed covering over 200 precisely operationalized variables.

Results. Codings and data analyses are not finished yet. However, first results indicate that about 90% of studies were conducted in the United States with an overall sample size of more than 300,000 participants. The predominant ethnicity was African American. Many studies aimed at preventing cognitive or language deficits, but some also focused on the prevention of behavior problems. Effect sizes were small to medium depending on several factors: For example, high-intensity programs were more effective than low-intensity ones, as were programs that began when clients were at an early age in contrast to programs that started during adolescence.

Conclusions. Conclusions for research will be drawn (e.g., research gaps, optimal program components for different program types) and recommendations will be given for interventionists and policymakers.

Author: Sabrina Maichrowitz, Department of research synthesis, intervention and evaluation, Friedrich-Schiller University Jena

Additional Authors: Sebastian Schulz, Louisa Arnold and Andreas Beelmann

63. Title: Interventions to Improve Labour Market Outcomes of Youth: a Systematic Review of Training, Entrepreneurship Promotion, Employment Services, Mentoring, and Subsidised Employment Interventions

Addressing the youth employment challenge ranks high on the development agenda with a view to improve the ability of governments to diagnose and address the problems facing youth in accessing wage- or self-employment, based on rigorous evidence. The current political and economic context makes even more imperative the need to provide evidence on what works and what doesn’t, why, and how to improve labour market outcomes of young men and women.

This systematic review seeks to support policymakers and practitioners with evidence-based recommendations on what works to effectively support youth in the labour market. The review thus summarizes and integrates empirical research on the impact of interventions aiming to improve labour market outcomes of youth. The following research questions frame the analysis on what are effective measures, which will ultimately help decision-makers in the allocation of their resources and their investment level and portfolio on youth employment:
Panel Abstracts

1. What is the impact of youth employment interventions on labour market outcomes of youth? In particular, the review looks into skills training, entrepreneurship promotion, employment services, mentoring, and subsidized employment interventions.

2. Which of these interventions are the most effective?

The review relies on component studies that conduct impact evaluations of youth interventions and for which the relevant information to compute comparable effect sizes can be gathered. Accordingly, the meta-analysis addresses the second research question by measuring program success without confounding its effectiveness with the study sample size.

The review also looks at a more contextual research question, namely: how applicable is the evidence to countries in Africa. This question was put forward by the review's main donor Canadian CIDA and will be addressed through qualitative research and consultation with experts, the advisory group, and African policymakers working in the youth employment field.

By synthesizing the evidence on the relative effectiveness of different labour market interventions for youth, this systematic review contributes to closing the knowledge gap in this field with a real impact on the nearly 75 million of young men and women that are currently looking for a job.

The review team is currently screening and coding relevant studies. Results from the analysis are expected by April-May 2014. Discussing them during the Colloquium will therefore be of great value to the research.

Author: Jochen KLUGE and Susana PUERTO Humboldt-Universität zu Berlin and International Labour Organization

Additional Authors: Felix Weidenkaff, Jonathan Stoeberau, Marc Witte, David Robalino, Friederike Rother and Jose Romero

65. Title: Sutton Trust-EEF Teaching and Learning Toolkit

The Sutton Trust-EEF Teaching and Learning Toolkit is the result of on-going research in the area of education aiming to help schools on deciding how to best spend their resources to support the learning and attainment of disadvantaged students. The emphasis is on identifying comparative messages from existing quantitative research. The picture is complex since there is evidence suggesting that there is no association between spending levels and academic performance (Hanushek & Woessman, 2010), whereas others suggest that there is evidence connecting the two variables (Greenwald et al. 1998). Investing for better learning is therefore not easy. The current research interprets the difficulty of establishing a direct causal link by suggesting that there must be areas which offer better prospects than others. This is what the Toolkit seeks to provide. A quantitative approach was adopted based mainly on the synthesis of existing meta-analyses of educational interventions. Where there were no meta-analyses other available quantitative were used to estimate effects. Effect size is an important concept of the Toolkit, since it shows the magnitude of the effectiveness relative to other interventions and approaches. Overall, the Toolkit provides a measure of average impact, strength of evidence and cost-effectiveness. Currently the Toolkit contains reviews of over 30 different approaches and is updated regularly, see: http://educationendowmentfoundation.org.uk/toolkit/). The Toolkit aims to provide the best possible current estimate of what is likely to be beneficial drawing on existing evidence. It summarises what has worked as a ‘best bet’ for what might work in the future.

Author: Maria Katsipataki, School of Education, Durham University

Additional Authors: Steve Higgins, Professor in Education

75. Title: Youth Gangs in Low-and Middle-income Countries: a Systematic Review of Predictors and Interventions

The involvement of young people in gangs and gang violence is not only an issue in western nations, but is widespread across low- and middle-income countries (LMICs), particularly because many LMICs experience – or have experienced – some form of war or conflict, providing a fertile ground for gang formation. In order to reduce the prevalence of youth gang violence in LMICs, it is important to first identify the factors that are predictive of young people joining youth gangs, and then to identify interventions that are successful in preventing gang membership.

We are conducting two Campbell-registered systematic reviews; one examining the predictors of gang involvement, and the other examining the effectiveness of preventive interventions, in low- and middle-income countries. Predictors of gang membership are routinely categorised into five domains: individual, peer, family, school and community. Preventive interventions seek to target these predictors in order to disrupt the pathway to gang membership, and focus on capacity building and
social prevention to stop gang crime before it occurs, either by preventing youth from joining gangs or by rehabilitating gang members outside of the criminal justice system.

The predictors review aims to synthesise the empirical evidence on predictive factors associated with membership of youth gangs in LMICs and categorise predictors into the five key domains, thus informing future prevention efforts. The interventions review aims to synthesise the evidence on the effectiveness of preventive interventions in LMICs, assess whether effectiveness differs according to intervention type and across different populations, and identify reasons why interventions may fail or succeed.

The search for eligible studies was conducted as part of a broader project systematically reviewing literature on conduct problems and crime in LMICs. The initial search of published and unpublished literature was conducted in seven languages, with no date constraints, across a wide range of electronic academic databases, international organisation databases, the websites of NGOs and other organisations, and yielded over 45,000 records.

We synthesise the effect sizes from eligible studies using random effects meta-analysis with inverse variance weighting. Whilst the meta-analyses rely on quantitative impact evaluations, we include qualitative studies to provide a narrative review on the barriers and facilitators of implementation success, with a focus on practical, policy-focused implications from the literature.

In this paper we present the findings from both systematic reviews, along with a discussion of the methodological issues encountered along the way.

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76. Title: The Role of Campbell Collaboration in Promoting Access to Evidence In Africa: Better Evidence for Better Africa

Background
Africa is in its nascent stage in education, health and most basic services. In the past 10 years Africa has seen an increase in democracy and thus has rapidly gained pace in education and health development. However, the fast pace has led to an increase in demand for knowledge development and consumption. Due to limited human and financial resources, Africans decision makers have not been able to have access to vital evidence needed to guide their decision making in health and educational behavioural milieu.

In Africa literacy rates are lower than in most parts of the world. Available evidence in a digital age provides key opportunities for African scholars and decision makers to access knowledge. Africa now has one of the fastest growing digital markets. This makes research evidence on mobile gadgets or internet easy access to consumers in Africa. This is an opportunity that has been so far under exploited.

The exact data on proportion of African authors and consumers of the Campbell collaboration is not known. However a review of the online library reveals no authors with African affiliations, there are however a few reviews using studies done in Africa.

Objectives
Assess the number of African authors across the Campbell Collaboration Groups
Assess consumption of evidence from the Campbell Collaboration by users from Africa
Stimulate involvement of at least 15 African authors in reviews with the Campbell collaboration

Methods
Work with administrators of the Campbell library to estimate African authors and users
Organise Workshops for African Authors for Campbell reviews.
Developing Systematic Reviews appropriate for African Decision Makers
Translating and implementing knowledge for Decision Makers in Africa (Policy makers, governments, ministries and development agencies)
Making evidence available to consumers in Africa
77. Title: Evidence for the Effectiveness of Educational Interventions: The Quality of Meta-analyses

Background. During the last 15 years the number of meta-analyses in education has expanded greatly. Many overlapping meta-analyses have been published, often with conflicting findings. For instance, in seven meta-analyses of phonological awareness interventions, the mean effect size for word reading skills range from d=0.2 to 0.69, and the number of studies included range from 6 to 90. However, the methodological quality of meta-analyses and how their quality affects the conclusions reached have received little attention. Method. We have conducted a systematic search for meta-analyses and systematic reviews in Education published from 1998-2013. The main inclusion criterion was that the meta-analysis had to examine effects from an intervention implemented in school or kindergarten by professionals, and report a mean effect size on an academic achievement or behavioral outcome. Results. Seventy-one different meta-analyses were included in the study. The mean effect size for academic outcomes was d=0.46 (range 0-1.58) while for behavioral outcomes mean d=0.31 (range , 0.07-1.56). Seventy-eight percent of the studies were published in paper journals, 17% by Clearinghouses or researcher collaborations, and 4.25% were in the grey literature. Only 20% of the studies included a flow chart of the search and inclusion process. Some 26% used fixed-effect models where arguably they were not justified. Publication bias was only addressed in 27% of the studies and only 13% reported data on follow-up effects. Based on a set of criteria, reporting quality was classified as low in 37% of the studies. In the 20% of the studies with high reporting quality, all except one were from Clearinghouses or research collaborations. The single most important predictor of mean effect size in the meta-analyses, was the design of the studies included; mean d=0.36 (k=12) for RCT based meta-analyses, d=0.27 for quasi-experimental designs with control group (k=0.27) and d=0.65 for meta-analyses that also included studies without control group (k=31, p .0001). Conclusion. The methodology of studies included in a meta-analysis has a large impact on the mean effect size obtained, and meta-analyses that include studies without a control group tend to greatly overestimate effect sizes of interventions. Reviews from Clearinghouses or research collaborations appear to have a greater methodological rigor and better reporting practices than meta-analyses published in paper based journals. Policy makers should therefore thoroughly assess the quality of meta-analysis when using such evidence as the basis for making policy recommendations.

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87. Title: The use of Qualitative Synthesis to Inform the Large-scale Implementation of Evidence-based Parenting Programmes

Background: A number of systematic reviews have demonstrated the effectiveness of evidence-based parenting programmes (EBPPs) in improving child emotional and behavioural problems, parenting skills, and parental mental health. However, in order to develop a public policy for delivering these programmes, it is necessary not only to demonstrate their effectiveness through rigorous trials but also to assess the extent to which they can be implemented to scale within mainstream services. This qualitative synthesis identified key factors that may influence the success and sustainability of EBPPs, with a view to informing the development of an effective service-based blueprint for rolling out such programmes on a large scale.

Methods: This rapid review involved a synthesis of qualitative studies (n=30) that assessed the experiences of parents, practitioners and service managers involved in the receipt or implementation of an EBPP within mainstream services. Barriers to, and facilitators of, programme implementation were identified using the framework thematic synthesis approach. Study quality was moderate to high and was assessed using guidance from the Cochrane Qualitative Research Methods Group.

Results: Facilitators and barriers were primarily linked to systems of ensuring access to the target population and knowledge of parental, therapist, agency and systemic variables involved in engaging consumers and in enhancing outcomes. Key drivers
include: utilisation of an effective awareness-raising strategy to normalise the seeking of parenting support; fostering a pre-
programme relationship with parents; screening to assess parental readiness to attend the programme; delivering programmes
that are clinically and culturally responsive to client need; skills-based training and supervision of caring staff; accessible venue
with onsite childcare; careful attention paid to group composition (e.g. size, presenting issues); managerial planning and
commitment to provide adequate infrastructural support; and inter-agency collaboration to lever on-going expertise, funding
and referral streams. Furthermore, it is important to involve fathers to facilitate the implementation of new parenting skills in the
home. EBPPs delivered in disadvantaged settings may require additional resources to recruit and retain parents (e.g. home visits;
provision of meals and transport) and to maintain outcomes in the longer term (e.g. post-intervention supports).

Conclusion: Qualitative syntheses can play an important role in in identifying the key facilitators of, and barriers to, implementing
EBPPs within mainstream services. The findings from this kind of approach may help develop a framework for scaling up such
programmes, as well as identifying potential moderator and mediator variables that can be explored in future systematic reviews
of parenting programmes.

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88. Title: “Why is the U.S. So Bad at Knowledge Transfer and Implementation of
Evidence-based Practices in Education and How Can It Do Better?”

Implementation (including knowledge translation) is among the most important, and least studied, components of the evidence
cycle. Correspondingly, there is often failure to adopt and/or successfully implement evidence-based practices in real world
settings. Nowhere is this more true than in the field of education where, despite tremendous strides in education research over
the past few decades, educators continue to adopt and implement practices that have little or no research backing and yield
poor outcomes. Too often practices that have proven research results fail due to poor implementation.

This paper provides a review of the best available research and outcome data to answer the following questions: (1) What do
the data tell us about the knowledge translation and implementation of evidence-based practices in education? (2) What are
the obstacles to improving this performance? (3) What are the salient features of sustainable implementation? (4) What are the
critical strategies of successful and sustainable implementation?

Data suggest that, despite decades of education reform initiatives, student outcomes have not improved. Further analysis finds
a significant disconnect between research and practice at almost all levels of the system. The field embraces charter schools
and class size reduction as panaceas despite research suggesting these have limited effect on improving student outcomes.
Evidence-based teaching practices are not taught in most teacher preparation programs nor used in many classrooms. Research
suggests the critical value of “coaching” in developing teaching skills that can generalize to and maintain in the classroom, yet
coaching is infrequently used in teacher training.

The obstacles to effective implementation are daunting, including: philosophical (fundamental disagreements on the role of
science and nature of learning), organizational (autonomy of teachers and lack of performance feedback), emotional (cynicism
and distrust), and behavioral (competing contingencies, lack of time, teacher turnover).

Sustainable implementation emphasizes the distinction between implementation (skills, interventions and strategies) and
intervention. It is a long term, ongoing process that ultimately results in culture change. Continual performance feedback on all
aspects of implementation and intervention is the most critical component.

Research and practice suggest the following critical strategies of knowledge translation and implementation: adoption
(assessing the fit, decision making, cultural integration), installation (building the infrastructure, establishing contingencies, initial
training), full implementation (systems in place, ongoing training and performance feedback), ongoing evolution / innovation
(ongoing problem solving, modification).

Author: John “Jack” States , The Wing Institute, California
91. **Title: Synthesising Quantitative and Qualitative Reviews: A Worked Example**

**Background:** There are few established methods for the integration of findings from quantitative and qualitative systematic reviews of interventions. This paper describes a method of overarching synthesis which we developed and how it was used to bring together the findings from four systematic reviews about the effectiveness and experience of school-based non-pharmacological interventions for attention deficit hyperactivity disorder (ADHD): i) a quantitative review of the effectiveness of interventions, ii) a quantitative review of the attitudes towards these interventions, iii) a qualitative review exploring attitudes and experiences of interventions and iv) a qualitative review exploring attitudes towards and experiences of ADHD in school more generally.

**Methods:** We approached the synthesis from two perspectives which proceeded iteratively and in parallel: i) We brought together the findings of the two qualitative syntheses using an inductive approach to identify the contextual elements that might influence the effectiveness of interventions. ii) We worked deductively from quantitative findings about the effectiveness of interventions, intervention category and potential moderators of effect, to identify findings in our other reviews that offered hypotheses about the relationships between possible moderators and effectiveness.

**Results:** Findings from the inductive approach revealed a hierarchy of contextual levels that influence the use of school-based interventions. The deductive approach findings raised implications for the development and evaluation of school-based ADHD interventions and furthered understanding about potential moderators of effectiveness. Unlike existing methods of overarching synthesis, the methods employed did not only explain the findings of the effectiveness review, but rather developed a greater understanding of the use of ADHD interventions in school settings.

**Limitations of the method:** There were challenges in the synthesis of quantitative and qualitative evidence, especially when considering the implications from this work. The main limitation relates to the different research questions across the four reviews. Because of this, the reviews sometimes focused on different interventions and studies focused on attitudes and/or experience that did not link to interventions, compromising comparison. The ages of pupils diagnosed with or at risk of ADHD differed across reviews, further contributing to difficulties in comparison.

**Conclusion:** The addition of an overarching synthesis to this series of complex systematic reviews has allowed comparison across all reviews and brought together a breadth of evidence regarding the use of ADHD interventions in school settings. We propose that the links between reviews identified are valuable because of their relevance to future intervention programme design and evaluation, despite their tentative nature.

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92. **Title: Improving the Utility and Practice of Evidence Synthesis: Views and Experiences of Public Health Decision Makers and Review Authors in the UK**

**Background:** Review questions initiated by policy makers and evidence users are often broad and incorporate high levels of complexity. Preparing rigorous systematic reviews to address these policy relevant questions can present many methodological challenges. These include incorporation of evidence from non-randomised studies, and addressing questions beyond effectiveness to explain what works for whom and in which circumstances. Finding a balance between preparing a complex review which is rigorous, relevant, timely and affordable is difficult.

This paper presents the findings of a consultation conducted by the Cochrane Public Health Group. The aim of the consultation was to elicit perceptions and experiences of evidence users and review authors with respect to barriers and facilitators to the use and production of public health systematic reviews in the UK.

**Methods:** Telephone interviews using broad open-ended questions were conducted with 14 policy makers and 13 systematic review authors from the UK. Purposive sampling was used to select users and funders of public health research and systematic reviewers with varying degrees of experience. Interview data were coded using framework analysis and key themes from each interview identified.

**Findings:** Policy makers reported that systematic reviews were an integral and valuable component of the economy of evidence available to inform decision making, but reviews which only included RCTs were considered to be of limited use. Utility of reviews...
could be improved by addressing questions beyond effectiveness and incorporating diverse evidence types. Difficulties with applying and using systematic reviews to inform policy reiterated well established challenges to bridging the research-policy gap. The usefulness of systematic reviews could be improved by providing brief, accessible, and timely summaries addressing specific policies and contexts. Lack of methodological expertise was reported as a major barrier to producing useful reviews addressing policy relevant questions for public health.

Building reviewer capacity through training pitched at different knowledge levels, sharing experience amongst communities of practice and collaborative author teams was widely supported. Involvement of policy makers was also viewed as important for improving communication and relevance.

Conclusion: These findings reflect growing recognition, in and beyond the Cochrane Collaboration, that systematic reviewers need to seriously consider enhancing utility for decision makers. This paper will stimulate discussion about how to improve production of reviews which are both rigorous and useful.

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94. Title: Engaging Stakeholders in the Development of an Economic Analysis of Domestic Violence Interventions for NICE Public Health Guidance

Background – Domestic violence is a major issue for the criminal justice system and a significant public health concern. Although there is widespread agreement that interventions targeted at reducing and preventing domestic violence should be implemented, there is limited cost-effectiveness evidence. The aim of this research was thus to systematically review the available evidence for interventions to prevent and reduce domestic violence and construct an economic model to estimate the cost-effectiveness of included interventions.

Methods – Two methods were employed to generate the evidence base for the economic model; a systematic review of effectiveness and cost effectiveness studies to identify interventions that either prevented or reduced domestic violence, and user and expert engagement to define the scope of the model. Programme development groups (PDGs) were set up to engage stakeholders on the design of conceptual economic model and to appraise the suitability of interventions found through the systematic review.

Results – The scope of the economic model was initially to cover the short and long term impacts for adults and children experiencing domestic violence. From discussions with the PDG the model was redefined to focus on incidence and harm reduction, excluding children and long term impacts on adults due to lack of data. The systematic review resulted in eleven potential interventions, of which two were chosen in collaboration with the PDG members; Independent Domestic Violence Advisors (IDVAs), for the incidence reduction model, and Cognitive trauma therapy – battered women (CTT-BW), for the harm reduction model. The modelling results showed that: for every 100 participants IDVA services is expected to generate cost savings of £4.7 million, a QALY gain of 8 QALY’s and correspondingly a dominant ICER. CTT-BW is estimated to generate a cost savings of £15.0m and a QALY gain of 102 QALYs generating a dominant ICER, over a three year time period, for 100 participants.

Conclusions – Users and experts had a key role in shaping the scope of the analysis, helping to make the results trustworthy and relevant to decision-makers, potentially facilitating the implementation of the recommended interventions. The reviewed interventions IDVA and CTT-BW were found to generate both cost savings and QALY gains and therefore represent good value for money. Overall, the key message of the economic analysis is that the cost of domestic violence is so high, that interventions which are even marginally effective at reducing and preventing domestic violence represent efficient use of public resources.

Author: Jacque Mallender

Additional Authors: Tracey Jhita, Antony Morgan
95. **Title: Impacts of Water, Sanitation and Hygiene Interventions: an Evidence Gap Map and Systematic Review**

Despite broad consensus on the need to improve global environmental health and political commitments in the Millennium Development Goals, an estimated 783 million people still do not use improved water sources, and 2.5 billion people do not use improved sanitation – 1.1 billion of whom, mainly in Africa and South Asia, defecate in the open (WHO/UNICEF, 2012). This has terrible consequences in terms of ill-health, under-nutrition and death, particularly among children (Boschi-Pinto, 2008), as noted in systematic reviews of evidence on diarrhoeal diseases (Fewtrell & Colford 2004; Waddington & Snilstveit, 2009, Cairncross et al., 2010), respiratory infections (Rabie & Curtis 2006), helminth infections (Ziegelbauer 2012) and trachoma (Rabiu 2012). Bad water, sanitation and hygiene (WASH) conditions may also have other longer-term adverse social and economic implications, including for education attainment and labour market outcomes (Hutton 2007). While all suffer loss of dignity from open defecation, some costs are borne disproportionately by women and girls, including the time and drudgery in collecting water for the household and risks involved in defecating in unsafe places.

The effectiveness of WASH technology in preventing death and disease depends on both the efficacy of the technology itself in preventing disease transmission (whether it works under perfect compliance), and the extent of compliance with the technology. Unfortunately, much evidence measures efficacy as opposed to effectiveness (whether it works in ‘real world’ implementation settings) (Waddington and Snilstveit, 2009). Problems with sustained compliance are well known in the household water treatment literature (e.g. Quick 2002), but recent evidence has also emerged suggesting limited compliance and health impacts at-scale for hygiene interventions in Vietnam (Chase & Do, 2012), Peru (Galiani & Gertler, 2012) and Bangladesh (Huda et al. 2012). Where interventions appear effective in combating disease, it remains unclear if this is because compliance rates are high, or because of unobserved confounding, including due to Hawthorne effects and courtesy bias since diarrhoea rates are usually measured through self-reporting (Schmidt & Cairncross 2009).

The study partially updates a previous review undertaken by the authors (Waddington and Snilstveit, 2009), including the additional 20+ WASH impact evaluation studies which have been produced since. Recognising the importance of health and developmental outcomes, the review also aims to include evidence on broader health outcomes such as respiratory infection and time-savings from improved access to amenities. The review is presented in the form of an evidence gap map (Snilstveit et al., 2013).

**Author:** Hugh Waddington International Initiative for Impact Evaluation (3ie) and Campbell International Development Coordinating Group (IDCG)

96. **Title: Meta-analysis and Review Methods Across Disciplines: a Review of Current Practice in Systematic Reviews**

Systematic reviews are commonly used to summarise large bodies of evidence, particularly clinical trials. They are also increasingly used to inform decision-making in fields other than medicine that are relevant to human health and wellbeing, including the fields of public health, social welfare, agriculture, crime, education and many others. The interventions in question are often complex and study designs and populations in the review are often varied, and researchers may be discouraged from conducting a meta-analysis. It has also been argued, however, that meta-analysis is currently under-used. This project (funded by the UK Medical Research Council Methods Research Programme) aims to explore factors in the decision to conduct a meta-analysis; to compare existing guidance in health and non-health topics to see what can be learned; and ultimately to develop new guidance on the meta-analysis of complex interventions. As part of the project (called the “MACH” project – “Meta-Analysis, Complexity and Heterogeneity”) we are also examining systematic review practice more generally across a wide range of disciplines outside health and medicine, to investigate whether and how those methods vary.

We are currently identifying the most cited systematic reviews in each of 20 disciplines, by searching Web of Science (WoS) for systematic reviews or meta-analyses (n=64253), with no restriction by year or language; then filtering by WoS topic category; ranking those reviews by frequency of citation, from highest to lowest; and then selecting the twenty-five most cited reviews (irrespective of whether a meta-analyses was performed). A systematic assessment of each review is then conducted examining the review focus and methods, what synthesis methods were used (including whether a meta-analysis was performed, and how) and how the review was reported. The reviews are also critically appraised using the AMSTAR criteria (Shea et al., 2007). The disciplines being examined so far include criminology, social work/social welfare, education, software engineering, zoology, marine biology, conservation/ecology, agriculture, and meteorology. Initial findings will be presented, including an assessment of the main sources of methodological guidance used within the various disciplines.
The meeting will also be used to present the project more generally, and to discuss current guidance on when meta-analysis is and is not appropriate; in discussion we will also explore whether there is greater scope for using meta-analysis in the case of complex interventions, and what can be learned from other disciplines.


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99. Title: Systematic Reviews in Social Care Guidance Development: the Experiences of the NICE Collaborating Centre for Social Care

This presentation will focus on the role of systematic reviewing in informing policy and practice at a national level.

Research context:
The National Institute for Health and Care Excellence (NICE) is a non-departmental public body in the UK which provides national guidance to improve health and social care. This presentation will consider the work of the NICE Collaborating Centre for Social Care (NCCSC).

NICE guidelines are written by multi-professional guideline development groups. The primary evidence about effectiveness and cost-effectiveness of interventions (which informs the work of the groups) stems from systematic reviews and economic analysis, undertaken by the NCCSC. The NCCSC ‘dissemination and adoption’ team engages with stakeholders who plan, provide and use care, encourage them to help shape the guideline as well as supporting them to adopt and implement guidance in practice.

Findings:
By June 2014 the NCCSC work will have been ongoing for just over one year. It will be timely to reflect on how it has responded to the particular challenges of developing guidelines for social care, and we anticipate considering challenges for reviewers and economists in relation to three aspects:

Social care outcomes are complex and multi-dimensional
There is huge diversity in the funders, commissioners and beneficiaries of social care, as well as in the interventions themselves: services with similar aims may employ different care packages consisting of a diverse range of interventions and employing different approaches. The notion of need is not straightforward and there can be competing perspectives on outcomes. The synthesis of findings, and the identification of suitable comparators, is therefore challenging.

Measuring and valuing the costs and effects of interventions
The complex nature of outcomes poses difficulties for determining effectiveness and cost-effectiveness of interventions. Social care interventions typically impact on a range of other service sectors which is linked to long-term cost savings in those sectors. Cost effectiveness evaluations in the social care area are still rare and methods underdeveloped. In particular, there is the lack of established ‘willingness to pay’ thresholds.

Integrated working
Social care services sit within a complex network of agencies and their work should complement services delivered by other providers, especially NHS practitioners. While we utilize established methods for critical appraisal and synthesis, there are particular concerns in identifying and aggregating evidence of different quality, and in making guidelines relevant and generalisable to a diverse social care workforce and to primary and community health care.

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Additional Authors: Deborah Rutter, Beth Anderson and Carolyn Denne
100. Title: Mapping the Intervention Literature in Military Social Work

General statement of purpose:
We propose a panel session in which we will present and discuss the findings of a detailed mapping exercise which we are currently conducting. Our aim is to gauge the evidence available to those wishing to conduct systematic reviews of relevance to military social work, an area in which we have some expertise. We believe this project will be of considerable benefit to:

Potential authors of systematic reviews;
Researchers and policymakers keen for current data on which topic areas yield the largest amounts of data suitable for synthesis, which areas are emergent, and where gaps in the research literature exist; and The Campbell Collaboration’s Social Welfare Group itself.

Procedure:
Databases of published literature to be systematically searched include: MEDLINE, PsycINFO, ASSIA, CENTRAL, and IBSS. We will also search OpenSIGLE, Grey.net and specialized relevant databases including that belonging to the U.S. Department of Veteran Affairs (and analogs in other countries) to help identify “grey” literature. Finally, we will search international trials registers to identify trials which are currently recruiting participants.

We aim to establish the volume and types of controlled trials which focus on interventions to support military personnel (whether active duty, discharged or retired), their partners and families. Following screening of search results and coding on variables including study design, intervention, number of participants and outcomes, we will create discrete topic bibliographies. We will then provide a numerical breakdown and thematic discussion of evaluation studies within key topic areas.

We anticipate evaluations studies thus identified will include (but not be limited to) issues such as:
Post-traumatic stress disorder, depression and pain;
Military sexual trauma (MST);
Substance abuse;
Domestic violence;
Homelessness;
Geriatric care; and
Palliative care including hospice.

Findings
Our results should help to create the basis of a prioritized review list in this important area of the Campbell Social Welfare Group’s scope.

Author: Dr. David L. Albright, University of Missouri

Additional Author: Jane Dennis, PhD Campbell Social Welfare Group

103. Title: The What Works Centre for Crime Reduction: Generating and Translating Evidence Synthesis for Decision Makers and Practitioners

The College of Policing is hosting the What Works Centre for Crime Reduction. Co-funded by the Economic and Social Research Council (ESRC) the Centre is one of a network of six in the UK – including health, education, ageing, local growth and early intervention. Working together with a consortium of academic partners the Centre will rate and rank the existing systematic review evidence in crime reduction. A key output will be an accessible, clearly labelled evidence base with evidence listed and ranked by robustness, cost and impact on reducing crime. For the first time practitioners will have access to the ‘state of the evidence’ and be able to understand ‘what works’ and ‘what doesn’t’ at the click of a mouse. The Centre will also help to ensure that evidence gets used.

In this session we will focus on plans to move from sharing evidence to getting it used in practice. The session will focus on two different ways in which user engagement and user involvement in design/delivery are helping to ensure that knowledge is translated into practice.
User design - an on-line crime reduction toolkit

The Centre is designing and building an online ‘toolkit’ to provide decision-makers with quick access to the best available evidence of what works. We will describe our progress in developing the toolkit and how users are being directly involved to ensure the toolkit meets their needs.

2) User engagement - The outreach and capability building programme

This is designed to support practitioners to understand and use their evidence. A range of activities will be described with a spotlight on the first ‘Evidence Base Camp’ run by the Centre earlier this year. 60 practitioners came together to learn about the principles of systematic review and how to carry out rapid evidence assessments. Delegates worked together in ‘live’ review teams directly applying their learning to rapidly review the evidence for some of their own perennial questions. The aim of the camp was to raise awareness of systematic review principles and develop critical thinking and appraisal skills while allowing practitioners to test out these skills on live, relevant review work. Lessons from the camp will be shared including practitioner reactions to the methods and how they plan to implement their learning back in the work place.

Author: Mark Abram Senior Research Officer, College of Policing


SRs can have an intrinsic appeal to policymakers who understand and value the logic of why we do them. Yet, even those policy actors need to know how synthesised evidence relates to their own contexts. Often that evidence does not exist or it has not been included in a review. Other policy actors do not see the value of using evidence in their decision-making. What has 3ie learned from recent systematic review grant-making about how to adapt and improve engagement with policy actors more effectively throughout the research cycle? How is evidence of effective policy engagement and influence for research uptake being adapted and used in the systematic review research enterprise in low- and middle-income countries? What aspects of developing country contexts most affect how we engage with policy actors from the start of the research cycle through implementation? Beryl Leach, 3ie deputy director for policy, advocacy and communication, will present an overview of how and why 3ie is adapting and strengthening evidence-based methods for policy engagement and influence into its work with systematic review teams, intermediaries and policy actors from question identification and design through implementation and uptake of findings.

Author: Beryl Leach, International Initiative for Impact Evaluation (3ie) Policy, Advocacy and Communication Office, ISID Institutional Complex

109. Title: Which Interventions have the Greatest Effect on Student Learning in Sub-Saharan Africa? A Meta-analysis of Rigorous Impact Evaluations

Research Question: The objective of this meta-analysis is to highlight which education interventions work best in Sub-Saharan Africa – a critical policy imperative for developing countries with limited resources to spend. For example, do financial incentives for teachers result in similar outcomes as providing incentives to students or their families? Or are interventions that provide school supplies to students (textbooks, flipcharts) as effective as those that change the method of instruction? Further, I also examine whether program effects differ by student population (gender, income level etc.), region, subject matter, intervention dosage, and study methodology, among others.

Research Methods: This meta-analysis includes literature from the fields of Economics, Education, and Public Health. Only studies published since 1980 which use either experimental or quasi-experimental methods and focus on primary or secondary learning outcomes are included. For my research design, I employ a random effects meta-analysis model. Further, since many studies report multiple outcomes (without information on the correlation structure), in some analyses I use robust variance estimation, and when the number of studies is small, I use small-sample corrections. In total, I evaluate 60 studies, containing 88 experiments.

Findings: Interventions with the strongest impact are pedagogical interventions (i.e. interventions that implement new instructional methods) [d = 1.128, p = 0.000] and instructional time increases (i.e. interventions that extend the school day) [d = 0.451, p = 0.000]. Pedagogical interventions have an average effect size 0.862 standard deviations higher than any other
intervention type (SE = 0.105, p-value = 0.0001). Among those intervention types with the lowest pooled effect sizes are school-based management interventions (d= 0.047, p = 0.278) and school supplies provision (d=0.058, p = 0.004) [Full set of findings available in the full paper].

Research prioritization: In general, the evidence on “what works” to improve learning in Sub-Saharan Africa is not evenly distributed across topics or countries. I found that certain topics that are very relevant to the African context (such as multi-grade teaching or multi-shift teaching) are not under rigorous study at all. Further, over 30% of the studies in this meta-analysis come from Kenya alone. In addition, pedagogical studies (those with highest effect sizes) are often quite underpowered (randomization units under 10). Thus recommendations for researchers would include the use of larger randomized trials (particularly in the field of pedagogical research) and an increased focus on evaluations that are more representative of both the continent and the issues facing education systems across Africa.

Author: Katharine Conn, Columbia University

110. Title: Theory-based Evaluation of Criminal Justice Interventions for Intimate Partner Violence

Background
In recent years, criminal justice interventions have emerged as the most visible response to intimate partner violence (IPV) in modern western nations (Barner and Carney, 2011). This response covers a range of interventions from mandatory arrest to perpetrator treatment programmes. The historical development of these approaches has been driven, to a large extent, by ideology and untested assumptions about IPV (Bacchus et al, 2007; Dixon et al, 2011). It is only relatively recently that there has been a greater focus on research evidence and formal evaluations of ‘what works’ (Bacchus et al, 2007). This has given rise to a small but growing body of systematic reviews examining the effectiveness of criminal justice interventions in domestic violence (Akoensi et al., 2013; Davis et al., 2008; Feder et al., 2008; Miller et al., 2013). The findings of these reviews, however, have been mixed and it appears that ‘we do not yet know what works best, for whom, and under what circumstances’ (Akoensi et al., 2013).

Rationale and Question
With a continuing urgency to address the issue of domestic violence, this paper argues that we need to take an alternative, theory-based approach to evaluating criminal justice interventions. Current evaluations, and reviews, vary in the extent to which they articulate and test theories of change. This means that it remains difficult to interpret findings from these studies and identify the necessary conditions and contexts for improving outcomes. To progress the field, evaluation and syntheses methods need to focus on the theoretical underpinnings of the interventions:

What are a) the key assumptions about IPV and b) theories of change that underpin criminal justice interventions?

Methods: This paper reports on the preliminary findings of an analytic synthesis (aggregative and configurative) using empirical evaluations of IPV interventions. The approach draws on existing methods of conceptual syntheses (O’Mara-Eves, 2012; Lorenc et al., 2012; Pawson et al., 2004) and uses an iterative and staged approach:

(i) Aggregative synthesis of empirical data for each intervention in terms of effects and populations, interventions and contexts.
(ii) Configurative synthesis of the underlying theories of change
(iii) Configurative synthesis of the empirical data against the theory

The syntheses will provide an overview of the relative impact of different criminal justice interventions in relation to assumptions about IPV and theories of change. These findings will contribute to a greater understanding of the necessary conditions and contexts for addressing IPV to help inform policy and practice.

Author: Karen Schucan Bird, EPPI-Centre, Social Science Research Unit, Institute of Education

Additional Authors: David Gough and Carol Vigurs
113. Title: Secular Trends and Evaluation of Complex Interventions: the Rising Tide Phenomenon

Context: Evaluation of service delivery or public health interventions usually occurs when some uptake of the interventions has already taken place. Insofar as these interventions are effective, their spontaneous diffusion may produce an improvement across the board, akin to a ‘rising tide, lifting all vessels’. This leads to unexpected improvement in control groups that may contribute to apparent null results in controlled evaluation studies, which are gaining popularity for assessing social and policy interventions. This paper aims to illustrate such a secular trend of improvement, or ‘rising tide phenomenon’ using examples drawn from published literature. We propose a framework to help identify possible occurrence of this phenomenon and highlight potential implications for the design of evaluation studies and the interpretation of their results.

Methods: Four published evaluations of health service delivery and public health interventions where a null study result may have been the consequence of a rising tide were selected for detailed case study. A framework that facilitates a systematic scrutiny of positive and negative evidence was developed from epidemiological principles for determining the likelihood of a secular trend explanation (as oppose to alternative explanations) and was road-tested on the four cases.

Findings: The plausibility of a rising tide being the main explanation of a null result will often be uncertain. Application of the framework in the case studies demonstrates that cases are most compelling when consistent internal and external longitudinal data show a system-wide improvement preceding and during the evaluation study, and alternative explanations such as contamination, Hawthorne effect, regression to the mean and other biases can be ruled out.

Conclusions: The possibility of a rising tide phenomenon should be considered in a controlled evaluation study when baseline measurements are better than expected or similar improvements are observed in both intervention and control groups. In such a scenario, the proposed framework can be used to distinguish between a rising tide and other explanations. Further research is required to gather empirical evidence on the occurrence and implications of a rising tide phenomenon both within and beyond health sector and to validate the proposed framework.

Author: Dr Yen-Fu Chen University of Birmingham

Additional Authors: Professor Andrew, Stevens Dr Karla Hemming and Professor Richard Lilford

120 Title: A Tale of Two Reviews. Policy and Program Lessons from Two Reviews and Process Evaluations of Feeding Programs for Children in Developing Countries.

Introduction. The consequences of undernutrition in early childhood are severe; more than 35% of deaths and another 35% of the disease burden in young children are due to undernutrition. Physical and intellectual development may be adversely affected. Furthermore, undernourished children are less likely to attend school and benefit from it when they do attend.

Early intervention is important to reduce hunger and maximize potential. Feeding programs are designed to do that. Billions of dollars are invested in these programs; it is essential to learn whether, how, and why they work or don’t work. We conducted two Cochrane/Campbell systematic reviews (1) food supplementation for young children 2) food supplementation for school-aged children (and update). We also performed structured process evaluation.

Objectives. To compare and contrast key outcomes and process factors in feeding programs for children and present some policy and program implications.

Methods. We followed Cochrane and Campbell procedures, developing a logic model, standardized searching and involving at least two authors in reviewing searches, inclusion/exclusion and conducting data extraction, analyses and bias assessment. We also conducted relevant subgroup analyses, and used a structured approach to process evaluation. Our team included nutritionists and process evaluation experts to assess calories given, leakage, and, and barriers and facilitators to effectiveness.

Results. Thirty studies were in the preschool review, 26 from LMIC. Eighteen studies were originally in the school meals review with 8 more in the update; 17 from LMIC. Here, we focus on findings from LMIC. Both reviews showed small effects on weight (preschool: .12 to .25 kg/year, school: .25 to .75 kg / year) and height (preschool: .48 to .67 cm./year, school .25 to 1.47 cm/ year). The preschool review showed significant, moderate effectiveness for psychomotor development in 4 out of 5 studies; both reviews showed significant effects for mental development. Additionally, school meals had consistent effectiveness for attendance and math performance.
Factors that impacted on effectiveness included: nutritional need, broken supply chains, redistribution of the supplement within the family, amount of supplemental energy given, palatability, parental/school capacity to give food, and degree of supervision of the feeding.

Policy/progarm implications. There is stronger evidence for ensuring that: 1) community organizations/schools are well-organized and prepared to deliver food 2) food is palatable and accepted by children and the community 3) distribution and intake of the supplement are closely supervised 4) high portion of the RDA for energy is given. 4) Supplementation starts early and continues for several years and 5) the poorest/ most undernourished children are targeted. There is moderate evidence for fortification, giving foods with high energy density and giving families extra rations. Process evaluation was a vital complement to the systematic reviews.

Author: Elizabeth Kristjansson, University of Ottawa

Additional Authors: Selma Liberato, Vivian Welch, Damian Francis, Trish Greenhalgh, Laura Janzen and Eammon Noonan

125. Title: The Role of Translational Tools in the Evidence Cycle: Moving Systematic Review Findings to Decision Makers

The evidence-practice and policy gap is a major problem facing researchers, policy makers, and practitioners in a variety of different fields. There is consistent evidence across disciplines that a considerable amount of high-quality research is not efficiently translated into practice. This lack of knowledge translation leads to the costly continued use of ineffective practices. While systematic reviews are uniquely designed to serve as the basic unit of knowledge translation (Grimshaw et al., 2012), they do not inherently lead to the adoption of real world practices or policies. The current research provides an overview of “translational tools”; an emerging method for knowledge translation across disciples. Specific questions that are addressed in this paper include: 1) What are translational tools?; 2) How are they created?; 3) What purpose do they serve?; and 4) How are systematic reviews incorporated into translational tools? This research takes a primary focus on how systematic review findings can be incorporated into the development of translational tools and makes recommendations for improving the transportability of research synthesis findings. The discussion of translational tools is guided with two examples of tools that are currently being implemented in the field of crime and justice; the RNR Simulation Tool and Skills for Offender Assessment and Responsivity in New Goals (SOARING2). Examples of translational tools from other fields are also provided and promising research on the effectiveness of translational tools is discussed.

Author: Michael S Caudy, Ph.D., George Mason University

Additional Authors: Faye S. Taxman, Ph.D.

126. Title: Mind the Evidence Gaps: How Can We Bring Systematic Reviews to the People Who Need Them?

How do you make decisions about your healthcare? What information do you rely on? Oftentimes, the answer is talking to trusted friends or family members, asking a primary care provider, or seeking information over the internet, yet in many cases, these methods may be far from ideal. Systematic reviews have only recently made the jump from academic exercises to (in some cases) serving as a comprehensive and unbiased evidence base for broadly disseminated clinical practice guidelines. The hope is that these rigorous evidence-based guidelines are then broadly disseminated to research and training institutions and to clinical practice organizations so that they can reach frontline researchers, administrators, and primary care providers. Primary care providers knowledgeable about current evidence are then entrusted with helping their patients make informed medical decisions in line with their unique circumstances and preferences. Because there are so many steps in the evidence dissemination and implementation cycle, there are equally many places to refine the process to help increase the reliance on systematic review evidence by the providers and patients making medical decisions together.

This presentation will highlight the multifaceted efforts of two US agencies, the Veterans Affairs Evidence-based Synthesis Program and the Agency for Healthcare Research and Quality Evidence-based Practice Center program, to improve the evidence dissemination and implementation process at multiple steps in the evidence cycle. We will also discuss future needs of both agencies for further advancements in dissemination and implementation. We will present implemented and proposed
methods that are both commonly debated in the literature (e.g., engaging stakeholders in the systematic review process, investigating patient-centered outcomes, increasing the readability of systematic reviews, dissemination of findings to guidelines working groups) and more novel (e.g., building relationships with commonly used websites like WebMD and point-of-care resources like UpToDate, incorporating medical decision-making literature and behavioral economics into systematic review dissemination materials, collaborating with training institutions to increase provider awareness of research synthesis methods, having ongoing collaborations with practice organizations, tailoring systematic review products to various audiences through the creation of patient and provider education briefs, linking systematic review teams with laboratories and organizations conducting primary research, and conducting rapid reviews and other research synthesis products that better serve the needs and timeframes of organizations making policy decisions). Our goal is to critically examine and refine all points in the evidence cycle to increase the utility of research synthesis methods and results.

Author: Maya Elin O’Neil, PhD, MS AHRQ Scientific Resource Center, Portland VA Medical Center, Oregon Health & Science University

Additional Authors: Nicole Floyd, MPH and Kelly Vander Ley, PhD

128. Title: Testing Campbell’s Sociology of Scientific Validity with Supplemented Data from a C2 Systematic Review

Donald T. Campbell’s contributions to evidence based program evaluation are not limited to his creation of a fundamentally new methodology for designing and conducting field experiments and critically appraising their results. Campbell’s contributions extend as well to the philosophy of science and the sociology of research in applied settings. Thus, while he is generally recognized for providing us with a powerful set of methodological tools for improving the validity of applied research, it is less widely appreciated that Campbell also proposed and partially implemented a theory for identifying the social and organizational conditions under which the validity of research findings may be explained and improved. Testing Campbell’s applied sociology of scientific validity—or in his words an epistemologically relevant sociology of scientific validity, or ERISS—is the main purpose of the proposed paper.

Following Campbell, we recognize the pressing need for theory-guided empirical research on the effects social organization on the quality of scientific evidence available to policy makers. Focusing on the field of evidence-based counter terrorism research and the path-breaking systematic review of Lum, Kennedy, and Sherley (2006), we systematically link their findings to the tradition of the applied sociology of science established by Campbell. The main research question is whether variations in the social organization of terrorism research affect the quality of evidence produced within that research community. Using social network analysis, we focus on the presumed effects of two key social properties—multi-disciplinarity and organizational diversity—on the quality of research products. Based on Lum’s data and new data extracted from the Web of Science, we examine more than 25,000 publications on terrorism between 1992 and 2012. Each publication is assigned a quality score based on the 3-point Lum scale and related to properties of multi-disciplinarity and organizational diversity. We also examine whether quality of research produced by individual authors varies by their affiliation with specific types of organizations (e.g., think tanks) and their membership in particular disciplines (e.g., sociology, political science, economics). The data are analyzed in three time periods, 1992-2000, 2000-2008, and 2008-2013, which correspond to three separate presidential administrations. Each time period is examined as a distinct system with definable differences in multi-disciplinarity, organizational diversity, and research quality. Finally, citation network analysis is used to investigate relations between the quality of research produced by individual authors and their position in the network as leaders, followers, brokers, and isolates. Following Campbell, we hope to extend the methodology of scientific validity to the sociology of scientific validity. To our knowledge, this is the first empirical investigation of Campbell’s ERISS program.

Author: William N. Dunn, PhD and Alla Sergeevna Khadka University of Pittsburgh

Additional Authors: Alla Sergeevna Khadka
130. Title: “Impact of Training and Working Conditions of Early Childhood Education and Care Practitioners on Children’s Outcomes”

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite European Union Agency, whose role is to provide knowledge in the area of social and work-related policies. Eurofound contracted out in 2013 a systematic review on the impact of training and working conditions of early childhood education and care practitioners on children’s outcomes. The aim is to identify how the training and development of care and education workers, who operate in a range of types of setting, might be tailored to most effectively to improve the quality of the care and education services available for children below primary school age in European member states. The literature study is being carried out by adopting the systematic review methodology elaborated by the EPPI-Centre for informing evidence-based policies.

The review will address the following questions:
Which features of CPD affect children (their outcomes/wellbeing)? Which forms are the most effective?
Which features of working conditions affect children (their outcomes/wellbeing)? Which forms are the most effective?

These will be achieved by conducting:
- a synthesis of quantitative data on the impact of ECEC continuing professional development and working conditions on outcomes for children
- a synthesis of qualitative data describing ECEC staff views and experiences of continuing professional development and working conditions
- a cross-studies synthesis of the quantitative and qualitative data to assess the findings of the reviews in relation to one another.

Our approach is innovative in that the review will seek to cover research studies carried out in most EU languages by involving national experts in all 28 Member States. Their language expertise will grant access to scientific literature written in languages other than English and will allow examination of studies carried out on this topic across EU-28 Member States.

Author: Daniel Molinuevo, Research Officer, Eurofound

131. Title: Systematic Review and Critical Appraisal of Qualitative Metasyntheses to Develop a Snapshot and Taxonomy of Practice

Introduction. Qualitative metasyntheses—or the ‘meta-analysis’ of qualitative studies to develop new understandings—have grown in popularity as social scientists seek to develop practice-relevant evidence from qualitative reports. A surfeit of metasynthesis methods currently exists, with differences between them poorly understood. Moreover, though reflective of systematic reviewing methodology, metasyntheses might inadequately report search and retrieval of studies. To understand current research practice—both in searching for and in reciprocally translating studies—qualitative metasyntheses published in 2012 and indexed on three major databases were systematically reviewed, their reporting assessed, and their methods analysed to develop a taxonomy of reciprocal translation.

Author: G.J. Melendez-Torres, Centre for Evidence-Based Intervention, University of Oxford

Additional Authors: Sean Grant and Chris Bonell
132. Title: Assessing How Much Confidence to Place in the Evidence from Reviews of Qualitative Research

Background
Qualitative evidence syntheses are increasingly used to bring together findings from qualitative studies. However, it is difficult to use these findings alongside reviews of effects, or to inform policy development, because methods to assess how much confidence to place in these synthesis findings are poorly developed.

Objectives
To describe a novel approach for assessing how much confidence to place in evidence from the review of qualitative research.

Methods
The Confidence of the Evidence from Reviews of Qualitative research (CERQual) approach was developed through review of existing tools in this area; discussions within a working group; and piloting of the tool on three qualitative evidence syntheses.

Results
The CERQual approach bases assessments of confidence on four factors: the methodological quality of the individual studies contributing to a review finding, the coherence of each review finding, the relevance of a review finding, and the sufficiency of data supporting a review finding. Methodological quality is assessed using a quality-assessment tool for qualitative studies. Coherence is assessed by looking at the extent to which a review finding is based on data that is similar within and across multiple individual studies and / or incorporates (plausible) explanations for any variations across individual studies. Relevance is assessed by determining to what extent the evidence supporting a review finding is applicable to the context specified in the review question. Sufficiency of data is assessed by an overall determination of the degree of richness and / or scope of the evidence and quantity of data supporting a review finding.

After assessing each of the separate components, an overall judgement of the confidence in each review finding is made. The degree of confidence in a review finding can be judged as high, moderate, low, or very low. This assessment should be described and justified in a transparent manner, preferably in a summary of qualitative findings table which includes narrative statements.

Conclusions
The CERQual approach provides a transparent method for assessing the confidence of evidence based on reviews of qualitative research and may facilitate the use of these findings alongside review of effects and in guideline development processes.

Author: Heather Menzies Munthe-Kaas, The Norwegian Knowledge Centre for the Health Services

Additional Authors: Claire Glenton, Simon Lewin, Benedicte Carlson, Christopher Colvin, Jane Noyes and Arash Rashidian

133. Title: The Impact of Land Property Rights Interventions on Investment and Agricultural Productivity in Developing Countries: a Systematic Review

Secure and predictable access to land as a productive resource is key to the livelihoods of millions of farmers around the world. Existing evidence on the effects of land property rights interventions is mixed and to a considerable degree dependent upon the initial land rights conditions. We conduct a systematic review of current quantitative and qualitative evidence on the effects of land property rights interventions. The quantitative results are based on a corpus of 20 studies. Studies on freehold titling provide evidence mostly consistent with conventional economic theories of property rights: land tenure interventions substantially improve productivity and consumption expenditure or income, with long-term investment and increases in perceived tenure security as plausible mechanisms (a credit-collateral channel finds no support). The quantitative evidence base has very little to say about consequences of such policies for social outcomes like displacement, conflict, or gender equality. Thus, while tenure recognition appears to improve land productivity and the material welfare of those who have access to registered land, we do not have a clear sense of the dynamics that follow from such policies in terms of overall access to land. We also have no quantitative evidence on policies that certify communal property rights, one of the forms of property rights enhancement that motivated our interest in this review. The qualitative side of the review analyzed nine studies that catalogued a broad spectrum of both positive and negative experiences with land tenure interventions, confirming that social impacts can be significant, unpredictable and in some instances negative, such as displacement or diminished property rights for women. The study results draw attention particularly to the significant gains in productivity and investment in agriculture in the Latin American and Asian cases due to tenure formalization, and the comparatively weak effects attributable to formalization in Africa. We
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propose the idea of the “Africa effect”, based on the fact that most farms in sub-Saharan Africa are held under customary tenure arrangements, which generally provide long-term tenure security to qualified members of land-holding families, groups or communities. Low gains to investment and productivity in Africa may also be explained by the low levels of wealth and income of African farming families in comparison to those in Latin America or Asia. Understanding the relevance and the relative weight of either effect merits further research.

Author: Cyrus Samii New York University

Additional Authors: Steven Lawry, Kennedy School of Government, Harvard University, Ruth Hall, University of Western Cape, Aaron Leopold, Global Governance Institute, Donna Hornby, University of Western Cape and Farai Mtero, University of Western Cape

135. Title: Systematic Review Summaries on Child Welfare Services

The Norwegian Directorate for Children, Youth and Family Affairs has initiated a quality improvement process. To meet expected demand for research based knowledge about effects of child welfare services, the Centre for Child and Adolescent Mental Health, Eastern and Southern Norway (RBUP) in collaboration with Enhance Reviews, set up a project with the aim to:

Map systematic reviews (SRs) on child welfare services
Examine effects of various interventions
Identify knowledge gaps

To identify relevant SRs we searched systematically in Medline (Ovid), Embase (Ovid), PsycInfo (Ovid) Cinahl, Cochrane Library (CDRS and DARE), Campbell Collaboration Register, and TRIP Database. Two researchers screened titles and abstracts independently. Possibly relevant records were obtained and screened in full text. To be included the publication had to meet the AMSTAR criteria and report effects of any intervention of possible relevance to the child welfare services. An advisory board representing stakeholders had two tasks: 1) to assign priority points to each of the included SRs, and 2) to review our drafts for a plain language summary template for the SRs. We held focus groups and asked for written feedback for this purpose. We also engaged a publishing agency for assistance with the Norwegian plain language summary template, and for graphical lay out.

Technical and comprehensive summaries were first written in English by one of the reviewers, and then transformed to Norwegian plain language summaries. Summaries were produced according to the priority list from the advisory board and coded according to a prespecified coding scheme.

The publishing agency set up an Internet site (using the web publishing tool WordPress) for the summaries, and summaries are published successively. The coding scheme was incorporated in the web site to provide search and browsing options.

Future developments of this project will be to include SRs about effects of other child and adolescent mental health services.

Author: Hege Kornør, Centre for Child and Adolescent Mental Health, Eastern and Southern Norway (RBUP)

Additional Authors: Karla Soares-Weiser, Enhance Reviews Ltd

136 Title: Community Policing to Reduce Crime, Disorder and Fear and Increase Satisfaction and Legitimacy

Community-oriented policing (COP) emphasizes community involvement in crime prevention efforts, in contrast to the focus of traditional policing on law enforcement and order maintenance. Previous non-systematic reviews have found limited effects of COP on reducing crime, but suggest that it may have benefits for other outcomes, including citizen satisfaction and trust in the police. There are a number of challenges in assessing the effectiveness of COP, including substantial heterogeneity in the types of strategies that fall within COP's very broadly defined boundaries and the lack of a clear logic model or accepted structure for interventions. We therefore conducted a systematic review to attempt to identify and synthesize the various approaches that have been classified as COP. Our results are more encouraging than earlier work, suggesting that COP has a small but significant impact on violent crime and stronger benefits for citizen satisfaction, perceived disorder, and trust in the police. Effects on property crime and citizens’ fear of crime are weaker. Identifying the specific strategies that are implemented in collaboration with the community, such as problem-oriented policing, may be key to refining COP as an intervention and assessing its effectiveness

Author: Charlotte Gill
137. Title: Displacement of Crime and Diffusion of Crime Control Benefits in Large-scale Geographic Areas

The traditional belief that displacement of crime to other areas is an inevitable outcome of geographically focused crime prevention efforts has been replaced by an assumption that displacement is seldom total and often inconsequential. Indeed, research suggests that many place-oriented crime prevention strategies lead to a “diffusion of crime control benefits” to surrounding areas. However, much of the primary research on displacement has focused on “micro places” such as single street blocks. Although policing efforts at these “hot spots” have become more widely used, formal social control interventions are often still implemented at larger geographic units such as police districts, cities, and jurisdictions. We conducted a systematic review and meta-analysis to assess displacement and diffusion of benefits in these broadly targeted interventions. We find that, in line with prior reviews that examine displacement at smaller geographic units, displacement of crime is not a common occurrence at larger units of geography and diffusion of benefits is more likely to occur.

Author: Cody Telep

138. Title: Continuity of Care and the Psychosocial Development of Children and Youth Living in Residential Settings: a Mixed-methods Systematic Review

Background and Aim: Continuity of care (CoC) within residential settings describes to what degree care of looked after children is coherent and consistent. Elements which determine continuity of care include staff turnover rates, staff to child ratio, and type of staffing patterns. Increasing continuity in out-of-home care is one way to create a “family-like” environment. The paper to be presented summarizes current knowledge on the effect of organizational changes and interventions to promote continuity of care on the psychosocial development of children and youth living in residential institutions. Using a mixed-methods approach, we will present summarized evidence on the following questions: What is the effect of organizational changes or interventions to promote CoC on the psychosocial development of children/youth living in residential settings? How does CoC affect how children/youth experience life in an institution?

Method: This study employs systematic review methodology developed by the Cochrane Collaboration. Using a systematic literature search and a set of explicit inclusion/exclusion criteria, relevant studies were identified, appraised and synthesized in an attempt to answer the research questions. There is increasing recognition for the value of including both effect and qualitative studies when conducting systematic reviews on complex social interventions. Qualitative evidence synthesis related to the experiences of looked after children aims to clarify why and how elements of CoC are important and whether children’ needs/wants are addressed when out-of-home care is designed and implemented.

This systematic review may have important implications for how residential institutions are organized in the future.

Author: Heather Menzies Munthe-Kaas (Norwegian Knowledge Centre for the Health Services, NOKC, Norway); Karianne Thune Hammerstrøm (NOKC, Norway); Kristina Rolstad Nordlund (NOKC, Norway); Nanna Kurtze (NOKC, Norway)

Themes: children and youth; residential institutions; continuity; organizational structure

139. Title Publication Bias in Social Sciences

Publication bias is a well-known threat to the validity of systematic reviews and meta-analyses in the medical sciences. In the social sciences, however, evidence to support publication bias has been lacking. The purpose of this presentation, therefore, is to extend the research on publication bias to research in the social sciences. We report the results of two independent projects on publication bias. Each of the studies showed reliance on statistically significant results in the published literature. We conclude that reviewers should continue to search for and include unpublished, grey literature.

Author: Joshua Polanin and Emily Tanner Smith
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1. **Title: The Quality Survey of Campbell Systematic Reviews using AMSTAR**

**Background:** Campbell Systematic Review (C2 review) was acknowledged as high quality evidence, especially in fields of social work, education, and so on. However, we didn’t find a study to evaluate the quality of them.

**Objective:** To evaluate the quality of C2 review associated with international development, education, crime and justice, and social welfare.

**Methods:** We downloaded all studies about the following four fields: international development, education, crime and justice, and social welfare in Campbell Library. Two researchers evaluated the quality of these C2 review independently using AMSTAR tool, which includes 11 items and each item measured Y, N, Can’t answer, and Not applicable.

**Results:** From 2003 to 2012, 90 studies (4 updated) met the inclusion criteria and all of them were downloaded: 2 articles (2.3%) about international development, 13 articles (15.1%) about education, 35 articles (40.7%) about crime and justice, and 36 articles (41.9%) about social welfare. Generally speaking, the quality of C2 review was pretty good, over 80% studies reported Y in 4 items and over 60% studies reported Y in 4 items. On the other hand, only 60% studies reported Y in item “Was the likelihood of publication bias assessed?” and another quality index “Was the conflict of interest stated?” were done only by 31.4% studies.

**Conclusion:** The quality of Campbell Systematic Reviews was high based on assessment results, however, some items could be improved like publication bias and interest stated.

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2. **Title: Communication Enhancement for Older Adults with Hearing Impairment**

**Background:** WHO (2005) estimate that 278 million people worldwide have moderate to profound hearing loss in both ears. Hearing aids and other interventions, having been proven to be traditional effective methods to improving aging hearing impairment, could not meet more and more clients’ needing because of its effectiveness or expenditure. Many studies suggest that various communication interventions be proved to be an effectively methods to reduce aging hearing impairments.

**Purposes:** To assess the effectiveness of group communication enhancement training on (1) the quality of life, (2) communication activity limitations, and (3) communication strategies of older adults (50+ years) with hearing impairment.

**Search strategy:** Electronic searches of MEDLINE, Embase, Cochrane Central Register of Controlled Trials, Web of Science, Science Direct, to Jan 2013. Reviewers contacted relevant organizations, individuals, and searched pertinent websites and reference lists.

**Selection criteria:** All randomized controlled trials of interventions with a communication interventions comparing with other interventions (e.g., hearing aids) for improving hearing impairment of older adults.

**Statistics methods:** Two reviewers evaluated the quality of the included studies, extracted and cross checked the data; the Review Manager 5.0 software was used to perform the test for heterogeneity. GRADE method was used for quality assessments.

**Results:** Group-based communication can improve quality of life (SMD=0.33, 95% CI: 0.10 to 0.56, p = 0.006) and communication skills (SMD = 0.36, 95% CI: 0.13 to 0.59, p = 0.003) to elderly with hearing impairment, while it’s no statistically significant on the improvement of emotional functions and reduction on hearing impairment.

**Conclusion:** Group communication programs can enhance the patients’ communication skills and quality of life. However, more high quality and standard randomized controlled trials need to be carried out.

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3. **Evidence-Based Practice in Non-clinical Medicine Fields in China is Urgent**

**Background:** Evidence-based practice (EBP) thinking and methods was acknowledged as one of high quality research methods in clinical medicine areas world widely. Little is known about quality and quantity of EBP development in non-clinical medicine fields in China.

**Objectives:** Systematically review all of EBP development in non-clinical fields in China.

**Methods:** Using literature searching strategy (“systematic review” AND “meta-analysis” AND “evidence-based practice”) search CSSCI (Chinese Social Science Citation Index), CNKI (China Journal Full text Databases) combining with handing searching of other professional journals. Two groups of review authors applied inclusion criteria, assess trial quality, and extracted data independently.

**Results:** From 1998 to 2012, 188 items were identified initially; finally 67 items met inclusion criteria which was composed by 51 (76%) EBP conceptions, 11 (16%) systematic reviews (SR), 5 (8%) meta-analysis but not SR. In Management Science, 4 items about EBP conception, 1 item about SR, 4 items using Meta statistical methodology. In Education Science, 6 items about EBP conception. In Library and Information Studies, 22 items about EBP conception. In Economic Science, 2 items about EBP conception and 2 items about SR. Beside above disciplines, 17 items about EBP conception, 6 items about SR, and 1 item using Meta statistic methodology were found in other fields. Using AMSTAR to assess 11 included SR, calculated mean score was 6 (5-9): 4 SR <6.1, 3 SR=6, 4 SR>6.

**Conclusion:** Both quantity and quality of EBP research in non-clinical medicine fields were low in China. The Campbell/Cochrane SR research methods should be advocated in non-clinical medicine areas in China, with the purpose of helping decision maker make reasonable decisions based on high quality research evidence. AMSTAR tool should be used to assess EBP in other fields than clinical fields in China.

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4. **Title: International Research Evidence Transformation: a Good Example of Knowledge Equity**

**Background:** Chinese citizens are aging rapidly with increasing tremendous needs in geriatric health and mental health services. However, there are few trained geriatric health care providers able to meet the needs of older adults. It is necessary to critically transform intervention evidence from acknowledged international research units.

**Objectives:** Based on NREPP’s (National Registry of Evidence-Based Programs and Practices) intervention summaries, this study aims to develop a Chinese aging mental health database under the Chinese Aging Health Clearinghouse (CAHC) through a joint effort between the School of Social Work at the University of Southern California (USC) in the United States and the Evidence-Based Medical Center at Lanzhou University (LZU) in China.

**Methods:** An Aging Mental Health Scientific Advisory Committee (AMHSAC) was created within CAHC during Fall 2011. The AMHSAC is composed of six experts from the United States and China. Using a standardized assessment form, AMHSAC members appraised NREPP interventions and selected the interventions that were being considered as appropriate for implementation in contemporary China.

**Results:** Initially, 98 NREPP interventions were assigned to two gerontology experts to assess its appropriateness for using on older adult population. 47 items entered the second appraisal round performed by four Chinese experts from the United States and China to assess its applicability in China. Based on the scores provided by these experts, 10 aging mental health interventions were selected and translated. The website of the Chinese Aging Mental Health Clearinghouse will be ready for use at the end of 2013.

**Conclusion:** It is more significant and more challenging to connect practice with research-based evidence in nonclinical medical fields in China, such as aging health. China can learn from the existing international evidence-based practices, transform others’ research experiences, and develop its own best practice in the coming years. This international evidence transformation exercise sets a good example for future similar research transformation.

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7. Title: The Reporting Characteristics of Campbell Systematic Reviews Using PRISMA

Background: Campbell Systematic Review (C2 review) contributes a lot to decision making on social work, education, and so on. Appropriate information presenting relays on normative reporting, however, we didn't find a study to evaluate the reporting characteristics of them.

Objective: To evaluate the reporting characteristics of C2 review associated with international development, education, crime and justice and social welfare.

Methods: We downloaded all studies about the following four fields: international development, education, crime and justice and social welfare in Campbell Library. Two researchers evaluated the reporting characteristics of these C2 review independently using PRISMA tool, which includes 27 items and each item measured Y,N, Can’t answer and Not applicable.

Results: From 2003 to 2012, 86 studies, of which 4 had updated, met the inclusion criteria and all of them were downloaded: 2 articles (2.3%) about international development, 13 articles (15.1%) about education, 35 articles (40.7%) about crime and justice and 36 articles (41.9%) about social welfare. Generally speaking, the reporting characteristics of C2 review was good, over 80% studies reported Y in 16 items and over 60% studies reported Y in 5 items. Nevertheless, under 50% reported Y in 6 items. Only about 30% studies reported Y in various items on “Risk of bias” and “Additional analyses”. And another reporting index “Limitations” were reported only by 44.2% studies.

Conclusion: The reporting characteristic of Campbell Systematic Reviews was not that integrated based on assessment results, especially the normalization like risk of bias and limitations reporting should be improved.

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8. Title: Effects of School-Based Interventions with U.S. Military-Connected Children: A Systematic Review

Objective: The purpose of this systematic review was to examine the effects of school-based interventions on the well-being of military-connected students (i.e., dependents of military service members or veterans).

Method: Systematic review procedures were employed to find and synthesize published and unpublished studies meeting the following inclusion criteria: examined effects of interventions intended to assist students whose parents were active duty service members, reserve component personnel, or a veteran of a branch of the U.S. military with parental deployment, reintegration, military related trauma or death, or frequent moves; employed a randomized or quasi-experimental design; measured at least one social, behavioural, emotional or educational outcome; and conducted in a Pre-K-12 school setting between 1990 and August, 2013. Search procedures included 11 electronic databases using specified keywords; websites of relevant research centers; reference lists; and contacts with researchers and military research institutes. All studies were coded by two coders (kappa=.92).

Statistical analysis was designed to produce descriptive information and effect size statistics (Hedges’ g). Risk of bias was assessed for selection, performance, detection, attrition, and reporting biases using the Cochrane Collaboration’s risk of bias tool.

Results: Of the 1,460 abstracts reviewed, 22 full-text reports were retrieved. Twenty-one of those were excluded based on eligibility criteria. The one included study, an unpublished dissertation, employed a quasi-experimental design to examine the effectiveness of a group counselling intervention for military-connected students whose parents were scheduled for deployment or were deployed. Effects on all outcomes were small to moderate and not statistically significant: state anxiety (g = -.38; 95% CI, -.86 to .12), trait anxiety (g = .06; 95% CI, -.43 to .54); self-esteem (g = -.25; 95% CI, -.24 to .74); externalizing behaviour (g = -.47; 95% CI, -1.00 to .06); and internalizing behaviour (g = -.51; 95% CI, -1.04 to .02). Selection, performance, detection, and attrition bias was assessed as high risk, reporting bias was assessed as low risk.

Discussion: The paucity of intervention research in this area is surprising given the increased awareness of negative impacts of military life and national efforts to improve the well-being of military-connected students. The nascent state of empirical research in this area and challenges associated with conducting school-based research may account in part for the lack of studies identified for this review. The results of this systematic review support the need for further development and testing of school-based interventions that address the needs of military-connected children.
Poster Abstracts

9. Title: Helping the Helpers: A Systematic Review of Interventions for Secondary Traumatic Stress with Mental Health Workers

Objective: The purpose of this systematic review was to synthesize the effects of interventions aimed at decreasing symptoms of compassion fatigue (CF), secondary traumatic stress (STS) and/or vicarious trauma (VT) among mental health workers.

Method: Systematic review procedures were employed to find and synthesize published and unpublished studies meeting the following inclusion criteria: randomized or quasi-experimental study examining effects of interventions with a goal of decreasing symptoms of CF, STS, or VT among mental health workers on outcomes broadly related to symptoms associated with CF, STS, or VT (e.g., stress, anxiety, secondary traumatic stress, vicarious trauma, compassion fatigue). We excluded no studies based on geographical context or setting, but studies must have been written in English and conducted between 1983 and 2012.

The search, completed in September 2012, involved several sources: 11 electronic databases searched using specified keywords; websites of relevant research institutes and professional associations; personal contacts with researchers; and reference lists. Two coders independently coded all studies that passed the initial screening stage using a coding instrument developed by the authors to guide systematic examination and extraction of data.

Results: The search procedures yielded 4,134 titles from which 159 full text reports were retrieved and screened. Of those 159 reports, eight appeared to be reporting effects of interventions with CF, STS, and/or VT. Six of those reports were excluded at the screening stage because they did not meet basic eligibility criteria. Two were fully coded, but were excluded upon further review due to not meeting eligibility criteria related to study design and participant characteristics. No studies met inclusion criteria for this review.

Discussion: Although prior narrative reviews have been published, the present study is, to our knowledge, the first systematic review of outcome research of CF, STS, and VT interventions with mental health workers. Despite compelling evidence of negative effects of working with trauma victims and need for intervention, no studies met inclusion criteria for this review to inform how to most effectively intervene. In other words, this systematic review is an ‘empty’ review. While it is important to provide effective interventions to helpers who may be experiencing symptoms related to secondary trauma, it seems apparent that there is yet more we need to do in order to advance efforts in evaluating the outcomes of practices currently being used and under development. Barriers to intervention research in this area and implications for practice and research are discussed.

Authors: Brandy R. Maynard, MSW and Melissa L Bercier PhD


Systematic review methodology is evolving as it is applied to new areas outside of medical research. This is especially true in international development where systematic reviews are increasingly commissioned to inform policy-decisions and support the effective investment of increasingly limited resources. The available evidence is both varied and complex: interventions are not uniformly implemented, outcomes may not fall in the same reporting limits, and evaluations employ a range of methodologies. In most instances, multiple interventions are implemented simultaneously, and outcomes may be differently measured. It is rarely practical to randomize interventions across subjects, while outcomes of similar interventions may be reported as objective or subjective findings, subject to measurement bias. Assessing potential sources and effects of bias is therefore a particular challenge for international development systematic reviewers.

Risk of bias can seriously adulterate the internal and external validity of a research study, and, unless it is identified and systematically evaluated, it can hinder the process of comparing effectiveness and efficacy of interventions. Tools for assessing risk of bias of randomized study designs in medical reviews are relatively well established. Systematic reviews of non-randomized studies use a range of tools with little agreement on how best to assess risk of bias.
In our review of agricultural interventions for smallholder farmers we applied the Cochrane tool for assessing risk of bias in non-randomized studies. This tool stipulates six potential sources of bias: bias due to A. baseline confounding, B. selection of participants, C. departures from intended interventions, D. missing data, E. measurement of interventions or outcomes, and F. selection of reported results. We appraised studies and only selected those with the fewest threats to internal and external validity. The risk of bias assessment criterion was applied for every outcome from studies included in the systematic review. Each of the outcomes was scored as either: low risk, moderate risk, serious risk, or critical risk of bias. The risk of bias was deemed ‘unclear’ if there were insufficient details to make a decision. Supporting guidance for judgment on the risk of bias was provided for each of the domains considered.

In this presentation we reflect on our application of this tool and compare it to our experience of applying other critical appraisal tools in the conduct of systematic reviews, including EPPI-Centre tools, review-specific tools, study-design specific tools (in particular for randomized studies), and generic tools for assessing risk of bias irrespective of study design.

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11. Title: Effects of 21st Birthday Brief Alcohol Interventions on College Student Celebratory Drinking: A Meta-Analytic Review

Alcohol use and heavy episodic drinking are a serious public health issue among college students in the U.S. Of particular concern to many colleges and universities are students’ 21st birthday celebrations, which often involve consumption of extreme amounts of alcohol with participants subject to peer pressure and drinking games or competitions. Given the potential detrimental and even lethal consequences associated with heavy episodic drinking, there is a clear need for preventive efforts on college campuses that can reduce the risk of acute alcohol intoxication during students’ 21st birthday celebrations. The objective of this systematic review was to synthesize the available research on brief interventions targeting college students’ 21st birthday alcohol consumption to determine whether such interventions may reduce students’ celebratory drinking.

We conducted a comprehensive search of the U.S. and international literature to identify all studies meeting prespecified eligibility criteria. The search yielded 7,593 reports of which 9 randomized evaluations with 10 interventions were deemed eligible and included in the review. Standardized mean difference effect sizes were coded to measure post-intervention effects on quantity of alcohol consumed and blood alcohol concentration outcomes. Random-effects meta-analysis was used to summarize the effects of the interventions.

The analytic sample included 1,513 undergraduate students from nine randomized studies conducted in the U.S. and published between 2005 and 2012. There was no evidence that brief birthday-focused alcohol interventions reduced quantities of alcohol consumed during birthday celebrations ($\tau^2 = 0.03, Q = 8.62, I^2 = 7.2\%$). The interventions were associated with significant reductions in BAC levels ($\tau^2 = 0.87, Q = 3.69, I^2 = 0$). This effect was small in absolute terms—equivalent to a reduction in BAC from .15 in the control to .12 in the brief intervention conditions. Homogeneity in effects precluded sophisticated moderator analysis. However, weighted bivariate correlations showed a positive association with the intervention effects for students at smaller ($r = -0.54$) and private ($r = 0.61$) universities, and interventions involving provision of printed materials ($r = 0.52$).

Results from this systematic review and meta-analysis provided no evidence that birthday-focused brief alcohol interventions reduce the quantity of alcohol consumed by college students during 21st birthday celebrations, although these interventions may yield small beneficial effects on BAC. More research is needed to explore other promising strategies for reducing students’ hazardous 21st birthday celebratory drinking.

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12. **Title: Challenges in Synthesizing the Literature in Rare Diseases: A Case Study of Phenylketonuria**

**Background:** Phenylketonuria (PKU), a rare metabolic disorder in which an inability to properly metabolize the amino acid phenylalanine (Phe), leads to a buildup of Phe in the blood and neurotoxicity. A Phe-restricted diet is the cornerstone of treatment; however, new drugs such as sapropterin (BH4) may aid treatment.

**Objectives:** To provide a case study of methodologic and clinical interpretation challenges in synthesizing rare disease literature using PKU as an example. We will make recommendations to future systematic reviewers and primary researchers for analysis and reporting of studies to promote synthesis of evidence.

**Methods/Research Design:** We summarize our process, focusing on methodologic challenges and complexities of reviewing a paucity of studies along with a need to make clinical decisions. The case study describes components of a predictive model for the relationship of Phe and IQ and review of treatment studies for effectiveness data.

**Results:** We used Bayesian methods to maximize data to predict IQ effects associated with Phe levels at different time points. Treatment literature was limited to five industry sponsored trials of BH4, so we also examined regulatory documentation and other grey literature. Challenges in the use of evidence in rare diseases include explicitly considering the threshold for evidence and action that may affect early decisions in conducting systematic reviews. These decisions may include scoping the review, inclusion/exclusion criteria, analytic strategies, and interpretation. Challenges inherent in assessing small studies include recruitment issues, concerns about applicability of findings, and issues involved in determining whether the literature was insufficient or low in cases of a small literature base but with high magnitude of effect and a strong need for clinical decision making.

**Conclusions:** Assessing rare disease literature is complicated by small sample sizes, selected populations, and inconsistent methodology. In peer review and in presenting the data at a national conference, multiple opinions were voiced that the evidence-based approach to PKU was dogmatic and treated the literature harshly. To the contrary, we believe that rare diseases, and other clinical areas, need accurate, timely evidence syntheses to inform clinical decision making. Methods for evidence-based assessment in rare conditions can be adapted from standard methods, with sensitivity to clinical decision making in an area where evidence is lacking. This project offers a model to assess the role of systematic review methodology in accounting for constraints of rare disease literature; to suggest future research; and to address implications of adapting systematic review methods in rare diseases for longer term decision making.

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13. **Title: Is Urban Agriculture a Potential Solution to Food Insecurity in Low and Middle Income Countries? A Systematic Review**

In light of the resurgence in investment in urban agriculture, this review aimed to address the gap in our knowledge about urban agriculture’s impact on food security and nutrition in low and middle-income countries. This included outcomes that measure levels of food security at the individual, household and/or community levels.

Alongside increased urbanisation and associated increase in urban income poverty, urban food security has grown to become of principal challenge in urban areas of the southern hemisphere. Policy makers, development practitioners and academics have praised urban agriculture’s potential to ensure adequate food provision for urban dwellers, evidence for such claims has not been analysed sufficiently. Hence, we set out to identify and synthesise available evidence on urban agriculture’s contribution to food security in urban areas.

Systematic review methodology was employed to ensure that the review of the evidence is comprehensive, transparent and replicable, and responds to systematic review standards of rigour and quality appraisal. Systematic searches included 28 online databases and websites, and all relevant literature was screened against a set of inclusion criteria, in order to include in our synthesis only those results that were directly speaking to our review question.
Though we located a wealth of worldwide data on urban agriculture in its various forms, the body of identified literature displayed a dearth of sound evidence that is collected through reliable impact evaluations. Indeed, we found an absence of evidence of the impact of urban agriculture on food security or nutrition, either positive or negative. This suggests a compelling need for improving the quality of impact studies of urban agriculture’s potential to contribute to food security.

In order to move beyond the reporting of an empty review, we set out to re-analyse impact studies which had partially met the last set of inclusion criteria. Hence, data were extracted to identify factors associated with positive or negative developments, rather than establishing definite causal links. Based on this analysis we will present hypotheses for causal relationships which warrant further analysis and/or investigation.

**Authors:** Marcel Korth and Nolizwe Madinga, Centre for Anthropological Research, University of Johannesburg
Ruth Stewart, Laurenz Langer, Natalie Rebelo Da Silva, Carina van Rooyen and Thea de Wet

15. **Title: Time to Try Something Different for Knowledge Implementation: A New Approach to Building Capacity to Use Research Evidence in Southern Africa**

A wide range of approaches is advocated for getting the findings of systematic reviews into policy and practice, however there is limited evidence for which approach is most effective. This presentation proposes a different approach to knowledge translation and implementation and outlines our plans for building capacity to use research evidence.

Most knowledge translation and implementation approaches focus on ‘pushing’ the findings to policy-makers and practitioners. We are embarking on a different strategy focusing on ‘pulling’ better evidence into government decision-making. Our proposed approach, working with the national governments of South Africa and Malawi, will build capacity to use research evidence through partnership working. To this end, we are designing capacity-building programmes tailored to the governments with which we are working, incorporating training, mentoring and secondment opportunities.

Our programme is distinct in six key characteristics:

1. We bring a sound understanding of evidence, grounded in the principles of systematic reviews, and the principles of rigour and transparency that underlie them.
2. We are a Southern-based initiative, consciously avoiding ‘parachuting in’ and instead working to ensure we build lasting relationships with the communities that we work.
3. We are taking great care to ensure that we build on existing initiatives, capacities and resources, to ensure we meet real needs and truly contribute to current capacity in research-use rather than merely replicating, duplicating or contradicting current efforts.
4. We are working through and building up an existing Africa Evidence Network into a sustainable engaging community. In doing so we are able to reach a wider audience of evidence producers, evidence-users and research-use facilitators.
5. We are avoiding the practice of training the trainers and instead adopting an apprenticeship approach. The vast majority of our activities, and all of our training, are delivered by: a) a member of our core team with varying backgrounds in both the production of systematic reviews and building capacity to use them b) a ‘guru’ in evidence-informed decision-making from our pool of partners, who specialise in a range of relevant areas from establishing research centres within government, to building monitoring and evaluation capacity, and improving access to research evidence, and c) a less experienced local apprentice who will have the opportunity to shadow and contribute to activities, gaining valuable experience.
6. We play the role of matchmakers, fostering meaningful networks of research-users, research-producers and intermediaries in the two countries in which we are working and across the continent.

**Authors:** Ruth Stewart, Centre for Anthropological Research, University of Johannesburg
The BCURE team at the University of Johannesburg, including: Yvonne Erasmus, George Otieno, Hazel Zaranyika, Thea de Wet and Christa Heyneke
17. **Title: The International Fund for Agricultural Development’s (IFAD) Evidence database: A Practical Example of Facilitating the Application of Systematic Review Evidence**

Systematic review evidence to inform the design and implementation of policies and interventions is increasingly recognized as important in the field of international development. In this context, IFAD commissioned a database of evidence in the field of rural and agricultural development to inform research agendas, policy choices, development strategies and investments programs. Providing users with information to address the questions of ‘what works best, under which conditions and how this can be scaled up’, the database contains all evidence of the effectiveness of agricultural interventions that focus on poverty reduction and food security in rural areas. The evidence presented in the database consists exclusively of high-quality pieces of research synthesis – systematic reviews, rapid evidence assessments and meta-analyses – all of which are coded on key dimensions to allow simple searching and filtering by users. Summary information is provided on each review, including the review abstract, and a link to the full publication. This database not only allows IFAD to better access key evidence in the field of rural and agricultural development but also serves as a practical example of how to connect actors in international development with relevant systematic review evidence.

This poster explains the process of scoping the database with IFAD and identifying and operationalising content for the database. It also highlights some key features of the evidence contained within it.

In broad terms, we conducted a systematic review of systematic reviews, applying a structured methodology to search for, screen and code relevant reviews. We also applied a simplified quality appraisal to provide users with indicators for the reliability and completeness of each review. Our extensive searches identified over 8000 titles and abstracts, all of which were screened against predetermined inclusion criteria and coded using a structured framework. We identified 166 publications meeting our inclusion criteria and provide a coded summary of each in the database. As well as presenting our methodology and an overview of the evidence within the database, our poster will reflect on both our approach and the usefulness of this evidence product to the user community within IFAD.

**Authors**: Ruth Stewart, Centre for Anthropological Research, University of Johannesburg
Laurenz Langer, Nicola Randall and Constanza Di Nucci

18. **Title: A Three-stage Approach to Systematic Reviewing**

Not all review questions are sufficiently developed to embark on a traditional effectiveness review without prior work. This is particularly true of many of the systematic reviews commissioned by international donor agencies on key development issues, where broad, rather unwieldy questions are the norm. Preliminary systematic approaches are required to ensure any overlapping systematic reviews are taken into account, and size and nature of the available evidence base are considered. This poster presents a three-stage approach employed in a recent Campbell systematic review and discusses the challenges and merits of such an approach.

We were commissioned to identify which interventions are effective for improving agricultural outcomes for smallholder farmers in Africa. We were aware that there were a number of systematic reviews of relevance to this question, and that the question was broad and almost certainly unanswerable with the resources and time available. We therefore undertook the following three pieces of work:

- A systematic review-of-reviews: We identified through systematic searches, screening and coding twenty overlapping systematic reviews. This enabled us to highlight where there is already an established evidence base exploring the effectiveness of agriculture interventions on agricultural outcomes for smallholder farmers and which specific questions remain unanswered.

- A systematic map of relevant evaluations: Through further systematic searches, screening and coding, we identified 159 abstracts of research which has been undertaken in Africa assessing the impact of interventions (specifically: training, innovation and new technology, agricultural finance, and agricultural infrastructure) on one of the outcomes of interest (specifically: investment, adoption of innovation, yield, productivity, financial wealth, food security or nutrition). This was used as a consultation document to refine our review question.

- A traditional Campbell effectiveness review: We drew on our first two pieces of work to systematically review the available evidence of effectiveness of i) training interventions and ii) innovations and new technologies on i) the financial wealth and ii) the food security of smallholder farmers’ in Africa.
Strengths of this three-stage approach have included our ability to learn from reviews that have already been undertaken, for example drawing on search results and conceptual frameworks. It has however, been challenging as the usual Campbell systems and resources only have scope for our third and final piece of work. Never-the-less we strongly advocate the use of both reviews of reviews and systematic maps of impact evaluations as preliminary stages in the production of systematic reviews of effectiveness.

Authors: Ruth Stewart and Natalie Rebelo Da Silva, Centre for Anthropological Research, University of Johannesburg
Hazel Zaranyika, Yvonne Erasmus, Evans Muchiri, Marcel Korth, Laurenz, Langer, Nolizwe Madinga, Nicola Randall, Thea de Wet

19. Title: What Have We Learnt from the Application of Systematic Review Methodology in International Development?

The importance of systematic review evidence in the design and implementation of policies and interventions is increasingly recognised in the field of international development. Since the first international development agencies commissioned reviews in 2009/10, more than a hundred reviews have been conducted. Teams conducting these reviews have consisted either of experienced development researchers who are new to systematic reviews, or experienced reviewers from other disciplines who are new to international development. In both cases much has been learnt from their experiences. Alongside this wave of systematic reviews a lively debate regarding the most feasible and beneficial ways to conduct reviews in international development has emerged. This paper presents a status report of the primary years of systematic reviewing in international development providing a thematic review of what we have learnt about the methodology’s application in development thus far.

For this thematic overview, we followed a structured methodology to search for, screen and categorise all relevant publications to provide a detailed picture of what has been learnt. We divide the literature into 3 main categories: i) what people are saying about reviews in development, drawing on blogs, editorials and ‘promotional’ papers which publicize and debate the approach, ii) what specific review groups have learnt from doing reviews (either specific lessons linked to their review, or broader lessons for the approach as a whole), and iii) what new frameworks have been proposed for future international development reviews.

We found that there is consensus that systematic reviews provide a useful and well-received tool in international development. They can serve as a new and effective channel through which research can make a difference in the field and have lead to important discoveries in development practice, for example deconstructing the theory behind microfinance interventions. However, there is an also a shared understanding that, in order to fulfil its promise to enhance and promote evidence-informed policy making in development, systematic review methodology needs to adapt to the specific demands and contexts faced by international development reviews. From ‘theory-based’ or ‘adapted systematic reviews’, to ‘effectiveness plus’ reviews, a number of approaches propose ways in which to better operationalise systematic reviews in international development. The usage of a program theory, inclusion of a broader evidence range, more specific review questions, innovative search strategies and means to disseminate review findings to policy makers, emerge as some of the key lessons learned.

Authors: Ruth Stewart, Centre for Anthropological Research, University of Johannesburg
Laurenz Langer

20. Title: Interventions to Facilitate Social Integration of Immigrants and Their Families – A Systematic Search and Mapping of Literature

The enlargement of the European Union, the European Union now including more Eastern European countries, as well as an increasing unemployment in many countries due to the financial crisis, has lead to a rise in immigration in those countries with a stable economy, such as Norway. An increase in immigrants of different kind, e.g., working immigrants, immigrants with their families, calls for the need of effective programs of social integration addressing both, minority and majority population.

The aim of this systematic literature search is to map the literature on the wide topic of social integration by using key terms, and thus help us to specify a PICO-question for a systematic review over effect studies in a particular field of social integration.

In this project we use a broad definition of ‘social integration’ including the following dimensions: 1) social participation, civic participation and participation in social networks, 2) knowledge and ability to use public services, as for instance health services the and social service office, 3) having established oneself at the real-estate and job markets as successfully as native-born, for instance gaining a long-term rental contract or leasing contract, a long-term employment, ideally matching with ones qualifications, and social mobility.
Eligible social integration interventions are 1) all kinds of introductory programs provided by the public sector or non-profit organizations addressing immigrants and their families, 2) training programs in the majority language provided by public or voluntary organizations, 3) mentoring and coaching programs provided by public or voluntary organizations, 4) networking programs and initiatives, 5) programs to facilitate entry into housing market, either by renting or buying a flat and 6) other programs. Outcomes of interest are all indicators of social integration such as majority language skills, knowledge about the new country and culture (e.g., health literacy), voluntary and political engagement in the new society, participation in higher education, access and use of public services, such as primary health services.

This systematic literature search and mapping will include all studies addressing the effect of interventions to facilitate social integration; in addition the mapping will include qualitative studies on immigrants’ perceptions and experiences with these programs.

Thus, this study will provide a mapping over and a description of empirical research on the variety of programs on social integration, identify possible knowledge gaps and might lead to the identification of more specific questions on systematic reviews on effect studies.

Authors: Sabine Wollscheid, PhD, Norwegian Knowledge Centre for the Health Services
Heather M Munthe-Kaas
Karianne T Hammerstrøm


HIV/AIDS prevention, care and support programmes in several countries of the world have attracted large allocations of resources from national Governments and donor organizations. To seek desired impact and cost effectiveness, huge emphasis is placed on systematic assessment of outcomes and impact of these programmes. For the funds recipients, these very evaluations have become prime mover for continuation of resource allocation and scaling-up of the interventions. But what is the status of evaluation of these programmes? What is the evidence of rigor and persuasion of appropriate processes in these evaluations? To what extent these evaluations have produced evidence for management interventions, replication/scaling up the programmes?

This paper will attempt a synthesis of the evaluations of HIV/AIDS programmes in South Asia, particularly contributing to improvement in programme management. Its focus will be on evaluations reflecting on casualty/what has or has not worked and the evidence for up scaling/replication of interventions.

In the numerous evaluations of HIV/AIDS interventions (particularly in South Asia), there is a notable paucity of evidence for direct and indirect programme implications. Further, very few evaluations are able to stand the scrutiny of a systematic evaluation. Though, these realities have constrained our search, the broad inclusion criterion are as follows.

- Studies completed/published in 2000 or after
- Used randomized control/ quasi-experimental/descriptive design
- Produced evidence for casualty/ what has or has not worked and/or provide evidence for up scaling/replication of interventions
- Studies conducted in South Asia

The search strategy covers major known sources/registry of evaluation such as Cochrane Library, HIV/AIDS, AIDS, AIDS Public Policy Journal, AIDS Care, AIDS Education and Prevention as well as the independent search on internet and libraries.

The database generated will be categorized as (i) primary citations qualifying for inclusion in the synthesis; (ii) background citations not qualifying for inclusion but providing evidence on causality and/up scaling; (iii) citations to be acquired for further inquiry or (iv) not relevant.

The criterion for evaluation would be as follows.

- **Rigor of evaluation** – Evaluability of programme/project, evaluation design, indicators, coverage and clarity in analysis
- **Timeliness of evaluation** – In relation to up scaling/replication of interventions
• Presentation
• Dissemination
• Evidence for causality, up scaling/replication of programme

We propose to construct an index (by giving appropriate score to selected evaluation studies on each of these counts) to assess the contribution made by evaluation in strengthening programme management in South Asia.

Author: Prof. R.S. Goyal, PhD Adviser,
Ramana Development Group and Senior Adjunct Professor, Taleem Research Foundation


The proposed paper investigates the effects of innovation (measured by faster TFP growth, product innovation, process innovation, and imports of technology) on employment in low-income countries (LICs). It aims to provide a synthesis of the empirical and qualitative evidence on the relationship between types of innovation (process and product innovation) and levels of employment; paying attention to skill levels and the level of aggregation/analysis.

We follow a mixed method of mapping the narrative synthesis of the evidence from 53 qualitative studies with meta-analysis of effect-size estimates from nine empirical studies. Fifty-three per cent of the studies investigate the effects of innovation on employment in agriculture, whilst the remaining 47 per cent focus on manufacturing. The evidence base relates to the effects of innovation on employment in the short-to-medium term. The systematic review is based on a peer-reviewed and pre-published protocol that specifies the methods for searching, screening and evaluating the existing literature; and for synthesizing the qualitative and empirical evidence from included studies.

The narrative synthesis indicates that innovation’s effect on employment depends on the balance between displacement (labour-saving) and compensation (job-creating) effects. The overall effect is reported to be positive when: (i) the demand for skilled labour is analysed; (ii) there are strong forward and backward linkages between innovative enterprises and their suppliers or customers in upstream or downstream industries; (iii) labour-market and governance institutions are supportive of appropriate technology choice and/or technology adaptation; and (iv) innovative activities consist of product innovation as opposed to process innovation. On the other hand, the effect is reported as negative when income distribution is skewed, international trade is capital-intensive, and skill upgrading capacity is low at the enterprise, sector or country levels.

The meta-analysis evidence indicates that the average effect of process innovation on skilled-labour employment is small positive (0.102); but the effect on total employment is insignificant. These findings suggest that process innovation tend to be associated with a small skill bias. Heterogeneity in the effect-size estimates is found to be related to skill levels, levels of aggregation, world regions, and sector.

We report both convergence and divergence between the narrative synthesis and meta-analysis findings; as well as areas where meta-analysis was not feasible due to limited evidence base.

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30. **Title:** Cross-Age Tutoring: A Systematic Review and Meta-Analysis of Cross-Age Tutoring in Kindergarten and Elementary School Settings

**Background:** Qualified teaching staffs are neither available nor affordable to provide large numbers of children with individual attention. One solution to providing individual tuition has been the development of tutoring programs that are delivered by non-professional tutors, such as classmates, older children and community volunteers.

**Objectives:** We have conducted a systematic review of cross-age tutoring interventions delivered by non-professional tutors to children between 5 and 11 years old. Only randomized controlled trials with reliable measures of academic outcomes, and continuing for at least 12 weeks, compared to instruction as usual, were included.

**Results:** Searches of electronic databases and previous reviews, and contacts with researchers yielded 11,564 titles; after screening, 15 studies were included in the analysis. Cross-age tutoring showed small significant effects for tutees on the composite measure of reading (g=0.18, 95% CI: 0.08, 0.27, N=8251), decoding skills (g=0.29, 95% CI: 0.13, 0.44, N=7081), and reading comprehension (g=0.11, 95% CI: 0.01, 0.21, N=6945). No significant effects were detected for other reading sub-skills or for mathematics. The quality of evidence is decreased by study limitations and high heterogeneity of effects.

**Conclusions:** The benefits for tutees of non-professional peer and cross-age tutoring can be given a positive but weak recommendation, considering the low quality of evidence and lack of cost information. Subgroup analyses suggested that highly-structured reading programs may be more useful than loosely-structured programs. Large-scale replication trials using factorial design, process evaluations, reliable outcome measures and logic models are needed to better understand under what conditions, and for whom, cross-age non-professional tutoring may be effective.

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Professor Allen Thurston, Queen’s University  
Dr Sarah Miller, Queen’s University

33. **Title:** Evidence Aid: a Resource for those Preparing for and Responding to Natural Disasters, Humanitarian Crises and Major Healthcare Emergencies

**Background:** Evidence Aid was established following the Indian Ocean tsunami (December 2004), to improve access to systematic reviews of the effects of healthcare interventions of particular relevance in the aftermath of natural disasters (www.evidenceaid.org). Between 2010/13, important progress has been made through a needs assessment survey.

**Methods:** The 1st Evidence Aid Conference was held in 2011 in Oxford, and the 2nd conference was hosted by the Belgian Red Cross in 2012; each included more than 70 participants from a wide range of backgrounds and organizations (including - Belgian Red Cross, US Center for Disease Control and Prevention, The Cochrane Collaboration, Department for International Development (UK), Health Protection Agency (UK), International Committee for Red Cross, Médecins Sans Frontières, OXFAM, Research4Life, Save the Children, UNHCR and the World Health Organization).

Evidence Aid has an ongoing needs assessment survey (www.evidenceaid.org) and has surveyed more than 100 people from aid agencies to policy makers to donors.

**Results:** Preliminary analysis of the needs assessment survey showed that 82% of respondents thought that systematic reviews are useful; 51% had used them as a basis for decision-making. 81% thought that improved access to systematic reviews could play a role in improving the response to natural disasters and other humanitarian emergencies and the majority said that they would use online systematic review training if it were available. These results indicate that there is a lack of accessibility to relevant systematic reviews in the field of disaster and humanitarian emergency management. Evidence Aid will address this imbalance by providing a free at the point of use database of relevant tagged information.

In August 2013, Evidence Aid launched its new website which now has more than 150 systematic review resources relevant to the disaster and humanitarian emergency setting. It is searchable and free at the point of use. Evidence Aid continues to search for relevant information to add to the resource. Evidence Aid also responds to major disasters and recently developed a resource for the Philippines after Typhoon Haiyan; this was freely available and distributed to those who were responding to the disaster.

**Conclusions:** Evidence Aid has outlined short, medium and long-term goals, including a mission statement, identification of potential partnerships and target audience, content (with an initial focus on interventions or actions with health-related
outcomes), governance, communication, funding and training.

Authors: Claire Allen, Evidence Aid, The Cochrane Collaboration
Professor Mike Clarke, Dr Bonnix Kayabu and Dr Dominic Mellon

36. Title: Effects of Interventions to Counter over Serving, Serving Underage Persons and Alcohol-related Harms/injuries: a Systematic Review of Systematic Reviews

Background: The Norwegian Directorate of Health (Department of Public Health) and the Police Directorate in collaboration with the municipality of Oslo and Oslo Police District have started SALUTT. The project is inspired by the STAD project ("Stockholm prevents alcohol and drug problems"), which aimed to develop methods to reduce serving intoxicated or underage clients and thereby to reduce alcohol related harm. The Norwegian Directorate of Health has commissioned a systematic review of effects of interventions to counter overserving, serving underage people, and alcohol-related harm linked to drinking venues. We have identified and present systematic reviews of effects of such interventions.

Methods: We completed an overview of systematic reviews in accordance with the Handbook of the Norwegian Knowledge Centre for the Health Services. We searched for systematic reviews in 12 international databases and 3 internet sites. The search was completed in March 2013. Two individuals independently screened all the titles and abstracts and proceeded to review in full text all potentially relevant reviews. All systematic reviews of high to moderate methodological quality that dealt with interventions to counter overserving, serving underage people, and alcohol related harm linked to drinking venues were included. From the included systematic reviews, we extracted all relevant results, summarized these in text and created tables when deemed appropriate. The quality of the documentation for our main outcome was assessed using GRADE (Grading of Recommendations, Assessment, Development, and Evaluation).

Results: We included five systematic reviews of high to moderate quality. These were published between 2008 and 2011. Three systematic reviews examined, respectively, the effects of interventions in the alcohol server setting for preventing injuries, the effects of alcohol interventions in nightlife settings and the effects of interventions implemented in drinking environments on a broad range of harms. They focused on different types of interventions: Server training, training for owner/manager, policy law enforcement, heightened police supervision and community interventions. Two systematic reviews dealt with overarching alcohol regulation. The results varied across the studies. Mainly the results showed little or no differences. The quality of the evidence was either low or very low except for self-reported server behavior measured with index and observed aggression that we assessed to be of moderate quality.

Conclusions: In this overview of systematic reviews we found surveys that concluded with few positive effects of interventions to prevent intoxicated patrons, serving minors and alcohol-related violence in relation to licensed premises. We could not use the included reviews as a whole, as several studies in the included reviews were not covered by our inclusion criteria. There is a need for more studies of high methodological quality studies studying the effect of interventions to prevent intoxicated patrons, serving minors and alcohol-related violence.

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41. Title: Use of Grey Literature Sources in Agency for Healthcare Research and Quality Systematic Reviews

Objective: Systematic reviews frequently report searching of "grey literature" as an adjunct to systematic searches of the published, peer-reviewed literature; however, grey literature is inconsistently defined and methods for identifying, analyzing, synthesizing, and assessing the quality or risk of bias of such materials are not standardized. As a first step toward understanding methods for incorporating grey literature in systematic evidence reviews (SER), we conducted a scan of grey literature methods and results as reported in recent SER conducted by the US Agency for Healthcare Research and Quality Evidence-based Practice Centers (EPCs).

Methods: We located EPC SER published between 2010 and 2012 and read the methods, results, and discussion sections in order to characterize each review's grey literature search strategies, analysis and quality/risk of bias assessment, synthesis of findings, and incorporation with the overall evidence base.
Results: We identified 29 EPC reviews explicitly noting some use of grey literature, typically a combination of regulatory sources, ongoing research registries, funded research registries, and conference or meeting abstracts. Reports typically described the search strategy in the Methods section and noted how many items were located via grey literature search but provided little information about inclusion/exclusion, quality and applicability, and how the grey literature was used. Seven studies explicitly summarized or discussed grey literature findings in the results section of the report. Other reports may have analyzed grey literature findings but such analysis was not clear from the results presentation. Some reports provided an appendix of grey literature materials identified. Two described quality assessment of grey literature. A few reports commented on grey literature as a means to assess publication bias, but reports generally did not note how grey literature findings affected the assessment of publication bias.

Conclusions: Given the number of SER being conducted, the paucity of examples of analysis of grey literature is striking and likely reflects a lack of guidance and consistency. The issue is not limited to the EPC program. A recent Cochrane review examined the use of grey literature in meta-analyses of health care interventions; of only nine relevant studies identified, five reported use of grey literature in multiple meta-analyses. Only one assessed the type of grey literature and its effect on the results of the analysis. Future SERs may benefit from additional investigation of appropriate types of grey literature and the impact of this literature on review findings.

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44. Title: Experience of Uganda’s Evaluation of its Poverty Eradication Action Plan (PEAP)

The evaluation of Uganda’s Poverty Eradication Action Plan (PEAP) is a rare example of a nationally-driven evaluation of a country’s poverty reduction strategy. Uganda’s PEAP started in 1997, and was the first national poverty plan in Africa informing the World Bank-supported Poverty Reduction Strategy Papers that spread across the continent thereafter. By 2007, the Government decided a new direction and new type of plan was needed, and set about designing a broad ranging evaluation that would provide a measure of what had been achieved under PEAP, and importantly set the direction for the new plan. This proved insightful, with cross-government coordination of the evaluation leading to evaluation findings discussed by Cabinet under a white paper, and lessons and directions that have been drawn into Uganda’s successor National Development Plan (2010-2015). As a result of this evaluation, a National Policy for Monitoring and Evaluation was developed and approved by cabinet. The policy provides a clear framework for strengthening the coverage and timeliness of the assessment of public interventions. The paper will highlight how the implementation of the recommendations made in the evaluation of this scope have become useful in the development of the country.

Author: Albert Byamugisha, PhD

45. Title: Reducing Young People’s Drug use by Therapy: Results of Systematic Reviews

Youth drug use is a severe problem worldwide. Drugs such as cannabis, amphetamines, ecstasy and cocaine are, in this collection of reviews, referred to as non-opioids drugs. These drugs are widely available and used among young people. Persistent drug use among young people is a significant social and health related problem, and the treatment of young people’s drug use is challenging and costly.

This collection of five topic related reviews from SFI Campbell focuses on interventions for reducing youth drug use. The reviews deal with the effect of different therapy orientated interventions for young drug users. The treatments included in the referred reviews are Cognitive-Behavioral Therapy (CBT), Family Behavior Therapy (FBT), Functional Family Therapy (FFT), Multidimensional Family Therapy (MDFT) and Brief Strategic Family Therapy (BSFT).

All five referred reviews are Campbell systematic reviews. The participants in the reviews are young drug users between 11-21 years of age. They receive five diverse outpatient treatments for their drug related problems. Due to the content of included studies it has only been possible to conclude on the relative effects of the different therapy forms. The considered primary outcome for the reviews is abstinence or reduction of drug use, while the secondary outcomes are family functioning, education- or vocational involvement, treatment retention and risk behavior. Random effects weighted mean effect sizes are calculated when usable data was available. One of the reviews did not provide enough data to conduct a meta-analysis.

One of these reviews is finally approved, and some of the results presented in this abstract are therefore preliminary. The present
results indicate that there is need for additional research to clarify, which treatments are effective to young drug users. The evidence found in these reviews does generally not provide basis for a firm conclusion on the effects of interventions. Some of the reviews suggest a small effect for reduction in youth drug use compared to other interventions, whereas some of the reviews neither support nor reject the present treatment approach.

We would like the poster presentation to contribute with an overview of the three topical reviews included. The poster will also include a detailed description of the methods SFI Campbell has used in these reviews. We would also like to present the results from the referred reviews, as the listed results in this abstract are an overview.

Authors: Maia Lindstrøm, SFI Campbell – The Danish National Centre for Social Research
Anne-Sofie Due Knudsen, Majken Mosegaard Svendsen, Krystyna Kowalski, Trine Filges, Lars Benjaminsen, Anne-Marie Klint Jørgensen, Dorte Laursen Stigaard, Madina Saidj & Pernille Skovbo Rasmussen

46. Title: Labour Market Interventions for Unemployed Individuals: Results of Systematic Reviews

Several countries introduced labour market programmes in an effort to reduce unemployment and long periods of unemployment. SFI Campbell has conducted three very important and interesting reviews in this area.

One of the three included reviews analyses the effect of unemployment benefit exhaustion on the exit rate from unemployment to employment. The secondary outcome in this review is the exit rate from the re-employment job. The second review to be included in the presentation focuses on the effectiveness of active labour market programme (ALMP) participation on employment status for unemployment insurance recipients. The primary outcome in this review is the exit rate from unemployment and into employment. The review also includes the exit rate from re-employment as a secondary outcome. The third review focuses on the threat effect of ALMPs. The compulsory aspect of ALMP may provide an incentive for unemployed individuals to look for and return to work and this effect prior to participation is denoted the threat effect. Two of the three referred reviews are Campbell systematic reviews, whereas the third review is submitted to an international journal. The participants included in the studies are required to be unemployed individuals who receive unemployment benefits according to the problem in question. Random effects weighted mean effect sizes are calculated in all the reviews to the extent deemed possible. All three reviews include assessments of risk of bias and analyse heterogeneity between studies.

The study, which involves the effectiveness of ALMP participation on employment status, is not finally approved. The result presented in this abstract on ALMP participation is therefore preliminary. The available evidence shows that the prospect of exhaustion of unemployment benefits results in an increased incentive for finding work. Further, results suggest that the probability of finding a job increases after participating in ALMP. This result is however mixed depending on the approach used to investigate the effect of ALMP. Finally, the available evidence shows that there is an incentive effect of compulsory active labour market programmes prior to programme participation.

We would like the poster presentation to contribute with an overview of the three topical reviews included. The poster will also include a detailed description of the methods SFI Campbell has used in these reviews. We would also like to present the detailed results from the referred reviews, as the listed results in this abstract are an overview.

Authors: Trine Filges , SFI Campbell – The Danish National Centre for Social Research
Lars Pico Geerdsen, Anne-Sofie Due Knudsen, Anne-Marie Klint Jørgensen, Krystyna Kowalski, Geir Smedslund, & Anne Toft Hansen
52. **Title: The Implications of ADHD Stigma for Non-pharmacological Interventions in Schools: Findings from a Qualitative Systematic Review**

**Background to the topic:** Behaviours related to ADHD – such as fidgeting, being easily distracted and struggling to carry out complex instructions – can make school a difficult place for pupils and teachers alike. Consideration of the experience of ADHD is crucial to understanding how ADHD behaviours can be managed most effectively in schools.

**Aims:** This paper aims to answer the question, “What are the school-related experiences and perceptions of pupils diagnosed with or at risk of ADHD, their teachers, parents and peers?” and is part of a qualitative review that identified dynamics of experience and perceptions of ADHD in school contexts, and explored their relationship to the implementation of ADHD interventions. It was part of a larger HTA-funded systematic review, the aim of which was to evaluate the effectiveness of non-pharmacological interventions for ADHD in school settings.

**Method:** 21 academic databases were systematically searched for relevant literature, and with forward and backward citation, web searches, hand searching of key journals and contact with experts in the field, 10,753 records were identified. Two reviewers independently screened titles and abstracts, and then 393 potentially relevant papers at full text. 34 studies represented by 37 papers met the criteria for inclusion.

**Analytical framework:** Principles of meta-ethnography were iteratively followed including creation of structured summaries in order to establish relationships between studies, translation of study findings through the thematic analysis of concepts expressed by participants in and authors of studies, and the creation of a ‘line-of-argument’ that described study findings as a whole.

**Research findings:** This paper will focus on the ‘line-of-argument’ from this review, which found stigma to be an important aspect of experience and perceptions surrounding ADHD in schools. It was found that although pupils and teachers often described the experience of ADHD in relation to classroom environments and relationships, ADHD itself was rarely conceptualised in relation to the classroom. Instead, people tended to understand ADHD as a deficit in the individual pupil, or the result of environmental and relationship-related factors in the home. It was found that the role of schools in precipitating ADHD symptoms may remain unexplored as part of the mechanisms of stigma that work to protect existing social structures. The implications of these findings for non-pharmacological interventions for ADHD in schools involves the need for further conceptualization and development of interventions that take account of the interaction of pupil characteristics and classroom environments and relationships, including stigma.

**Authors:** Ruth Gwernan-Jones, University of Exeter Medical School
Professor Tamsin Ford; Dr Darren Moore; Dr Michelle Richardson; Dr Ruth Garside; Professor Ken Stein; Dr Jo Thompson-Coon; Morwenna Rogers; Rebecca Whear & Dr Tamsin Newlove-Delgado

53. **Title: Effect of Early, Brief Computerized Interventions on Risky Alcohol Use and Risky Cannabis Use Among Young People**

**Background:** Risky use of alcohol or recreational drugs (e.g. cannabis) among young people remains a prominent public health issue in many countries. The United Nations Office on Drugs and Crime has argued for a public health approach to prevent alcohol and recreational drug abuse, using interventions providing assistance and counselling at an early stage. Scholars have illustrated the advantages of brief, early interventions for young people with alcohol and drug problems to prevent them from falling into a downward spiral that may lead to severe substance abuse later in adulthood. Previous reviews have focused either on universal prevention or on the treatment and rehabilitation of individuals with substance dependency. Most studies on computerized interventions are limited to college students, and exclude other groups of young people who are not attending college.

**Object of the review:** The objective of this review is to assess the effectiveness of early, brief computerized interventions on alcohol and cannabis use by young people who are high or risky consumers of either one or both of these substances.

**Methods:** This poster will present a Campbell Systematic Review of studies measuring whether stand-alone early, brief computerized interventions can prevent the development of alcohol and/or cannabis problems in young people aged 15-25 years showing risky behaviour.
Both, efficacy and effectiveness studies where units (e.g., persons, institutions) were allocated randomly or quasi-randomly to an early, brief computerized intervention and at least one comparator condition will be included. Eligible comparators include not intervention, waiting list control or an alternative brief intervention, either computerized or delivered face-to-face. The population includes young people between 15 and 25 years of age who are high consumers of alcohol or cannabis, or both. The review will include all kinds of brief computerized interventions being delivered at an early stage of substance use (‘indicated prevention’), regardless of medium, provider or theoretical framework. Primary outcomes are alcohol use and cannabis use, measured by validated scales.

Studies will be retrieved in 13 databases among them ERIC, MEDLINE, PsycINFO and Social Service abstracts. We search for published studies as well as grey literature. Meta-analysis will be considered appropriate if the same treatments are compared to the same comparators and if the studies do not have a high risk of bias.

Authors: Sabine Wollscheid, PhD, Norwegian Knowledge Centre of the Health Services
Lin Fang, University of Toronto, Factor-Inwentash Faculty of Social Work
Wendy Nilsen, Norwegian Institute of Public Health;
Geir Smedslund, Asbjørn Steiro & Lillebeth Larun, Norwegian Knowledge Centre of the Health Services

54. Title: Empirically-Based Interventions Targeting Social Problems

This proposal represents a never before seen compilation of empirically-based interventions targeting social problems. Topics include: a cost-effective psychosocial prevention paradigm, child maltreatment, educationally disadvantaged children, violence in schools, adolescent sexuality, preventing HIV infection in adolescents, substance abuse, crime, urban decline and family homelessness, unemployment, marital conflict, intimate partner violence, family preservation, the impact of race and gender in social work practice, practice approaches with older clients, retirement, promoting self-management of chronic medical problems, hospice care, chronic grief, prevention, measurement of social problems, empirical approaches to case management, empirical approaches to social work supervision, obstacles to conducting evidence-based practice, and rationale for timing of interventions.

Under the rather general label of evidence-based practice a highly potent behaviour change technology is under construction (Thyer & Wodarski, 2007; Wodarski, 2009). Technological development in this area has focused largely on changing behavior at the individual level of analysis, and to a lesser extent on the group level of analysis, which has been characterized largely by individual programs carried out in group contexts to remedy problem behaviours, rather than through the use of the group as a vehicle of change. Moreover, only a few applications of this technology have been made at organizational, institutional, and societal levels, even though it appears obvious that in order to change behaviour and to insure its maintenance such applications are necessary since our laws, norms, and customs specify contingencies for the society as a whole as well as for each of the reference groups to which we belong. These contingencies substantially influence and determine the behaviours we exhibit in specific social contexts. Focus on these levels, therefore, should insure the maintenance and the generalization of behavioural change exhibited by individuals in individual or group interactional situations. Furthermore, the inclusion of this level of analysis will enable specification of the distribution of reinforcers and punishments by various societal units as well as help to determine how these units control behaviour. Evidence-based practice applied at organizational, institutional, and societal levels should expedite the solution of the various societal problems mentioned above, all of which this presentation will address in a review of many of the efforts made in these areas of research. The upcoming years will witness a greater sophistication of applications and the inclusion of essential variables, which will make the control of these behaviours more feasible.

Authors: John S. Wodarski, The University of Tennessee
55. **Title: The Pearl Harvesting Information Retrieval Framework to Support Research and Evidence-based Decision Making**

Using appropriate evidence synthesis requires locating the most complete set of research syntheses available. This presentation describes the challenges of locating evidence and describes an innovative information retrieval framework for supporting researchers and evidence-based decision makers.

Literature searching in general is fundamental for evidence synthesis and although acknowledged as important existing search methods are an awkward hodge-podge of strategies typically not validated. Systematic reviews themselves are fundamental to evidence-based decision making, however, finding them is hampered by the same general challenges of information retrieval. Existing investigations that searched for systematic reviews (e.g., Hilburg et al., 2011; Novak et al., 2013) included the search terms “meta-analysis” or “systematic review.” As systematic reviews have proliferated (Cooper & Hedges, 2009) a new searching problem has arisen. New unique terms denoting systematic reviews have also proliferated and these have not been incorporated into database indexing. This complicates information access.

The goal of the present investigation was to develop a comprehensive search strategy for locating systematic reviews, considering recent terminological developments. This was guided by the Pearl Harvesting Information Retrieval Framework (PH; Sandieson & McIsaac, 2013). PH prescribes that a comprehensive search includes as many topic-related search terms (i.e., a synonym ring) as possible.

A content analysis in research databases was done investigating possible search terms denoting systematic reviews. Twelve search phrases, each of which located unique citations pertaining to systematic reviews were located. This synonym ring was validated by comparing it to the search string “meta-analysis” OR “systematic review.” There was an increase in the number of systematic review citations located using the PH terms: 17% in MEDLINE, 37% in PsycINFO, and 56% in ERIC. Further practical searches were tested using terms representing Autism and Intellectual Disabilities (ID). The PH systematic review synonym ring located more citations than the terms “meta-analysis” OR “systematic review” across all databases. In MEDLINE there were 118 (23%) more citations for Autism and 255 (42%) more for ID; in PsycINFO, 255 (42%) more for Autism, 359 (57%) more for ID; in ERIC, 45 (31%) more for Autism, and 85 (35%) more for ID.

Locating the most complete set of scientific studies is crucial for evidence-based decision making. Existing digital literature search methods lack the ability to comprehensively deal with the volumes of information now being stored in digital databases. The current presentation discusses this issue and offers a validated alternative search framework to support researchers and evidence-based decision makers.

**Authors:** Robert Sandieson, Western University

57. **Title: Promotional Interventions with a Biopsychosocial Approach for Children and Adolescents: A Meta-analysis of Research Studies Performed in Chile**

Considering the characteristics of the Chilean school system and the international evidence on the positive impact of non-cognitive interventions in educational quality and equity, the present study seeks the effects of different biopsychosocial intervention programs developed in Chile during the last few decades, whose site of intervention has been school contexts and have been focused on improving the biological, psychological and/or social development of primary school children and adolescents.

Using a meta-analysis research strategy, the search found above 5,000 results, of which only 107 were considered as possible studies to be included in the meta-analysis. Following the standardized meta-analysis procedures, this set of articles was evaluated from a reading of their abstracts, resulting in a selection of 18 articles. These investigations were analyzed according to the characteristics of interventions (intervention year, age of participants, agents involvement, forms of implementation); the assessment methodologies used (sample loss, sampling error, examination year, type of evaluation); the impacts obtained (kind of impact, impact size) and some variables differentiating the quality of the studies (existence of complete results reports, developing effective impact evaluation methodologies and quality of study publication).

The results show the state of research on the analyzed topic, providing evidence of the limited number of studies (many of which are concentrated among a particular group of researchers) and significant limitations in terms of methodology and the outcomes provided. Additionally, findings reveal a high level of heterogeneity of interventions, in terms of the topics developed, instruments of evaluation and models of intervention, which demonstrates the existence of different and uncoordinated activities.
Additionally, regression analysis evidences that variables such as the duration of the intervention and its complexity (involving families and monitors) can be associated with positive impacts. This could account for the importance of create interventions sustainable over time, and generate actions that consider the students’ context. Also, it is also necessary to highlight the relation between the type of outcome and the impact, which demonstrates that certain types of outcomes (especially biological) are harder to reach than social or psychological outcome.

All this evidence seems essential to emphasize the need to construct a public biopsychosocial policy within the school context, and it could help to decrease the growing risk factors found in Chilean elementary school students, through the elaboration of controlled and organized design, intervention and evaluation processes.

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61. **Title: The Effectiveness of Programs for Preventing the Negative Consequences of Migration Background for the Development of Children and Adolescents**

Even before the PISA studies, there was considerable evidence that children and adolescents with a migration background are at higher risk for deficits in cognitive and academic development. The same applies to their psychosocial development. To ensure equal opportunities and participation, it is necessary to counteract these risks through preventive and compensatory measures. There have been various attempts to achieve this goal, and a huge variety of evaluation studies have been published in which their efficacy has been tested. Nonetheless, despite the high number of primary evaluation research studies, they have still not been integrated in a systematic review. The purpose of this study is to conduct a meta-analysis on educational and psychosocial programs aiming at preventing or compensating developmental and educational risks associated with a migration background. We conducted an exhaustive search by examining nine literature databases, asking authors for gray literature, and looking through the references of relevant primary studies and systematic reviews.

We selected studies according to the following inclusion criteria:

1. The study has to evaluate the effectiveness of a psychosocial or educational program that aims at preventing negative psychosocial or educational consequences of a migration background.
2. The study has to focus on a nonclinical population aged up to 18 years consisting predominantly (at least 50%) of participants with a migration background (at least one parent was born in another country).
3. Participants have to be randomly assigned to an intervention and control group (in case of cluster randomization, at least five clusters have to be assigned to each group).
4. The sample size has to be at least N = 25 for each group (intervention and control).

170 studies were included in the meta-analysis. About 90% of the studies were conducted in the United States, most of them focusing on Hispanic/Latino samples. The interventions were predominantly addressed to the child alone and focused especially on language. Fewer programs focused on the family or even broader systems. Effect sizes were small to medium and higher for outcomes more proximal to the intervention. Most studies reported only short-term effects. In cases in which long-term effects were reported, these were lower.

This meta-analysis delivers evidence-based hints for educational and psychosocial practice as well as for future research.

Authors: Sebastian Schulz, Friedrich-Schiller-University Jena, Institute of Psychology Dipl.-psych. Sabrina Maichrowitz, Dipl.-psych. Louisa Arnold & Prof. Dr. Andreas Beelmann
62. **Title: Social Mix and its Impacts on Children: A Scoping Review of Relevant Literature on Social Mix, Tenure Mix, and Neighbourhood Effects**

The idea of social mix has long been proposed to have huge benefits in urban designing as a sustainable measure to harvest social harmony. Socially-mixed housing redevelopments have emerged during the past few decades throughout Anglo-Saxon countries and parts of Europe; however, the evidence to support such initiative is uncertain and limited. This paper seeks to elucidate the concept of social mix and provide insight into its proposed benefits as an urban policy initiative, with a special emphasis on social mix and its impacts for children’s developmental health. A scoping review is conducted to survey the literature relevant to the concept of social mix, as well as child development, to provide a brief overview of the processes of social mix and its impact on child health and well-being. An analytical map is created to elucidate components of social mix that are involved in redevelopment initiatives aiming to create socially-mixed neighbourhoods. A review on the evidence base surrounding the effects of socially-mixed strategies on children reveals that it sufficiently supports a socially-mixed policy aimed at avoiding concentration of disadvantaged individuals; however, the evidence base does not support a mixing policy on the creation of social capital. There is a need to consolidation relevant evidence bases with future research looking across disciplines, particularly drawing evidence on neighbourhood effect studies on children that involve measures looking at different axes of social mix. It seems that the evidence base is not as insubstantial and more efforts should be devoted to delve deeper into the concept of social mix and how it can be utilized to achieve realistic benefits for children living in concentrated poverty.

**Authors:** Sharon Yu, McMaster University

64. **Title: Preventing Prejudice and Improving Intergroup Attitudes: A Meta-Analysis of Child and Adolescent Training Programs**

Prejudice and other forms of negative intergroup attitudes cause serious social problems in many societies throughout the world. Their consequences may include social exclusion and segregation and a generally more negative quality of life for members of the social out-group; as well as racism, political extremism, and hate crimes in members of the in-group. Interventions aiming to promote intergroup attitudes and relations have a long history with a variety of intervention concepts being applied, including multicultural or diversity training, cooperative learning methods, bilingual education, integrated schooling, and special programs promoting, for example, empathy and perspective taking. However, although major scientific progress can be documented in these approaches, there is an ongoing debate over which are the most important individual and social factors that need to be addressed in systematic interventions designed to prevent negative intergroup attitudes and associated problems of intolerance and discrimination in intergroup relations.

This presentation reports the results of a meta-analysis of 81 research reports containing 122 intervention–control comparisons of structured training programs to prevent prejudice development or promote positive intergroup attitudes in children and adolescents. We analyzed the effectiveness of three different intervention types relying theoretically on either intergroup contact, information/knowledge acquisition, or the promotion of individual social-cognitive competencies. Although the studies stemmed from several countries, most were conducted in the US (74.1%). Overall, the analysis revealed a mean effect size of $d = 0.30$, indicating low to moderate intervention effects. Effect sizes were influenced only marginally by publication bias and methodological moderators. From the great variety of different approaches, interventions based on direct contact experiences along with social-cognitive training programs designed to promote empathy and perspective taking showed the strongest effect sizes. In addition, effects varied according to the program participant’s social status (higher effects for majority groups), the target out-group (lower effect sizes for ethnic vs. disabled and aged out-groups), and the type of outcome assessment (higher effects for cognitive vs. affective and behavioural measures of intergroup attitudes). The discussion considers several limitations including the lack of implementation and follow-up research on, for example, the reduction of hate crimes, presents future directions in research on promoting intergroup relations, and makes recommendations for public policy.

**Authors:** Andreas Beelmann Friedrich-Schiller-University Jena, Institute of Psychology
Dr. Kim S. Heinemann
68. Title: The Effectiveness of Relationship Education in Low-Income Populations: Results From a Meta-Analysis

Parental relationships are crucially important for both the well-being and the social, emotional, and cognitive development of children. During the past decades, typical family structures have been changing, and families are facing new challenges in providing their children with a safe and stable family environment. In the light of climbing divorce rates, single parenthood, absent fathers, and complex stepfamily constellations, relationship education programs have been brought onto social agendas. The goal of these programs is to provide couples with skills and knowledge about healthy and committed relationships, and thereby positively influence the context in which children grow up. The demographic changes in family structures are especially pronounced in low-income communities. In recent years, a growing number of relationship education programs have been established, focusing specifically on the needs of low-income families and meaning to buffer the negative correlates of poverty on the family level.

What are the effects of these programs on couple relationships that are already burdened by a variety of stressors (economic hardship, substance abuse, domestic violence, crime)? Evaluation studies have shown small positive effects on relationship outcomes. However, an integration and analysis of the most recent research has been lacking to date. This is the purpose of the present meta-analysis. It is based on 48 research reports (mostly from the US and UK) identified in a comprehensive literature search.

The integrated studies are based on quite large samples (average of 465 couples), which gives findings an exceptional weight. Fixed and random effect models were applied to estimate average effect sizes. An overall effect size of .104 (SE = .026, p = .000) could be estimated. For more specific outcomes (e.g. relationship, communication, and co-parenting measures) significant effect sizes are of a similar moderate size. Many programs provide long-term effects, which are also moderate and significant. Therefore it can be concluded that relationship education programs in this particular population have robust small to moderate effects in a diversity of outcome domains. Differential analyses suggest that programs working with both parents rather than just mothers or fathers are the most effective.

Nevertheless effect sizes for mothers are generally higher than for fathers.

Based on the present findings, however, further research still needs to explore the long-term effects on children in order to draw any final conclusions on the effectiveness of relationship programs as a social policy tool to prevent and break apart the vicious circle of poverty.

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Prof. Paul R. Amato (Pennsylvania State University, USA)
Prof. Andreas Beelmann (Friedrich-Schiller-University, Germany)

70. Title: Exploring the Objective and Function of Evidence Syntheses of Implementation Studies: A Systematic Scoping Review

Background: Evidence synthesis could be helpful in improving the understanding of issues that prevent or slow effective implementation of evidence based health recommendations. We were interested to explore the literature in this area to establish why research groups conduct reviews of implementation studies and the quality of the review methods used.

Objectives: To identify and explore the approach used in the synthesis of implementation studies in health research from the perspective of objective and function.

Data sources: Medline, Embase, CINAHL, HMIC, The Cochrane Library, relevant websites including KT+ and KT exchange, forward and backward citation searches for all included papers.

Methods: All evidence syntheses of implementation studies with explicit, predefined and reproducible methods were included. Study selection was performed by two reviewers independently; quality appraisal (using AMSTAR or a bespoke instrument based on ENTREQ) and data extraction were performed by one reviewer and checked by a second. All disagreements were resolved by discussion. For each included review, details of the methodological process were extracted and tabulated. Categories defining the objective and intended function were developed by a process of discussion and consensus. Each paper was assigned to one or more categories by one reviewer and these decisions were checked by a second with arbitration where necessary.
Results: Electronic searches identified a total of 166 papers; approximately two-thirds were published within the last five years. Topics under consideration for review varied widely and included topics as disparate as hospice care for prisoners, e-health for people living in rural communities and knowledge translation for fitness trainers. Using AMSTAR scores to summarise the quality of the review only 3% would be considered to be high quality (50% were assessed as being low quality and 47% moderate quality).

The categories developed to describe objective and function of included reviews were: effectiveness of implementation strategies (n=78), barriers and facilitators to implementation (n=70), descriptive mapping of themes and ideas (n=51), development of a framework (n=13), mapping of components of implementation strategies (n=10), using theory to understand the process of implementation (n=5), development of a taxonomy (n=4). Most papers were assigned to one category (n=99), 63 were assigned to two and four papers were assigned to three categories.

Conclusions: The synthesis of implementation evidence is an area of increasing focus. Establishing guidelines for methodological best practice and reporting that encompass both quantitative and qualitative approaches to synthesis of implementation studies is warranted.

Authors: Thompson Coon PenCLAHRC, University of Exeter Medical School
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71. Title: User Involvement in a Systematic Review of Quantitative and Qualitative Research of Non-Pharmacological Interventions for Attention Deficit Hyperactivity Disorder (Adhd) Delivered in School Settings: Reflections on the Impacts and Challenges

Background: The benefits of user involvement in health care research are widely recognised and supported by research agencies. Organisations commissioning systematic reviews encourage authors to seek the views of users with the aim of ensuring that the products are accessible, credible and relevant. There are few published evaluations of user involvement in individual systematic reviews.

Aims and objectives: i) to describe user involvement in a complex systematic review of both quantitative and qualitative research, ii) to provide reflections on the impact of user involvement on the project, iii) to highlight challenges experienced, and iv) to provide suggestions to inform the practice of user involvement.

Methods: The project incorporated user involvement at two levels; collaborative and consultative. At the collaborative level, a parent of children with ADHD with experience as a teaching assistant and a behavioural support professional in local schools were both integral to the project team and involved in all stages of the review. At the consultative level, we held a workshop at the start of the project with practitioners and parents that informed the early stages of the review in terms of which interventions and outcomes were important. We also held two events to discuss, disseminate and explore interim and final findings and consider feedback from users.

Results: User involvement has been an important aspect of this project with input from stakeholders i) providing direction for research, ii) contributing to a conceptual framework of interventions and outcomes, iii) ensuring the external validity/transferability of the syntheses to stakeholders and iv) contributing to the robustness of the qualitative syntheses through alignment of interim findings with lived experiences. Some of the challenges included i) planning for adequate time and resources for meaningful engagement, ii) balancing user enthusiasm with a realisation of what was achievable and applicable within the project scope, iii) managing the intensity of emotion at engagement events especially when this was directed at other stakeholder groups within the room, and iv) eliciting views from users on their experiences.

Suggestions for future practice: i) user involvement should be prioritised by the funding provider and the senior management team to allow appropriate allocation of time and resources, ii) issues discussed can be emotive; time to discuss the project and potentially difficult issues, manage expectations and define boundaries is invaluable and iii) potential for conflict between different groups of stakeholders should be considered.

Authors: Jo Thompson Coon PenCLAHRC, University of Exeter Medical School
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72. **Title: What are the Effects of Direct Public Transfers on Social Solidarity?**  

* A Systematic Review

The relevance of promoting solidarity and social cohesion as a constituent aspect of well-being and, hence as a key dimension of the development process has been widely advocated by academics (for example, Sen, 1999), policy makers and international organizations.

The aim of the systematic review is to synthesize the evidence on whether direct government transfers provided to households or individuals damage or foster social solidarity or some of its manifestations, considering how these effects vary with context, program design and among socio-demographic categories.

There is an ongoing debate on this issue with conflicting evidence and important implications (Cohen and Arato, 2000; Kumlin and Rothstein, 2009), that justifies a review and synthesis of the existing evidence. If social transfers erode social ties and increase social stigma, they might undermine solidarity and social cohesion.

To our knowledge there are no systematic reviews addressing our research question. At the same time, existing impact evaluations provide contradictory results. For instance, Attanasio et al. (2008) find positive effects of conditional cash transfers on social capital. Meanwhile, Chong et al. (2009) report that welfare destroys social ties through stigmatization. Vera Soares et al. (2010) find no effects on social participation in the Paraguayan transfer program Tekoporá. Kardan et al. (2010) evaluate an emergency transfer plan in rural Zimbabwe and find that the program negatively influenced social relations, as a result of the targeting process, whereas, the sense of confidence among beneficiaries increased. Responding to the synthesis question with the available evidence will endow decision makers with a better understanding of tradeoffs or complementarities in implementing welfare policies, and will allow various players to identify related research/knowledge gaps.

In order to meet our objective, this review will include a configurative and an aggregative component (Gough et al, 2012). The former will be focused on empirical quantitative and qualitative studies, assessing the links between welfare transfers and solidarity, as well as “views” and public opinion studies. The aggregative component will synthesize quantitative experimental and quasi-experimental impact evaluations.

The studies considered in this research come from both developed and developing countries and cover interventions in the time span 1970-2013. As usual, a variety of data gathered systematically from the primary studies will make it possible to explore trends, biases, critical mass, gaps, or other emergent features of the literatures examined.

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Andrea Vigorito, Martín Leites, Gustavo Pereira & Gonzalo Salas

73. **Title: Are Alternative Livelihood Projects Effective at Reducing Local Threats to Specified Elements of Biodiversity and/or Improving or Maintaining the Conservation Status of those Elements?**

**Background:** Alternative livelihood projects are used by a variety of organisations as a tool for achieving conservation results. Yet these interventions, including their objectives, vary a great deal, and there is no single accepted definition of what constitutes an alternative livelihood project. In addition, very little is known about what impacts, if any, alternative livelihoods projects have had on biodiversity conservation, as well as what determines the success or failure of these interventions. Reflecting this concern, a resolution was passed at the IUCN World Conservation Congress in 2012 calling for a critical review of the benefits to biodiversity of alternative livelihood projects. The Center for International Forestry Research (CIFOR), the International Institute for Environment and Development (IIED) and the Zoological Society of London (ZSL) are undertaking a systematic review in order to contribute to this resolution.

**Methods/Design:** The research question for the review is: *Are alternative livelihood projects effective at reducing local threats to specified elements of biodiversity and/or improving or maintaining the conservation status of those elements?* The aim of the systematic review is to provide an overview for researchers, policy makers and practitioners of the current state of the evidence base. To undertake this, the systematic review will explore peer-reviewed research from the bibliographic databases SCOPUS, Web of Science, CAB Abstracts, AGRIS and AGRICOLA using search terms and Boolean search operators. The systematic review will also explore grey literature sources by conducting searches on Google Scholar, Dogpile, subject specific websites and institutional websites. Additionally, the review will use calls for papers and snowballing techniques to further identify literature.
In order to identify relevant evidence, inclusion criteria will be used to screen the titles and abstracts of the captured literature. Data will be extracted from the final list of relevant documents by using a questionnaire established through literature review and a stakeholder workshop. The key output of this review will be a report on the state of the evidence, and, if the data permits an answer to the question of whether alternative livelihoods interventions are effective.

The poster presentation will detail the methodology used for the systematic and outline the preliminary findings from the data extraction and analysis.

**Keywords:** alternative livelihoods, biodiversity, conservation, community attitudes and conservation threats.

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79. **Title: The Design of a MEDLINE Search Strategy (filter) to Locate Literature on Patient and Public Involvement (PPI) in Research**

**Aims**

1. To design a search strategy (filter) identifying literature where patient and public involvement (PPI) has been used in research
2. To test the filter against a gold standard of relevant literature.
3. To assess the methods used in the design of the filter

**Background**

The use of PPI in research is important because it leads to work that is more relevant to the people that should most benefit from it. PPI in research has expanded rapidly over the last 30 years, leading to a mass of literature. This literature is difficult to locate because PPI usually does not form the main focus of the research, it is reported inconsistently and the terminology used is often confusing.

Researchers need to identify PPI literature for two main reasons: either they are seeking to identify how other projects used PPI in that subject area or they need to identify specific methods for using PPI. However, there are currently no validated filters for identifying literature on PPI, and the indexing terms assigned to this area on the main databases are either non-existent or ineffectual.

**Methods**

A gold standard of PPI papers was formed by searching the PenCLAHRC user involvement group library and the INVOLVE evidence library website, and through hand searching the journals Health Expectations and International Journal of Consumer Studies for the past two years. The reference lists of systematic reviews identified were searched and relevant papers were added to the gold standard. All papers used in the design and test of the filter were identified as being present on MEDLINE.

Papers in the gold standard were randomly divided into two sets: a development set and a test set. Search terms were derived through reading the abstracts of the development set papers and identifying common terms and synonyms. The search terms were individually tested for sensitivity against the gold standard papers to find the most commonly used phrases. These were then combined to form a MEDLINE search strategy, which was validated using the test set.

**Results**

The search filter found 100% of the papers in the development set (59/59) and 98.5% (68/69) of the papers in the test set.

**Conclusion**

Although further testing is required on a larger sample of papers, the evidence indicates that we have designed a sensitive filter for identifying PPI literature on MEDLINE.

**Authors:** Morwenna Rogers, University of Exeter Medical School
Alison Bethel & Kate Boddy
80. **Title: Exploring the Dynamics Between Forests, Ecosystem Services and Food Production: A Systematic Review**

Forests and trees provide a range of important ecosystem services to agriculture. The practice of integrating trees within food production systems has a long history in both developed and developing countries. Studies have shown that these types of alternative agriculture systems can both conserve biodiversity and produce high yields. However, despite the recorded benefits, modern agricultural development often overlooks the negative impacts on biodiversity conservation. Driven by contemporary population growth and changing patterns of consumption, modern agriculture continues to expand and intensify, often at the expense of forests. Identifying how alternative agriculture systems can deliver important ecological processes for food production, which are often missed in modern agriculture, is thus a necessary and pressing issue.

This review asks: What does the current evidence base inform us about the contribution of forests and trees in ecosystem service provisioning to food production in tropical forest landscapes? By examining the two fields of agriculture and conservation science, this review addresses the concurrent challenges of achieving sustainable agriculture production while conserving forests habitats for organisms that provide the ecosystems services. Moreover, identifying how forest ecosystem services contribute to food production presents great potential for so called win-win-win scenarios of reducing food insecurity, alleviating poverty and enhancing biodiversity conservation.

This study will systematically examine the evidence on the contribution of forests and trees to food production in tropical forest landscapes. A comprehensive search string encompassing forestry, ecosystem services and agriculture research will be applied to bibliographic databases of Scopus, CAB Abstracts, ISI Web of Knowledge, ProQuest, and Google Scholar, as well as grey literature organizations and institutions engaged in forestry and related fields. The review's inclusion criteria includes English language studies dating back to the 1950s, which examine various types of farming or food production systems in or near tropical humid and dry forests. Outcomes will be grouped across crop and livestock productivity (i.e., yield or non-economic indicators); improved or sustained economic functions or services (i.e. increased pollinator activity); or more natural resources (i.e., soil enhancement from trees or forests). Two researchers will work independently and apply the inclusion criteria through three stages (title, abstract, full text) of results screening, discussing any disagreements with a third researcher. All studies included in the review will be critically appraised for the quality and description of their research subject, study methodology, reporting, and strength of analysis.

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James Reed, Jessica Clendenning, Gillian Petrokofsky, Christine Padoch and Terry Sunderland

83. **Title: The Effect of Language Comprehension Training on Standardized Tests**

The aim for this systematic review is to summarize the effectiveness of language comprehension training on standardized language comprehension and reading comprehension outcome measures. Background: Language comprehension skills, especially vocabulary, are strongly related to the development of reading comprehension and, in turn, to educational outcomes later in schooling. Intervention studies have thus aimed to boost children’s development in language comprehension. The effects of training on language and reading comprehension outcomes in these studies have shown that transfer effects to standardized measures are much smaller compared to custom measures designed for the targeted training. Earlier meta-analyses summarizing the effectiveness from these types of studies have commonly calculated a mean effect size where custom tests and standardized tests are merged together. In contrast, this review aims to get information about how effective these intervention studies are on the general growth in language and reading comprehension, by calculating the effects of language comprehension training on standardized test separately from custom measures. Inclusion criteria: The review will focus on language training done in educational settings, because these studies have the most relevance for educational policy and practice. Evidence from randomized controlled trials and quasi-experimental studies with control groups, conducted in preschool and later educational settings up to the end of secondary school, will be included. Furthermore, studies will be eligible if they meet the following criteria: Studies that include training in language comprehension skills, including vocabulary interventions (both direct vocabulary training and/or book reading interventions) and training studies with a broader focus on oral language training; studies where the duration of the intervention is at a minimum 10 lessons (approximately 45 min x 10) or more. Objectives: The aim for this systematic review is to summarize the effectiveness of language comprehension training on standardized language comprehension and reading comprehension measures. The review aims to answer: (1) Can language comprehension training be generalized to standardized tests of language and reading comprehension? (2) What features of language comprehension training are associated with generalized effects on language and/or reading comprehension? (3) Are effects on standardized tests mediated through effects on the specific words that are trained?

**Authors:** Kristin Rogde, Faculty of Educational Sciences, University of Oslo, Norway
Åste Mjelve Hagen, Monica Melby-Lervåg & Arne Lervåg
84. Title: Educational Engagement Programmes For Girls and Young Women in Low-and Lower-Middle Income Countries: A Systematic Review

Introduction: Providing access to education for girls and young women is a key dimension of poverty alleviation strategies and the economic advancement of women in society. Targeting the provision of ‘financial incentives’ to girls and young women, with the intention of increasing their access to education, has been introduced in several low- and lower-middle income countries (LLMICs). We aimed to analyse and summarise the research evidence on the impact of educational engagement programmes for girls and young women in LLMICs in producing their intended outcomes.

Methods: Thirteen electronic bibliographic databases and 30 websites were searched supplemented by contacting key authors and searching the reference lists of included studies for further relevant literature. Eight studies were critically appraised and synthesised using meta-analysis or by exploring the direction of effects of the findings.

Findings: Overall, the evidence suggests that programmes targeting the delivery of financial incentives to girls and young women are likely to increase their school participation and reduce sexual engagement and marriage rates. This was achieved by ensuring cash or scholarship funds were delivered directly to individual girls and young women, at a point in their lives when girls are more likely to drop out of school, and by addressing social and cultural factors that may inhibit girls’ access to education. However, there is a lack of evidence to indicate whether participation in school leads to improvements in educational attainment. There was also evidence to suggest that programmes targeting girls and young women can have unintended impacts on boys.

Conclusion: Educational engagement programmes aiming to provide access to education for girls and young women who face the greatest challenges in participating in education can improve their school participation. However, findings from this review indicate that future research investigating long-term educational and economic outcomes such as attainment, participation in higher education and employment, is a priority. Furthermore, future development of educational engagement programmes should ensure they are culturally relevant and context specific, involving the wider community in delivering and implementing programmes.

Authors: Mukdarut Bangpan, EPPI-Centre, Social Science Research Unit, Institute of Education, University of London
Kelly Dickson

85. Title: Improving the Livelihoods of Girls and Young Women in Low-and-Lower Middle-Income Countries: A systematic Review of Impact Evaluations and Qualitative Evidence

Introduction: Ensuring women and girls obtain equal access to economic opportunities and are enabled to contribute equally to the growth and development of local and global economies is a policy concern for many Low-and-Lower Middle-Income Countries (LLMIC). However, many gender-specific barriers restrict the equal participation of females in economic livelihood activities, thus requiring both micro-economic and macro-economic level interventions. This systematic review synthesised evidence on the impact and perception of economic asset-building programmes seeking to address the gendered social and economic disadvantages faced by girls and young women in LLMIC.

Methods: A systematic review was conducted that included a numerical narrative synthesis on the impact of ‘livelihood’ programmes and a thematic synthesis of qualitative evidence investigating girls and young women’s experiences of engaging in economic livelihood activities. Sensitive searches were conducted of 13 electronic bibliographic databases and 30 topic relevant websites, supplemented by contacting key authors and searching the reference lists of included studies for further relevant literature.

Results: Eight studies were included. All interventions were multicomponent, combining an economic asset component with a skills/knowledge component. Programmes aimed to address gender inequalities by engaging with girls and young women, at vulnerable points in their life, in accessible community-based settings, focusing on the skills required to support economic empowerment. Five trials provided quantitative data on impact. Six studies, including three of the trials, also provided qualitative data on girls and young people’s views. The trials evaluated a range of economic, reproductive health and social outcomes finding limited evidence of positive effect. Evidence from qualitative synthesis indicates that girls and young women need greater knowledge of financial services, practical support and resources to facilitate their economic engagement.
**Conclusion:** There is a small evidence base to suggest that providing girls and young women with access to economic assets and developing their skill sets has an impact on their lives. However, the views of girls and young women’s indicate that additional support is required if they are to maintain safe and active economic participation in society. Further consideration of girls and young women’s experiences of economic asset-building activities is needed during programme participation to ensure interventions are more likely to be successful.

**Authors:** Kelly Dickson, EPPI-Centre, Social Science Research Unit, Institute of Education, University of London
Mukdarut Bangpan

**86. Title:** Interventions Seeking to Increase Access to Economic Assets: Methodological Challenges of Identifying and Synthesising Research Evidence to Inform Policy Decision Making

Systematic reviews aiming to answer policy-relevant questions pose a range of methodological challenges. We reflect on a Department of International Development (DfID) funded systematic review that sought to identify evidence on addressing the social disparity of girls and young women in low-and-lower middle-income countries (LLMICs) by providing access to economic assets. We encountered a number of challenges through the review process to ensure its relevance for informing policy decision making.

Key challenges involved in conducting this systematic review were:

- The translation of policy relevant questions about economic barriers faced by girls and young women into research questions and appropriate conceptual framework(s)
- Identification of relevant research carried out in LLMICs that address the research questions.
- Decisions on which approaches to use when describing and synthesising a range of evidence that cuts across disciplinary fields, to answer the review questions and inform policy

It has been possible to engage with these issues by drawing on the wide choice of review methods available and institutional mechanisms at the EPPI-Centre that aim to support the production of policy relevant reviews. We identified strategies to deal with these challenges, including:

- Engaging with policy makers at the start and through the review process to define and agree the scope of the review. Through this process of initial scoping and consultation with policy advisors, we acknowledged the importance of taking a multi-component and theoretical approach to inform the review. We hypothesised that if interventions provide direct access to economic assets alongside attempts to tackle wider social determinants, it could improve girls and young women’s chances of economic success through the accumulation and control of economic assets and potentially help them to reframe their wider social relations.

- Developing a search strategy that could identify relevant interdisciplinary research, covering different geographical locations. We generated and piloted specified search terms before finalising the search strategy to include 13 electronic database and more than 30 topic-relevant websites.

- We produced a ‘typology’ of programmes approaches before undertaking the synthesis to present the wide range of intervention programmes evaluated in the included studies. These studies used a range of study designs, included a diverse population and explored different outcomes. We employed both aggregative and configurative synthesis approaches, involving meta-analysis, numerical narrative synthesis and thematic narrative synthesis.

**Authors:** Kelly Dickson, EPPI-Centre, Social Science Research Unit, Institute of Education, University of London
Mukdarut Bangpan
89. Title: The Use of Family Group Conferences to Support Students at Risk. Lessons Learned Designing and Implementing a RCT in Italian schools

FGC is a world widespread and long running participatory approach used to help families finding their own solutions to solve problems that affect their lives. Our research is aimed at evaluating the effectiveness of FGCs to improve student wellbeing and its feasibility in school environment. To gain this aim we are developing three research actions: 1. a RCT to test the impact of FGCs on student wellbeing; 2. a qualitative implementation analyses to document the adaptations of the model required by the school setting; 3. a systematic review of previous literature on FGC effectiveness. In June 2014, we will be able to present at the conference the main results of our systematic review, some considerations coming from the implementation analysis and the preliminary estimates of FGC short term effects on student wellbeing.

Stages of evidence cycle: Primary Research (Pilot Randomized Control Trial and implementation analyses) and Systematic Review

The problem
The Italian welfare system is under strong financial pressure. A combination of long and short term factors are questioning the sustainability of the Italian welfare system. For this reason, a new demand is growing for cheap and effective social policies, aimed, on the one side, at reducing the public burden and, on the other side, at increasing the impact of public actions on social problems. In particular, early intervention policies with a prevention function are gaining consensus. The prevention policy evaluated in this paper is the implementation of Family Group Conferences (FGCs). FGCs have originally been introduced in the field of child abuse. FGCs are here used as an early school intervention, aimed at reducing educational difficulties for disadvantaged students, engaging their parents and relatives. The key idea underlying this approach is that schools and teachers need to be supported in their preventive action. Indeed they cannot entirely stand the emerging social needs in a period of crisis for welfare state and labour market. At the same time, social services cannot support properly schools in their preventive actions, because they are still too stigmatizing and because they are also facing shortage of resources.

The intervention
FGC is a world widespread and long running participatory approach (Connolly, 1999) used to help families finding their own solutions to solve problems that affect their lives. It is a structured meeting between family members, professionals and ‘significant others’ in which participants make a plan for the protection and the care of a child in need. The action describe in this paper is going to re-shape the FGC model to the school environment.

More precisely, right now we are implementing 120 FGCs in one district of the province of Milano (Northern Italy), supporting disadvantaged students from 18 local lower secondary schools. The idea is that the involvement of the parents of disadvantaged students into a FGC could ‘empower’ families and, as a result, significantly reduces the level of pupils discomfort and increases their school participation and wellbeing.

The action is based on a structured set of meeting leaded by a trained co-ordinator. This intervention seems promising and fitting the Italian context, being based on family networks and displaying some characteristics named above: being preventive; being ‘light’, not requiring the involvement of social services; finally, being relatively ‘un-expensive’.

Previous evidence
We conducted a traditional literature review, revealing that there is a lack of sound evidence proving FGC efficacy or even defining their outcomes (Blekesaune and Holtan 2005). Moreover many evaluation studies are not based on RCTs but on counterfactual analyses of observational data, mainly using propensity score matching (Crampton, 2003; Syndell and Vinnerljung, 2004; Wheeler and Johnson 2003; Weigensberg et al. 2009). Only a limited number of studies (Hayden, 2009) have extended their use to the field of education, adapting the original model: Marsh and Dawn (2007) highlighted successful outcomes, but also difficulties in realizing the plans and problems in the relationship between families and professionals; Hayden (2009) showed that attendance and exclusion data did not improve among students involved in FGC. Finally, the existing RCTs (Brown 2003; Brazin et al. 2008) were not conclusive about the impact of FGCs. Nonetheless the use of FGC is increasing in many countries (Merkel-Holguin, 2003) because the model is recognized from practitioners as a helpful device to work with families in child protection. Several researches show that FGCs meet the enthusiasm of professionals and families (Marsh and Crow, 1998; Burford, 2001; Nixon et al., 2005).

Our study
In line with the ‘what works approach’ characterizing the most advanced research in the field of policy making, our study is based on three actions:
a. we are conducting a RCT to test the impact of FGCs on students wellbeing at school. During October 2013 we administered a pre-intervention questionnaire to all the students enrolled in the 18 observed schools. During December 2013 the schools listed the names of 240 students eligible for FGC. We randomized at the beginning of January. Only 120 are now being treated through their own FGC. We will administer a post-intervention questionnaire in May 2014 and a follow up questionnaire in December 2014.

b. we are developing qualitative implementation analyses to document the adaptations of the model required by the school setting and the difficulties raised by the introduction of this new tool;

c. finally, we are implementing a systematic review of previous literature on FGC effectiveness.

In June 2014, we will be able to present at the conference the main results of our systematic review, some considerations coming from the implementation analysis and the preliminary estimates of FGC short term effects on student wellbeing.

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90. Title: Adapting Systematic Review Methods for a Theoretical Review

Background: Review of theory is an area of growing methodological advancement. Theoretical reviews are particularly useful where the literature is complex, multi-discipline or contested. However, the emerging methods can be selective. Therefore systematic review methods were incorporated into the ‘How does money influence health?’ review of theory. The purpose was to develop a theoretical framework of pathways between individual and family income and health over the lifecourse. Drawing on the approaches of other theoretical reviews, this paper discusses some of the methodological considerations necessary and offers lessons learnt from experiences gained while conducting the review.

Methods: The key review stages of a systematic review are examined in relation to how they should be adapted for a review of theory. The stages include: assembling the review team; developing the research question; inclusion and exclusion criteria; literature searches; quality appraisal; data extraction; and synthesis.

Results: In applying systematic review methods to the review of theory, several stages of the process required adaptation. Different approaches to searching were required, involving multiple forms of both formal electronic searches and hand searches to identify highly cited and recent papers, and in particular to use citation tracking to follow how theories develop. In conducting different searches it was important to balance being comprehensive, so that the strengths of each approach compensated for the deficiencies of others, while ensuring the reviewers’ task was manageable. Determining inclusion criteria was an iterative process, to ensure inclusion criteria were specific enough to make the review practical and focused, but not so narrow that key literature was excluded. Involving subject specialists was valuable in the literature searches to ensure principal papers were identified, and during the inductive approaches used in synthesis of theories to provide detailed understanding of how theories related to another. However, this expertise was employed in the context of systematic searches which revealed previously un-encountered theories from other disciplines and literatures. Reviews of theory are likely to involve iterations and inductive processes throughout, and some of the concepts and techniques that have been developed for qualitative evidence synthesis can be usefully translated to theory reviews of this kind.

Conclusion: Adapting systematic review methods resulted in a process for collating and synthesising theories across a diverse literature to produce a framework of how income might influence health. Further methodological development is required to improve theoretical reviews and to consider their utility for evidence users, including the potential to help decision-makers.

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93. Title: A Comparison of the Decision-Making Processes Involved in Undertaking a Framework Synthesis and a Meta Study

Background: This paper will explore the factors influencing the choice of synthesis and evaluation methods in qualitative synthesis. This discussion is based in a broader context of a PhD study that seeks to determine the potential contribution of qualitative systematic reviews within a dementia research context. The aim of the reviews discussed was to contextualise findings about a subset of communication methods or interventions by analysing their use amongst broader range of populations living with communication impairment.

Methods: This paper critically examines the decision trails that led to two different methodological approaches. The first approach, a Framework Synthesis, was based on a citation tracking search strategy. The second method was an adaptation of a Meta Study approach based on a Cluster search strategy. The benefits and drawbacks of the choice of each methodology are discussed as well as the implications for the choice of method on the type of data gathered for synthesis.

Results: 19 studies were analysed in the Framework Synthesis and clusters of papers surrounding four ‘key pearl citations’ were examined in the Meta Study. The findings focus on the evidence available at the time to make the decisions and reflections about its appropriateness as the studies developed; of particular interest is the impact of the knowledge gained from the first study on the second. The advantage of the Cluster search strategy combined with the Meta study was the different forms of evidence (i.e. ‘effectiveness’ studies, methodological studies, theoretical studies and review papers) which could be explicitly identified and mapped. By contrast, the Framework Synthesis approach enabled the reviewer to take a more iterative approach identifying significant evidence found in smaller-scale studies. The different approaches to contextualisation of a single area of study revealed a tendency toward different treatments of different forms of evidence. This was predicated on the choice of synthesis method determined from the outset and subsequent interpretations of papers. Interpretations of papers are often coloured by the reporting conventions they adhere to.

Conclusions: The results indicate the key areas for evaluating the appropriateness of the review: the different ways in which the subjectivity of the reviewer maybe understood and challenged; the effect of an iterative process; the transparency of the methodological choices; and the interaction between search strategies and synthesis approaches and the type of evidence under scrutiny.

Authors: Katie Sworn, Social Policy Research Unit, University of York

98. Title: Some Problematic Matters Which Might Arise, When Attempting a Meta-Analysis

The logical perfection of combining well-conducted Randomised Controlled Trials can be violated when dealing with data from actual trials.

For example:

1) Usual statistical methods assume that observations do not influence each other. If correlation between observations is present this will tend to reduce the effective sample size. How to address this?

2) In non-randomised trials the groups being compared will not be statistically identical at the start. How to compensate for the effect of differences, for example regression towards the mean?

3) Without trials registration it is not possible to know if we have the whole picture of evidence. What might be the effect of such incompleteness?

4) If there are such problematic features, how to write a review?

5) What can be gleaned after implementation?

These issues will be briefly explored with an attempt to gain quantitative estimates of the effects (as in Baxter and Marchant (2010), in the Journal of Applied Statistics).

Authors: Paul R Marchant PhD, CStat, Leeds Metropolitan University & University of Leeds
101. Title: Preschool Predictors of Later Reading Comprehension Ability: A Systematic Review

Abstract: The purpose and goal of reading instruction in school is fluent reading with comprehension, in other words, good reading comprehension. Broad language skills are hence essential to obtain good reading comprehension. Knowledge about the correlation between linguistic comprehension abilities in preschool and other influential predictors and later reading comprehension abilities at school-age is paramount in regards to both reach a better understanding of how to implement preventive measures at an early stage and to understand why problems with reading and reading disabilities occurs.

We are now in the process of conducting a Campbell review (title proposal is under revision). In this meta-analysis, longitudinal non-experimental studies that report the correlation between linguistic comprehension and other influential predictors in preschool and reading comprehension abilities in school will be subject to analysis. The review will include studies conducted with a sample of unselected monolingual typical children, i.e., not included because of a special group affiliation (e.g., a special diagnose). The review aims to answer; what's the magnitude of the correlation between linguistic comprehension skills and other influential predictors in preschool and later reading comprehension abilities?

The planned review will conduct statistical modelling by using the program Mplus. This will make it possible to analyze a correlation matrix in the meta-analysis. In order to find the unique contributions, accounted for by a variable after the shared variance with other variables has been partitioned out, we will use a hierarchical regression-analysis on a meta-level.

Preliminary findings:
A literature search was conducted including studies published up to March 10. 2010, in PsychInfo, which resulted in 17 studies when the duplicates and the studies that did not meet the inclusion criteria’s as described above were excluded (i.e. children with learning disabilities). The mean correlation between preschool linguistic comprehension and later reading comprehension in school was moderate (r=.42, CI.36-.47) and significant, (z(16) = 13.32, p<.01). Variations in the correlation coefficients ranged from r=.15 to .54. This heterogeneity is significant (Q (16) = 51.65, p<.01, I²=69.02 %). In order to explore to what degree other variables contributed in explaining the difference between the included studies a moderator analysis was conducted. The significant variations between the studies could not be contributed to neither age at testing in school nor the time span between the two time points. The planned Campbell review will include a number of assumed influential predictors of reading comprehension to further attempt to account for the remaining variation.

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102. Title: Financial Education for Children and Youth: A Systematic Review and Meta-analysis

This paper presents results from the first systematic review and meta-analysis of randomized controlled trials to investigate the state of the evidence regarding the effectiveness of financial education for children and youth. Twenty-one identified trials are synthesized and meta-analyses of financial knowledge, attitudes, and behaviors are reported. Differences in effect sizes are explored by population age (children, youth), intervention type (in-class, online, mass-media), and intervention intensity.

Around the world, governments, the financial sector and civil society have highlighted the lack of financial capabilities of youth and adults. This lack negatively affects the individuals and families who are consequentially less capable of absorbing unexpected financial shocks and pursuing their goals. This also has macro level effects as poor knowledge and bad habits inject instability into the financial system, decrease the amount of capital available for innovation and growth, and place additional pressure on welfare systems.

Despite the need for improved financial capability and its importance for later wellbeing, there has been much debate regarding the effectiveness of financial education. However, the debate has been marked by three key weaknesses: Outcomes are often combined across age groups despite strong theoretical and empirical reasons to expect that age moderates outcomes, non-experimental data has been relied on too heavily with a lack
of experimental evidence being assumed, and the definition of financial education has varied widely without sufficient attention to how some variants might be more or less effective. Two recent meta-analyses highlight these challenges (Fernandes, Lynch & Netemeyer, 2014; Miller et al., 2014).

This review addresses the first two challenges directly by including only randomized controlled trials for individuals 24 years old or younger. The identification of 21 studies refutes earlier claims that there are very few experimental studies of financial education with this population and uncovers studies not included in the two previously mentioned reviews.

The authors are currently finalizing the data analysis by gathering primary data from included studies in a consistent format for more reliable meta-analytic results. Preliminary results indicate mixed evidence for improved financial knowledge and positive evidence for attitudes and behavior. Based on the outcomes and subgroup analysis a model for more effective intervention will be suggested.

Reflections will be shared on next steps in the evidence cycle. This should include prioritizing the identification of promising interventions and pursuing more targeted research on their effectiveness as they are scaled and transported to new contexts.

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Llorenc O’Prey

104. Title: Heated Debate but Little Evidence: What Do We Know About the Impacts of Smallholder Palm Oil Production on Biodiversity and What Should We Know?
Palm oil is a globally traded product that is cultivated by companies as well as smallholders. It accounts for some 35% of global vegetable oil trade.

It is an important crop from the perspective of international development because its production can create additional income for the rural poor and advance their economic development. Smallholder farmers are involved in nearly 40% of Southeast Asia’s area under oil palm cultivation and over 80% of Africa’s area under oil palm cultivation. However, alongside significant economic benefits, are the potentially harmful impacts of direct and indirect land use change on biodiversity.

Oil palm became well-known for the general public during the past decade through its potential as a biofuel crop to answer energy demand without increases in greenhouse gases and through the debate that followed the initial hype due to concerns of the environmental impacts. In the somewhat heated debate, it was quickly forgotten that palm oil is mainly used for food production and other purposes than bioenergy, and that there are the social benefits associated with its cultivation. Also forgotten was that not all the production is equal in terms of the impacts.

Current policies and standards treat all the plantations same regardless of the form of production. But should they differentiate based on the production and can there be a win-win situation that helps the rural poor without causing irreparable damage to nature? Our systematic review addressed the biodiversity impacts of oil palm cultivation and whether those impacts differ between industrial plantations and smallholder plantations per volume of fuel produced. In this presentation we discuss the evidence base and research gaps found. Using a framework modified from one used in health care, we identify and classify the reasons for the existence of the research gaps and discuss the implications of the gaps for policy development and further research.

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108. Title: Evidence Gap Maps – A Tool for Promoting Evidence Informed Policy and Prioritising Future Research
Agriculture has wide-ranging global impacts which extend to economic growth, poverty reduction, food security, livelihoods, rural development and the environment. Agriculture is the main source of income for around 2.5 billion people in low and middle income countries. In addition, around 70 percent of the global extreme poor live in rural areas in low and middle income countries, relying directly or indirectly on agriculture for their livelihoods. Thus, interventions in the agricultural sector have the potential to improve the lives of a large number of people in low and middle income countries. The evidence base on the effects of agricultural interventions is increasing, but there is a need to make this evidence easily available to decision makers, and to identify important gaps in the evidence which can inform future research efforts.
Evidence gap maps enable policy-makers and practitioners to explore the findings and quality of the existing evidence and facilitate informed judgement and evidence-based decision-making in international development policy and practice. They present a visual overview of the existing impact evaluation and/or systematic review evidence on a topic using a framework of policy relevant interventions and related outcomes. They can also identify key “gaps” where little or no evidence is available and where future research should be focused. Thus, gap maps can be a useful tool for developing a strategic approach to building the evidence base in a particular sector.

This paper presents the findings of an evidence gap map undertaken on agriculture interventions in low and middle income countries. The gap map includes both impact evaluation and systematic review evidence presented by 11 key agricultural intervention areas and important agricultural, income and well-being related outcomes. The paper highlights the main findings from this evidence, and identifies the areas where high quality evidence from primary studies is currently lacking, as well as where new systematic reviews may be appropriate.

Authors: Birte Snilstveit
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International Initiative for Impact Evaluation (3ie); Campbell International Development Coordinating Group (IDCG).

111. Title: Can Fuzzy Approaches to Meta-Analysis Help us Better Understand the Complexity and Diversity of Development and Environmental Studies?

Systematic reviews normally rely on conventional meta-analysis techniques, which work well combining the results of multiple studies that report the same outputs, measured in a statistically comparable way, as is often the case in medicine. This is rarely the case in international development or environmental sciences, where societies and systems are always complex and where many causal factors will contribute to an outcome. Furthermore, papers measure outputs in multiple ways even when they capture the same ‘concept’. Economic studies in international development often make use of general equilibrium models (GEMs), which combine original data and analytical assumptions, rendering them difficult to compare with each other and to evaluate alongside other research outputs.

We are suggesting a new method for meta-analyses in international development and environmental sciences, based on a tool for case-study synthesis known as fuzzy set qualitative comparative analysis (fsQCA). Fuzzy sets are calibrated based on theoretical and substantive knowledge of the subject area, mapping case-study findings onto set memberships. After calibration of cases into fuzzy sets, set operations (such as AND, OR, or NOT) are be used to identify a causal set of ‘recipes’ of necessary or sufficient conditions with a clear connection to an outcome. This allows for the identification of combinations of conditions associated with a given outcome, accounting for both the intervention and contextual factors. fsQCA is appealing because it can be used to synthesise results of studies with different indicators to measure a single concept, and works with small to medium n samples. Moreover, it does not require symmetrical relationships, allowing for multiple paths to a single outcome.

The method is being trialled in a systematic review looking at the impact of agricultural input subsidies on farm income, consumer welfare, and wider growth in low and middle income countries. These four outputs are highly complex and are expected to be captured in the evidence-base via a variety of output measures. By calibrating each of these outputs it is hoped we may be able to map the necessary and sufficient conditions of inputs and wider circumstances necessary to promote each of these outputs. We will also evaluate methods for incorporating GEMs into the overall analysis. If successful, the fsQCA method may have a lot to offer in addressing the challenges systematic reviews currently face outside of the medical arena.

Authors: Holly J. Wright

112. Title: Word Generation: A Systematic Review

Through multiple quasi-experimental and experimental studies, we tested the effects of a modest middle school intervention called Word Generation (WG) (see www.wordgeneration.org) that explicitly teaches five academic vocabulary words in the context of daily 15-20 minute activities distributed in a recurrent weekly sequence across the content-area classrooms (English language arts, science, social studies and math). This poster presents a systematic review of five previous studies of WG’s effects on academic language conducted across five academic school years (2007-2012).
Table 1 shows an overview of the five studies of the WG program with details concerning methodologies, student sample and estimated effect sizes.

In our first year of the quasi-experimental study, we compared vocabulary improvement of student in five treatment school with the improvement of students in 3 control schools (Hedge’s g = 0.49). There were problems with the timing of the administration of the pretest in control schools that may have resulted in inflated estimates (Snow, Lawrence, White, 2009). In the second year of the quasi-experiment, we estimated a much smaller treatment effect of WG on academic vocabulary (Hedge’s g = 0.06). During that year, two of the treatment schools during received news that they would be closed, which may have hurt staff morale. We did not have enough schools participating in these studies to use HLM analysis.

Our RCT (2009 – 2012) was conducted in different school districts. Before schools were randomly assigned, we used propensity score matching to form a composite from percent minority; percent free and reduced lunch, percent English language learners, and prior mean achievement. We then ranked the schools based on that composite. Each sequential pair of schools formed a dyad within which randomization occurred to maximize comparability.

In 2009 the program was evaluated in 28 randomly assigned schools. HLM models estimated differences at the school level controlling for a host of school- and individual-level covariates. We estimated reliable effects on taught vocabulary (Hedge’s g = 0.15). We uses similar method and had similar estimated effect sizes in 2010 (Hedge’s g = 0.12) and 2011 (Hedge’s g = 0.14).

Our results from multiple evaluations of WG indicate that it is possible to enhance students’ academic vocabulary knowledge by implementing a modest intervention that is not too intrusive to teacher’s instructional time.

Table 1
Overview of Evaluations on the Word Generation Program with Estimated Effect Sizes on Academic Vocabulary Scores

<table>
<thead>
<tr>
<th>Year</th>
<th>School Year</th>
<th>Design</th>
<th>School District</th>
<th>Treatment Sample</th>
<th>No. of schools</th>
<th>No. of students</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2007-2008</td>
<td>Quasi-experimental 1</td>
<td>1</td>
<td>5</td>
<td>697</td>
<td>0.49</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2008-2009</td>
<td>Quasi-experimental 2</td>
<td>1</td>
<td>7</td>
<td>1,183</td>
<td>0.06</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>2009-2010</td>
<td>Experimental 3</td>
<td>2 &amp; 3</td>
<td>15</td>
<td>940</td>
<td>0.15</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>2010-2011</td>
<td>Experimental 4</td>
<td>2, 3 &amp; 4</td>
<td>24</td>
<td>4,802</td>
<td>0.12</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>2011-2012</td>
<td>Experimental</td>
<td>4</td>
<td>6</td>
<td>3,491</td>
<td>0.14</td>
<td></td>
</tr>
</tbody>
</table>

Note: 1 Snow, Lawrence, & White, 2009; 2 Snow & Lawrence, 2011; 3 Lawrence, Crosson, Pare-Blagojevich, & Snow, in press; 4 Lawrence, Snow, & Francis, under review.

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115. Title: Developing Efficient Search Strategies: Application To a Review of the Impact of Population Ageing on Demand for Healthcare and Long-Term Care

Objective: This study proposes an efficient search strategy for conducting a systematic review within a diffuse subject area. A case study is presented in the form of a review of healthcare demand for an ageing population.
Methods: Scoping searches were undertaken alongside discussion with experts in the field. From this, twelve key papers from the target literature were selected. For each database interrogated (Medline, EMBASE, EconLit, ASSIA and CINAHL), searches were iteratively broadened until all the sample papers within the database were identified. Supplementary searches were undertaken when broad search strategies did not find a sample paper. The search strategies were iteratively refined to reduce the number of papers identified whilst maintaining maximum retrieval of the sample papers.

Results: The number of papers identified using broad search terms within Medline and EMBASE was approximately 50,000 (before de-duplication) and not all of the papers within the sample set were retrieved. This number was reduced to 8,849 following our iterative method which did identify all sample papers.

Conclusions: The proposed method significantly reduced the number of papers identified compared with a single broad search whilst identifying more of the chosen key sample papers.

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117. Title: The Social Marketing Evidence Base: A Web-Based Systematic Review Evaluating the Effectiveness of Social Marketing in Global Health

Population Services International (PSI) is a social marketing NGO working in global health. Social marketing uses marketing concepts to sell subsidized products through commercial sector outlets, distribute products for free, deliver health services through social franchises, and promote behaviors not dependent upon a product or service.

PSI is often challenged to demonstrate the effectiveness of this strategy for health behavior change. In response, PSI created the Social Marketing Evidence Base (SMEB), a systematic review of studies evaluating the effectiveness of social marketing in low and middle-income countries in health areas of HIV, tuberculosis, reproductive health, malaria, and child survival.

We searched PubMed, PsychInfo, and ProQuest, using search terms linking social marketing and health outcomes, for studies published from 1995 to 2013. Studies eligible for inclusion in the review had to provide sufficient information on the intervention evaluated to be scored using Social Marketing Benchmark Criteria from the National Social Marketing Centre. Eligible studies had to measure outcomes of behavioral determinants, health behaviors, and/or health outcomes in each health area, and each included study was graded with a six-point Strength of the Evidence score adapted from the Cochrane Handbook.

After reviewing 6,523 records, 109 studies met our inclusion criteria. Across the five health areas, 71 studies reported on changes in behavioral determinants. 82 studies reported on changes in behaviors, and we found 31 studies reporting health outcomes. Eligible studies discussed both positive and null effects of social marketing programs. No studies on childhood pneumonia were identified and only two eligible studies reported on tuberculosis outcomes. Effective programs were found to seek insight into their consumers and the market, in addition to targeting segments of the population most likely to change.

The Social Marketing Evidence Base website has been made publicly available as a resource for implementers, donors, and policymakers seeking to understand the effectiveness of social marketing. Finding from this review can be used to support decisions on investments in new global health programs and scaling up effective practices. The review also identified key evidence gaps in social marketing. Across all disease areas, few studies met the highest score on strength of the evidence, highlighting the need for further investment in rigorous evaluation of social marketing programs.

Authors: Rebecca Firestone, Population Services International
118. Title: Using Design to Communicate Systematic Review Findings to Global Development Practitioners

Evidence-based practice is of increasing interest in global development, and systematic reviews are an important tool in identifying effective interventions. However, systematic review methodologies are still relatively unfamiliar in development, and a culture of evidence use is nascent. Encouraging development practitioners to understand and use results from systematic reviews as part of the evidence cycle is a key task in knowledge translation. One challenge is in locating strategies to package results in a manner quickly understood by non-researchers. Graphic and web design, including data visualization methods, are important tools for overcoming this challenge.

We conducted a systematic review to assess the effectiveness of social marketing interventions in low and middle-income countries for achieving health behavior change on behalf of Population Services International, a social marketing NGO. To communicate our findings to practitioners, we created an infographic that summarized the systematic review. We used the infographic to link to a web-based resource that we developed to showcase detailed methodology and results.

The infographic was designed to help researchers and practitioners communicate with policy-makers about the effectiveness of social marketing in global health and the quality of the evidence base. It summarized the review’s methodology and provided recommendations on how review findings could be used by practitioners. The infographic enabled us to summarize findings from 109 eligible peer-reviewed studies into a format that is visually engaging, easy to understand, and portable. The website, titled the Social Marketing Evidence Base and hosted on PSI’s corporate website, provides logic models used to structure the review for each area of health behavior change assessed, offers key findings, summarizes each study included in the review, and describes the review’s methodology.

Preliminary website analytics indicate that users come directly to the Social Marketing Evidence Base through search engines, rather than navigating from the PSI home page. Users spend several minutes reading results, more than the average amount of time spent on other pages of PSI’s website. Use of these tools has demonstrated that existing social marketing practitioners are most interested in how to make social marketing effective for health behavior change. Additional analysis of website and infographic use is still needed. In global development, design tools, including data visualization, can increase the use of research findings for decision making and program design.

Authors: Rebecca Firestone, Population Services International
Shilpa Modi


The objective of the review was to assess the evidence on the effects of private-sector interventions in the areas of Access to Finance and Farmer/Business Training on performance indicators, such as technology adoption, agricultural productivity, household income/consumption and poverty reduction. The review also aimed to identify the interventions’ impact pathways from inputs to outcomes and long-term impacts. Forty four impact evaluations that used randomized control trials or quasi-experimental methods and passed the quality test were included in the review following a double-screening of full text by two experts. Eighteen studies were from Africa; eight from South Asia; eight from East Asia; eight from Latin America and the Caribbean; one from the Middle East and North Africa; and one from Central Asia and Eastern Europe. Included studies evaluated private-sector interventions to either improve access to finance or farmer and business training interventions, or both.

The reviewers found that Access to Finance and Farmer/Business Training interventions generally produce positive impacts on agricultural outcomes, such as adoption of technologies being promoted, with resulting increases in production, productivity, and/or farm income and profits. However, a significant portion of the positive results when disaggregated by value chains or groups of beneficiaries reveal not only positive but also statistically not significant effects for some value chains or groups of beneficiaries. For instance, the Millennium Challenge Corporation (MCC) evaluation of the Production and Business Services projects in El Salvador found that only dairy producers benefited from increased production and sales, while other value chains such as fruit, horticulture and tourism did not benefit. In general, successful projects have targeted all stages of the value chain,
from training in good farming practices to training in post-harvest techniques, plus providing inputs such as credit and facilitating farmers’ organization to help them obtain better prices from suppliers. The evaluation also found that fewer evaluations show positive impacts on farmers’ welfare (that is, on farmer’s household consumption and/or poverty reduction measures) and that de-centralized approaches to extension are promising, but are not always financially sustainable.

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Gloria Paniagua, Development Impact Department, IFC Advisory Services Unit (CDIAS)

Affiliation:

123. A Systematic Review of Breastfeeding Among Native Hawaiians and Pacific Islanders

Introduction: Problems that are large and endemic pose major challenges to policy makers. The World Health Organization identifies childhood overweight and obesity as such a problem. Childhood obesity is more prevalent among certain ethnic and racial groups, especially Native Hawaiian and Pacific Islanders (NHPs). This may not always be obvious as health data often aggregate Asians and NHPs. However, NHPs are over 30% more likely to be obese than Asians who have an 11% obesity rate. Breastfeeding is stated as an important early life exposure that may reduce the risk for overweight and obesity. Breastfeeding rates are lower among NHPs than for the entire state of Hawaii (Whites, Filipino, Japanese, and Chinese).

Objective: The purpose of this paper is to examine breastfeeding practices (initiation, duration, mixed feeding, introduction of complementary foods) and recommendations among Native Hawaiians and Pacific Islanders in order to inform policy decision.

Methods: We systematically searched nine electronic databases for articles and studies published on breastfeeding and Pacific Islanders/Native Hawaiians. We set no time or language restrictions. Screening by two reviewers resulted in a total of 715 studies with 18 studies being included in the analysis.

Results: Socioeconomic status and ethnicity were associated with lower breastfeeding rates. Various initiation and duration rates existed among Native Hawaiian and Pacific Islanders. The practice of short duration of breastfeeding, mixed feeding (bottle and breastfeeding), and early introduction of complementary foods high in sugar and carbohydrates was associated with childhood obesity among NHPs.

Recommendations for increasing breastfeeding among NHPs included the use of breastfeeding role models; public promotion of the benefits of breastfeeding, coupled with dispelling harmful myths; and culturally relevant public health initiatives, and including the personal dissemination of information. Additionally, increasing access to and availability of breastfeeding resources, specifically breast pumps, in schools and workplaces would make it significantly easier for busy moms to continue breastfeeding.

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124. Title: The Usability of Systematic Reviews in Education: A Systematic Map of the Recent Literature

Systematic reviews are increasingly considered a key tool for evidence-informed decision making. By going beyond the limitations of single studies, and allowing, in turn, for some degree of cumulative knowledge, intrinsically they have an important role in improving the translation of knowledge into action (Grimshaw et al., 2006; Tugwell et al., 2006). Although still far fewer in number compared to those focused on medicine and healthcare, the widespread international interest in systematic reviews in education has led to a steady growth in literature (Andrews, 2005; Blunkett, 2000; Davies, 2000). As in other fields, the role of reviews in education in mediating the policy/practice divide depends on their ability to meet the current needs of policymakers and other research users.
The objectives of this study were to evaluate the usability of recent systematic reviews in education through a systematic, empirical examination of their main features, and provide recommendations for what can be done on the commissioner and delivery side of systematic reviews to cover needs for reviews in education. A non-comprehensive, thorough literature search was conducted to identify qualifying systematic reviews published over a five-year period. Education-focused systematic reviews published from January 2009 to December 2013 in English, Norwegian or Danish were eligible for inclusion in the review. Two investigators manually reviewed reports identified using the search strategy and determined eligibility by applying the selection criteria. The needs of policymakers framed the data collection and analysis. This poster presentation will outline the methods and findings of the study and discuss implications for both researchers and users of reviews.

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127. Title: Observational Evidence and Strength of Evidence Domains: Case Examples

Background: Systematic reviews of healthcare interventions most often focus on randomized controlled trials. However, certain circumstances warrant consideration of observational evidence, and such studies are increasingly being included as evidence in systematic reviews.

Methods: To support use of observational evidence, we present case examples of systematic reviews in which observational evidence was considered as well as case examples of individual observational studies and how they demonstrate various strength of evidence domains in accordance with current GRADE and AHRQ Evidence-based Practice Center Methods Guidance.

Results: In the presented examples, observational evidence is used when randomized controlled trials are infeasible or raise ethical concerns, lack generalizability, or provide insufficient data. Individual study case examples highlight how observational evidence may fulfill required strength of evidence domains, such as study limitations (reduced risk of selection, detection, performance, and attrition); directness; consistency; precision; and reporting bias (publication, selective outcome reporting, and selective analysis reporting), as well as additional domains of dose-response association, plausible confounding that would decrease the observed effect, and strength of association (magnitude of effect). We demonstrate how to apply both AHRQ and GRADE strength of evidence guidance to multiple examples of strong observational studies, highlighting similarities and differences between the methods. We also provide suggestions for managing challenging considerations when relying upon observational evidence in systematic reviews.

Conclusions: The cases highlighted in this paper demonstrate how observational studies may provide moderate to (rarely) high strength evidence in systematic reviews. The examples also provide a real-world model that can guide investigators using observational evidence in future reviews.

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134. Title: Developing Efficient Search Strategies: Application to a Review of the Impact of Population Ageing on Demand for Healthcare and Long-Term Care

Objective: This study proposes an efficient search strategy for conducting a systematic review within a diffuse subject area. A case study is presented in the form of a review of healthcare demand for an ageing population.

Methods: Scoping searches were undertaken alongside discussion with experts in the field. From this, twelve key papers from the target literature were selected. For each database interrogated (Medline, EMBASE, EconLit, ASSIA and CINAHL), searches were iteratively broadened until all the sample papers within the database were identified. Supplementary searches were undertaken when broad search strategies did not find a sample paper. The search strategies were iteratively refined to reduce the number of papers identified whilst maintaining maximum retrieval of the sample papers.

Results: The number of papers identified using broad search terms within Medline and EMBASE was approximately 50,000 (before de-duplication) and not all of the papers within the sample set were retrieved. This number was reduced to 8,849 following our iterative method which did identify all sample papers.

Conclusions: The proposed method significantly reduced the number of papers identified compared with a single broad search whilst identifying more of the chosen key sample papers.

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The following organisations are exhibiting stands during our conference, at the back of The Whitla Hall. Improving Children’s Lives would like to express thanks to these organisations for their support.