Bridging the gap to understand effective interventions for adolescent well-being: An evidence gap map on protection, participation, and financial and material well-being in low- and middle-income countries

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### Acronyms and initialisms

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<th>Acronym</th>
<th>Full Form</th>
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<tr>
<td>3ie</td>
<td>International Initiative for Impact Evaluation</td>
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<tr>
<td>DID</td>
<td>difference-in-differences</td>
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<tr>
<td>EGM</td>
<td>evidence gap map</td>
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<tr>
<td>FGM/C</td>
<td>female genital mutilation/cutting</td>
</tr>
<tr>
<td>GBV</td>
<td>gender-based violence</td>
</tr>
<tr>
<td>ICT</td>
<td>information and communication technology</td>
</tr>
<tr>
<td>IPV</td>
<td>intimate partner violence</td>
</tr>
<tr>
<td>LMICs</td>
<td>low- and middle-income countries</td>
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<tr>
<td>PSM</td>
<td>propensity score matching</td>
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<tr>
<td>RCT</td>
<td>randomized controlled trial</td>
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<tr>
<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<tr>
<td>STI</td>
<td>sexually transmitted infection</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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**Technical glossary**

Adolescence  
A developmental stage of physical, social and neurocognitive change. The beginning of adolescence is usually considered to be puberty. The end is more difficult to define and is usually considered to be the transition in social role to one of independence, which may include completion of education and/or commencement of employment, an intimate relationship or starting a family.

Adolescent  
A person aged between 10 and 19 years – as defined by UNICEF and the World Health Organization.

Boolean search  
Searches that use a combination of keywords with operators such as ‘AND’, ‘OR’ and ‘NOT’ to help refine searches. Many bibliographic databases allow for complex combinations of search terms (often compiled into search strings) with operators and search limiters, e.g., specific publishing periods or languages.

Children  
All persons under 18 years of age, as defined by the Convention on the Rights of the Child, unless the laws of a particular country set a lower legal age for adulthood.

Difference-in-differences (DID)  
A quasi-experimental method for comparing the changes in outcomes over time between treatment and comparison groups to estimate impact. This is also known as the ‘double difference’ method.

Impact evaluation  
For the purposes of this evidence gap map, an impact evaluation is a study that uses a counterfactual design to examine the effects of an intervention or programme.

Instrumental variables  
A statistical regression-based method used to estimate causal relationships where randomized controlled trials are not possible.

Propensity score  
A quasi-experimental method for constructing a comparison group using statistical techniques. PSM entails matching treatment

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<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Matching (PSM)</td>
<td>matching individuals/households with similar comparison individuals/households and calculating the average difference in the indicators of interest.</td>
</tr>
<tr>
<td>Qualitative research</td>
<td>Research methods that gather descriptive data – including text, images and sound – that are neither numerical nor quantitative in nature. Common methods include interviews, focus groups, observation and ethnography. Though not usually considered generalizable, results are often transferable.</td>
</tr>
<tr>
<td>Quasi-experimental design</td>
<td>Quasi-experimental research designs test causal hypotheses but lack random assignment. Participants are assigned to a group by means of self-selection (i.e., participants choose treatment for themselves) or administrator selection (e.g., by officials, teachers or policymakers) and comparison groups are constructed by statistical means.</td>
</tr>
<tr>
<td>Randomized controlled trial (RCT)</td>
<td>In an RCT, members of the population eligible for treatment are randomly assigned to a treatment group (who receive the intervention) or a control group (who receive no intervention). The impact of the intervention is measured by comparing the results of the treatment group with those of the control group (i.e., the counterfactual).</td>
</tr>
<tr>
<td>Regression discontinuity design</td>
<td>This approach uses a threshold to determine eligibility for participation in the programme/policy – for example, women above or below a certain age are eligible to participate in an informal education programme. A regression discontinuity design is based on a comparison of the difference in average outcomes for groups either side of the threshold.</td>
</tr>
<tr>
<td>Search string</td>
<td>A combination of key search terms and characters that enables complex searches in some databases.</td>
</tr>
<tr>
<td>Snowballing</td>
<td>The process of checking the references of articles for other articles of interest.</td>
</tr>
<tr>
<td>Social ecological models</td>
<td>Theoretical models that take into account the interactive effects of personal and environmental factors that determine human behaviour. A socioecological model usually includes five levels of analysis: individual, interpersonal, community, organizational, and policy or enabling environment.</td>
</tr>
<tr>
<td><strong>Structural determinants</strong></td>
<td>Fundamental structures of a society or nation that generate social stratification. Examples include global and national economic systems, and a country’s political, social welfare and education systems. Structural determinants can result in differing levels of power, wealth, rights, empowerment, education, etc., between individuals, and may be the ultimate drivers of differences in health and well-being.</td>
</tr>
<tr>
<td><strong>Systematic review</strong></td>
<td>For the purposes of this evidence gap map, a systematic review is a high-level overview of primary research related to a research question, which tries to identify, select, synthesize and appraise all high quality research evidence relevant to that question.</td>
</tr>
<tr>
<td><strong>Youth</strong></td>
<td>Persons aged 15 to 24 years – as defined by UNICEF.</td>
</tr>
<tr>
<td><strong>Young people</strong></td>
<td>Persons aged 10 to 24 years – as defined by UNICEF.</td>
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Executive summary

A continued focus on adolescents is necessary to sustain the investment and significant achievements made in child well-being over the last two decades. Understanding ‘what works’ to improve adolescent well-being, and how and when to deliver these services is integral to effective policies and programmes.

This evidence gap map (EGM) collates the evidence base for adolescent interventions in low- and middle-income countries (LMICs). The thematic scope broadly corresponds with the UNICEF adolescent well-being outcome domains of protection, participation and livelihoods (excluding transferable skills and youth employment-related interventions and outcomes as other EGMs address these). Outcomes relating to the enabling environment for adolescents are also included to capture the contextual influences that might affect the well-being of adolescents.

The types of study included in the EGM are impact evaluations that use a counterfactual design (i.e., experimental and quasi-experimental) to measure the effect of interventions, and systematic reviews that synthesize empirical experimental and quasi-experimental evidence to evaluate interventions. The EGM describes visually where evidence for programming and policy exists, where it is scarce and where there are evidence gaps. It can be used to help determine where a research topic might benefit from new primary research or from further synthesis such as a systematic review. It can also assist with decision-making around adolescent programmes and policies by providing an overview of what evidence exists in different contexts and the quality of that information. The interactive EGM is available online at www.unicef-irc.org/evidence-gap-map. To view a static version, see Appendix A.

Key findings

The EGM contains 74 studies (71 impact evaluations and 3 systematic reviews). There is more evidence for interventions directed towards individuals and households, and less evidence on interventions operating at the group and community level or policy and institutional level. This reflects an emphasis within the evidence base on the tangible needs of adolescents over the contextual and underlying drivers of adolescent well-being.

Areas of evidence abundance

Most of the evidence is on financial support to individuals and households. Most of these interventions are conditional cash transfers, and studies frequently evaluate their impacts on
child labour and child marriage outcomes. The second largest evidence cluster relates to the impacts of socio-emotional learning and life skills on adolescent protection, particularly protection-related attitudes, skills and knowledge. This primarily includes life skills interventions with a gender equality/girls’ empowerment focus. Psychosocial support is the third most frequently appearing intervention among the evidence. These programmes consist of cognitive behavioural, cooperative play and group interpersonal therapy, and their aims typically relate to HIV prevention, treatment of internalizing or externalizing behaviours, violence reduction, and pro-social behaviour and communication skills.

At the group and community level, the largest bodies of evidence are on financial literacy and savings schemes, and norm change interventions. Financial literacy and savings schemes are often part of multidimensional programmes that variously combine group savings, financial training and matched savings elements. Studies most frequently evaluate the impacts of these programmes on savings and assets, while a smaller body of evidence evaluates the impacts on adolescents’ access, decision-making and agency, for example, in terms of the extent of adolescent influence on household decision-making, and the extent of their social interactions/networks. Norm change interventions often feature in programmes that operate at the individual/interpersonal and group/community levels, alongside life skills interventions and the provision of safe spaces to adolescents.

Evidence gaps

Evidence on interventions at the policy and institutional level is extremely scarce, and only one intervention was identified in the human rights and access to justice category.

There is a lack of focus on the enabling environment for adolescent well-being, with limited coverage of how interventions have an influence on legal norms or access to services. Service capacity is an outcome that is overlooked by all of the studies identified.

Coverage on the use of and access to information and communication technology (ICT) by adolescents is also missing from the evidence base. Furthermore, while coverage of gender is prominent in the literature only one intervention specifically targets boys and men to promote attitudes towards gender equity.

At the individual and interpersonal level, there are notable gaps in the impacts of second-chance education interventions on financial and material well-being. This suggests that downstream impacts from second-chance education on income generation, and on the ability of adolescents to save and build assets, are not being considered or evaluated. There
is also a lack of evidence on material/in-kind support such as school vouchers, and food and other materials for education schemes.

The evidence for child marriage outcomes far outweighs the evidence on other harmful practices such as female genital mutilation/cutting (FGM/C). With regard to violence outcomes, there is more evidence on sexual violence and gender-based violence (GBV) than on other types of violence such as physical abuse and punishment, and intimate partner violence (IPV).

At the group and community level, evidence is scarce on the impacts of advocacy and campaigns interventions on adolescent protection and participation. The evidence for group financial and material support is also limited, and this may reflect a broader trend among interventions to target individuals and households rather than groups and institutions.

Finally, while there is some evidence that norm change interventions can affect violence rates, there is limited coverage of the impacts of norm change interventions on other protection outcomes such as free and safe movement, and child marriage.

Research and policy implications

Analysing the EGM reveals several research and policy implications:

- **Lack of evidence at the policy and institutional level**: Further consideration is required of how interventions can be implemented at this level, and how these interventions can address the structural barriers to adolescent well-being.

- **Greater focus on boys and men needed**: The lack of evaluated interventions targeting adolescent boys is a critical gap in programming and research, and a vital area for primary research.

- **Expand the geographic scope of evidence generated**: The evaluative evidence base must be expanded to include francophone West and Central Africa, the Middle East and North Africa, East Asia and the Pacific, and Europe and Central Asia.

- **Improved conceptualization and comparability of adolescent well-being terminology required**: Uniformity is lacking among the variables, scales and indicators used to measure adolescent well-being. Increased homogeneity may allow for greater comparability across interventions and more diversity in synthesis methods.

- **Greater clarity around, and increased use of, the terms ‘adolescence’ and ‘adolescent’**: Definitional uniformity may help to improve the comparability of evidence from different interventions.
More explicit emphasis required on documenting and assessing the cost of interventions to aid programming: Further consideration is recommended of how cost-effectiveness analysis can be built into interventions and evaluations.

Multidimensional programmes: Consideration should be given to the fact that interventions often appear together in different combinations as part of broader, multidimensional empowerment programmes. The effects of individual components cannot be easily isolated in the evaluative literature.

Topics suitable for research synthesis

The EGM demonstrates that evidence exists on outcomes related to adolescent protection and participation. There are several potential entry points for research synthesis to strengthen the evidence base for these domains:

1. **Studies evaluating the impacts of socio-emotional learning and life skills:** Research synthesis could expand upon existing systematic reviews that evaluate the impacts of life skills interventions on child marriage and violence. There is also the potential to synthesize studies that evaluate the impacts of socio-emotional learning and life skills sessions on participation-related attitudes, knowledge and skills outcomes, and on access, decision-making and agency outcomes.

2. **Studies evaluating the impacts of psychosocial support on protection- and participation-related attitudes, knowledge and skills:** Research synthesis here could focus on the attitudinal outcomes of psychosocial support. This could be supplemented by primary research that evaluates the impacts of psychosocial support on behavioural outcomes such as connection to families, violence, and access, decision-making and agency.

Priority areas for primary research

The EGM suggests that several areas would benefit from primary research:

1. **Capacity building and the enabling environment:** The lack of evidence on the effect of institutional capacity building interventions on the enabling environment for adolescent well-being suggests that this is a priority avenue for future research.

2. **Second-chance education and literacy:** Expert consultations indicated a strong desire for evidence on supporting adolescent livelihoods through second-chance education and literacy interventions for those who are not in education or training.

3. **Financial literacy:** Further evaluative research is desirable on the impacts of financial literacy interventions on the financial capacity of adolescents, and the extent
to which changes in financial knowledge and skills lead to changes in the actual accumulation of assets and savings.

- **Social norms:** A focus is necessary on the impacts of norm change and community sensitization interventions on adolescent protection and participation.

- **Prevention of violence and harmful practices:** Research could be targeted towards interventions tackling FGM/C, suicide, physical abuse and punishment, IPV and homicide.

- **ICT:** Further evaluative research is required on interventions that aim to improve the use of and access to ICT among adolescents.

- **Material/in-kind support to individuals and households:** Further evaluative evidence would help to make clear the comparative advantages, if any, of this approach relative to interventions that provide financial support.

- **Auxiliary services:** Future research could focus on evaluating these interventions where they appear in concert with life skills and financial support interventions, and on assessing the extent to which they enhance progress towards improving adolescent livelihoods.

**Conclusion**

This EGM is a first attempt to provide a snapshot of evaluated interventions that target adolescents living in LMICs in the domains of protection, participation, and financial and material well-being. It complements other recently completed EGMs that examine different areas of adolescent well-being. While the EGM does not identify ‘what works’ in adolescent programming, it certainly points to areas where evidence could be fruitfully synthesized to answer this question. The EGM also identifies areas where knowledge about what works for adolescents is scarce and sometimes non-existent, and can thus be used as a tool for prioritizing future primary research.

Adolescents must actively engage in decisions affecting their lives. Yet outside of socio-emotional and life skills sessions, only a relatively low number of interventions in the EGM examined access, decision-making and agency. This needs to change dramatically if the emphasis placed on the importance of engaging adolescents to help achieve the United Nations Sustainable Development Goals is more than a gesture.
1. Introduction

1.1 The importance of adolescent well-being to sustainable development

The United Nations Sustainable Development Goals (SDGs) cannot be achieved without focusing on adolescents and youth, harnessing their potential and engaging them in decisions that affect their lives and communities (United Nations Children's Fund [UNICEF], 2017). The recent increased attention to adolescents (persons aged 10 to 19 years) in global discussions is partly influenced by their large numbers and recognition that this dynamic period provides a ‘second window’ of opportunity to improve and build on advances made during the first decade of life (UNICEF, 2017).

The world is home to 1.2 billion adolescents. This is the largest such cohort in history, making up 16 per cent of the world’s population (UNICEF, 2016a). Ninety per cent of adolescents live in low- and middle-income countries (LMICs) (UNICEF, 2016a). The vibrant physical, sexual and cerebral transformations that take place during this phase of life make adolescence a period of both opportunity and vulnerability. These transformations provide opportunities for leveraging certain types of interventions – such as those that focus on social, emotional and motivational learning – to modify developmental processes and trajectories (Dahl & Suleiman, 2017). On the other hand, if adolescence is characterized by the adoption of negative behaviours, insufficient opportunities to learn and engage in constructive activities, and/or exposure to volatile situations including conflict and violence, negative outcomes may result that stretch well into adulthood. Despite this, research on effective programme and policy interventions is lacking, making it difficult to make informed decisions about how to engage, assist and empower adolescents in different settings and in cost-effective ways to maximize positive outcomes.

Over the last two decades, humanitarian and development agencies have recognized the importance of acknowledging that adolescents belong to a separate age group (from children and young adults), and adolescence as a critical stage of development and transitions that requires substantial attention and investment. One of the main reasons for this is the recognition that adolescence is a unique life stage, when young people become “agents of change and a key asset and resource with the potential to contribute positively to their families, communities and countries” (United Nations Committee on the Rights of the Child, 2016, p. 3). Adolescents can and have made positive contributions to health and education campaigns, family support, peer education, and community development initiatives. In particular, adolescents’ aptitude for using digital and social media provides
opportunities for engagement in politics, peace, human rights, environmental sustainability and other issues of importance to this peer group and the world around them.

Another reason for the increased focus on adolescents by global actors is the challenging environments, risks and widespread deprivations that many adolescents face (Jones et al., 2015; Watson & Harper, 2016; Wodon et al., 2017). Despite most LMICs fulfilling the United Nations Millennium Development Goal to achieve universal primary education, many adolescents still face challenges during secondary education and drop out of school as a result. This means that adolescents are poorly prepared to transit into adulthood and are at risk of being pushed into a vicious cycle of intergenerational poverty and deprivation, as shown by case studies in Asia and Africa (Kyomuhendo Bantebya, Muhanguzi & Watson, 2015; Ghimire & Samuels, 2014; Marcus & Page, 2014). Many other risky behaviours and negative outcomes begin to manifest during this period, with the effects of gender roles and norms intensifying. For example, more than 200 million girls and women globally have undergone female genital mutilation/cutting (FGM/C) and approximately one in seven girls aged 15 to 19 years is married or in union (UNICEF, 2016b). For adolescent boys, the leading causes of death worldwide in 2015 were road traffic injury followed by interpersonal violence (UNICEF, 2016b).

A continued focus on adolescents is necessary to sustain the investment and significant achievements made in child well-being over the last two decades and to move the world towards sustainable development. Understanding ‘what works’ (and ‘where’, ‘why’, ‘when’ and ‘how’) to improve adolescent well-being is integral to effective policies and programmes.

1.2 Study objectives

Evidence gap maps (EGMs) are visual tools designed to provide an overview of the existing evidence on a particular topic or theme. They usually map out empirical evidence in the form of impact evaluations and systematic reviews to highlight gaps in the evidence base and to show where evidence is more abundant. This EGM follows the International Initiative for Impact Evaluation (3ie) approach to EGMs, whereby only impact evaluations that use a counterfactual design, and systematic reviews of effects are considered for inclusion. This helps to inform where a research topic might benefit from new primary research or from further synthesis such as a systematic review (Snilstveit, Vojtkova, Bhavsar & Gaarder, 2013).

This EGM collates the evidence base for adolescent interventions in LMICs where research is particularly scarce. Adolescent well-being is a topic with a very large scope, and this EGM does not attempt to collate the evidence for the entire range of adolescent well-being
interventions and outcomes. Rather, the thematic scope of the EGM broadly corresponds with the UNICEF adolescent outcome domains of protection, participation and livelihoods (excluding transferable skills and youth employment-related interventions and outcomes). A special effort was made to not duplicate information covered by other EGMs, and adolescent outcomes captured elsewhere – including those related to sexual and reproductive health, secondary education, transferable skills and youth employment interventions – were purposely excluded from this EGM. The EGM identifies areas with evidence from interventions and gaps in knowledge to inform programming and policy, and can be used to help determine future avenues for research.

This report presents the findings of the EGM, while the interactive gap map itself can be found online at www.unicef-irc.org/evidence-gap-map. Appendix A presents the EGM matrix in a static format.

1.3 Report structure

Section 2 outlines the EGM methodology, which follows the approach set out by 3ie (Snilstveit et al., 2013). Section 3 details the scope of the EGM in terms of the topics included and excluded, the framework of interventions and outcomes, and the types of study considered for inclusion. Section 4 presents the results of the systematic search and screening process. Section 5 describes the features of the evidence base, including findings on the research design used by studies in the EGM, on the geographic focus of interventions, and on the age ranges covered by the studies. The findings regarding systematic reviews and the quality appraisal process are covered separately within this section. Section 6 presents an analysis of the EGM, looking at intervention and outcome combinations where there are larger bodies of evidence, where the evidence is scarce and where evidence gaps appear. Section 7 presents the key conclusions, implications and recommendations to emerge from the findings, with an emphasis on topics that would benefit from primary research and others which could prove fruitful for synthesis.

2 See Appendix B for the key domains and indicators in the UNICEF Adolescent Country Tracker, used as a basis for conceptualizing the outcome and intervention categories in this EGM.

The structure of this report follows best practices set by existing EGM reports, including studies by 3ie (Rankin et al., 2015; Rankin et al., 2016), the Overseas Development Institute (Marcus & Cunningham, 2016) and the Governance and Social Development Resource Centre (GSDRC) at the University of Birmingham (Bakrania, 2015).

Two supplementary documents accompany this report and are referred to at various points. The first is the study protocol, which provides further detail on the methodology, search protocol and screening process. The second is a Microsoft Excel coding sheet, which was developed to extract data from the studies included in the EGM. To access both documents, visit the EGM web page at www.unicef-irc.org/evidence-gap-map.
2. EGM methodology

2.1 Scoping and development of the EGM framework

The UNICEF Adolescent Country Tracker (see Appendix B) and the theoretical framework on the social and structural determinants of adolescent well-being (see Appendix C), which underpins the UNICEF adolescent research programme, were used to conceptualize the initial thematic scope and outcome domains for this EGM. A scoping exercise was also undertaken. This entailed a rapid review of the literature on adolescent well-being, whereby some basic searches were conducted in a sample of databases to identify relevant systematic reviews and impact evaluations, and to explore the key interventions and outcomes discussed within these. The findings of the scoping exercise were presented to key personnel of the UNICEF Office of Research - Innocenti at a design workshop and approaches for formulating the EGM framework of outcomes and interventions were discussed. In addition, interviews with thematic experts were conducted, which helped to further refine the thematic scope of the EGM and to identify the priority interventions and outcomes to be studied.

A review of other EGMs on adolescent well-being was also conducted to prevent unnecessary duplication of recent efforts. Links to other relevant EGMs on adolescent well-being can be found on the EGM web page at www.unicef-irc.org/evidence-gap-map.

The findings from the scoping exercise, design workshop and expert consultations, together with a review of key UNICEF Innocenti policy documentation, ultimately fed into the development of the study protocol and the EGM framework of interventions and outcomes.

2.2 Systematic searches

Systematic searches were conducted in line with an explicit search strategy. This was developed after the EGM framework had been formulated, with key terms from the intervention and outcome categories used as a basis for the systematic search terms and search strings. The searches were conducted online across a wide range of database sources, including citation and journal indices, research and evaluation repositories, resource centres and other search engines. The range of sources was designed to capture peer-reviewed materials and grey literature as well as published and unpublished material. No language restrictions were applied during the searches, but the selection of documents was limited to those written in English, French or Spanish. The full search strategy and list of
database sources are included in the study protocol. The search strategy was reviewed as part of a broader peer review of the study protocol by thematic and methodological experts.

The search strategy was adapted to meet the search functionality of different databases. Versions included a long-form strategy for bibliographic indices with full Boolean and combination search functionality, and a short-form search strategy for institutional websites and repositories with more limited functionality. The principal researcher conducted the long-form searches, while research assistants were given guidance and training to conduct the short-form searches. Experts were also asked during the scoping phase to recommend documents for inclusion in the EGM and these were added to the screening process.

A full snowballing process was not implemented due to time and resource constraints. The references of key documents (including those generated by search results and recommended by experts) were checked, however, both after the expert consultation stage and again during the full-text screening stage. Those studies that met the inclusion criteria were coded and included in the EGM.

2.3 Screening and data extraction

A screening process was conducted to select those documents that met the inclusion criteria (see section 3). This was done in EPPI-Reviewer by a team of three researchers in three stages: by title, by abstract and by full text. The screening protocol used to aid screening decisions is included in the study protocol (see the ‘Reports’ section at www.unicef-irc.org/evidence-gap-map).

It was not possible to fully double-screen all documents, but the lead researchers reviewed screening decisions for a portion of documents at regular intervals for each stage of screening. This meant that 20 per cent of all documents were double-screened at the title stage, 16 per cent at the abstract stage and 38 per cent at the full-text stage. During these reviews, discrepancies were discussed before agreeing on the final screening decisions. At the end of the full-text screening, all included documents were double-screened by the principal and lead researchers, which led to a further filtering of documents before the data extraction stage.

2.4 Data extraction

Data extraction is a process of coding (or classifying) studies according to the evidence they present on interventions, outcomes and other relevant characteristics such as research type, geographic focus and target age range. A team of three researchers conducted the data extraction using a specially designed Microsoft Excel database, and all studies were double-
The data extraction from studies followed certain rules with regard to coding the effects of interventions. These rules are based on the approach to data extraction taken by 3ie for its EGMs (e.g., Rankin et al., 2015; Rankin et al., 2016). Programmes often comprise multiple interventions with effects in multiple outcome categories. Where several different interventions were grouped together in a programme, the effects of each intervention were coded separately. For example, a study may look at a programme that includes a cash transfer intervention and a financial literacy intervention, estimating the effects/impacts of both, either separately or together, on two different outcomes. In this case, the two associated outcomes were coded separately for each intervention. In some studies, only some elements of the programme or evaluation were relevant to this EGM (e.g., specific intervention or outcome types) and only these aspects were coded. It is not uncommon for there to be more than one evaluation of popular and/or large-scale programmes such as Oportunidades in Mexico and Familias en Acción in Colombia. During the data extraction process, studies focusing on the same intervention were reviewed to ensure they were not duplicate studies. In some cases, articles were excluded because they covered previous impact evaluations from a different angle, but presented no new evidence. In cases where studies/articles on a given intervention were included more than once, it was because they examined an alternative aspect of that intervention, evaluated impacts on varied outcomes, or focused on different target populations.

2.5 Quality appraisal

Systematic reviews that met the inclusion criteria were quality appraised using the 3ie checklist for judging how much confidence to place in a systematic review of effects (see Snílstveit et al., 2013, pp. 27–32). The checklist assesses the methods used to identify, include and critically appraise studies as well as the methods used to analyse findings. An overall assessment of reliability is then made, and the review is given a high, medium or low confidence rating. The EGM includes only those systematic reviews in which there was high or medium confidence in the findings. The 3ie checklist is included in full in the study protocol.

2.6 Limitations

The broad thematic scope of the EGM led to several challenges. Some of the included topics have considerable crossover with related but excluded topics such as health,
education and employment generation. The screening entailed a systematic process for identifying studies that explicitly met the inclusion criteria, but some studies may have been inadvertently excluded at the title and abstract levels.

Only impact evaluations that use a counterfactual design to examine the impacts of interventions, and systematic reviews that synthesize empirical evidence from studies using experimental or quasi-experimental designs were included in the EGM (see section 3.4 for further detail on the types of study considered for inclusion). This was in keeping with the 3ie approach to EGMs, and this EGM is intended to be comparable and compatible with its EGM. This does not mean that the evidence from other types of evaluation is not valuable, and a list of these has been kept for future reference and analysis. Ultimately, this approach may have resulted in the exclusion of some important bodies of evidence, for example, qualitative evaluations that use observational designs.

In some cases, studies were not explicit about the research design and methodology used, and further quantitative research experience within the research team may have been beneficial during the screening phase.

Time and resource constraints precluded some steps that may have helped to identify further studies. Firstly, full double-screening by independent researchers was not possible. A portion of documents was double-screened at each stage of screening, and all studies included for coding following the full-text screening stage were fully double-screened. Secondly, a full snowballing process was not conducted during the screening phase. The references of key studies and literature that referred to evaluative research but which were neither impact evaluation nor systematic review were checked, however. This included studies suggested by experts. Thirdly, the initial intention was to search in 27 online database sources, representing a mixture of citation and journal indices, research and evaluation repositories, resource centres and other search engines. After testing, however, three databases were omitted due to time and resource constraints. This was either because the search strategy could not be adequately applied or the searches returned inordinately high and unmanageable quantities of results, which lacked sufficient focus. For some of the omitted databases, it also proved difficult to transfer the necessary bibliographic data into the reference manager software used to collate the search results, and doing so would have added an excessive amount of time to the search process.

Finally, the searches were conducted only in English, although studies written in English, French or Spanish were considered for inclusion. The research team included French and Spanish speakers, who were involved in the screening process, and Google Translate was
used as a backup resource. Databases containing French and Spanish documents, including the Scientific Electronic Library Online (SciELO) and African Journals Online, were consulted. By not conducting searches in other languages, however, some evidence may have been missed, and this may explain why so few studies relating to francophone West and Central Africa were surfaced.

3. The scope of the EGM

3.1 Population (the types of participant targeted by interventions)

UNICEF and the World Health Organization define an ‘adolescent’ as a person aged between 10 and 19 years, and this was the definition adopted in this EGM (Reavley & Sawyer, 2017, p. 1). Studies were included where at least half of an intervention’s target age range fell within the age range of 10 to 19 years. For example, interventions targeting young people aged 10 to 24 years were included, but those targeting young people aged 16 to 24 years were excluded. Studies that provided only an average age of the target sample were also included, as long as this sample fell within the age range of 10 to 19 years. Studies that did not specify the age range of participants were excluded.

3.2 Geography (locations of the interventions)

The EGM focuses on interventions in LMICs (including upper-middle-income countries) as defined by the World Bank. Systematic reviews with a global focus were excluded if their focus was predominantly on high-income countries. Those containing information on high-, middle- and low-income countries, where the findings were clearly disaggregated by region or country, were included.

3.3 Thematic scope (the topics and themes covered by the EGM)

The thematic scope of the EGM broadly corresponds with the UNICEF thematic domains of protection, participation and aspects of livelihoods. Some important exclusions were made, however, to ensure both minimal duplication with other recent EGMs on adolescent well-being and a manageable scope. While developing the EGM framework, it was felt necessary to add to it an ‘enabling environment’ domain, to capture external and contextual outcomes that might affect the well-being of adolescents.

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4 See Data: World Bank country and lending groups (World Bank, n.d.), retrieved from https://datahelpdesk.worldbank.org/knowledgebase/articles/906519
3.3.1 Included thematic domains

**Protection** refers to adolescents feeling a stable sense of physical safety and security, and having access to legal support. Personal identity and bodily integrity are key aspects of the protection domain, along with the ability to have fulfilling and supportive relationships and to feel protected in their families, among their peers, in their schools, and in their social and virtual environments.

**Participation** refers to adolescents being socially, politically and civically active. This includes the ability for adolescents to participate and voice their needs/demands, and to assert accountability for rights vis-à-vis decision makers at home, within their communities, at the level of local governance and beyond. It also includes the ability to organize in a safe and supportive environment among peers, and to develop and exercise leadership skills.

**Financial and material well-being** includes aspects of the livelihoods domain, but with some important exclusions. This EGM focuses on those aspects of livelihoods relating to the capability of adolescents to secure, to have and to use assets. Aspects of livelihoods relating to transferable skills and employment generation were excluded (see section 3.3.2) as they are already covered in existing EGMs. Consequently, this EGM includes outcomes relating to actual changes in adolescent income, but omits outcomes related to participation in income-generating activities.

**Enabling environment** is an additional domain to reflect external and contextual factors that might affect adolescent well-being such as: social and legal norms; the capacity of adolescent-related services and facilities; and the accessibility, availability and affordability of such services.

3.3.2 Excluded topics

**Health** relates to adolescents attaining their highest physical health and mental well-being. Studies that focused only on physical health-related issues were excluded. Such studies covered topics including: physical ailments and the prevention and treatment of bodily and physical health conditions; the prevention and treatment of sexually transmitted infections (STIs) including HIV/AIDS; early/adolescent pregnancy; interventions during and after pregnancy directed towards reproductive health; and interventions solely focused on alleviating mental health conditions such as depression. Although attitudes towards

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5 See Youth and transferable skills: An evidence gap map (Rankin et al., 2015), retrieved from http://www.3ieimpact.org/media/filer_public/2016/07/05/egm2-youth_and_transferable_skills.pdf. It should be noted that this EGM focuses on 'youth' rather than 'adolescence', and covers an age range of 13 to 24 years. It was felt that there was enough of a crossover with the age range of the present EGM, however, as it was presumed that much of the evidence would be from the same or similar bodies of evidence.
substance abuse are considered part of the protection domain, actual outcomes relating to alcohol and/or drugs consumption are excluded, as other EGMs cover these core health-related concerns.⁶

**Education**-related studies were excluded if they focused only on formal school-based interventions leading to purely academic outcomes such as educational achievement, school enrolment, gender parity in educational attainment, and youth employment. Interventions taking place in the school setting were included if they were shown to have an impact in the thematic domains covered by this EGM.⁷

**Transferable skills and employment generation** are aspects of the livelihoods domain. Interventions providing youth with the tools to gain and succeed in employment and in sustainable and non-exploitative/productive work were excluded, as these are included in another EGM.⁸

### 3.4 Study types

The EGM includes studies that are explicitly impact evaluations or systematic reviews.

For the purposes of this EGM, an impact evaluation is a study that explicitly measures the impact of an intervention or programme using a credible counterfactual. The following impact evaluation designs and methodologies were considered for inclusion:

- experimental designs – i.e., randomized controlled trial (RCT)
- quasi-experimental designs including one or more of the following methods or analysis techniques:
  - regression discontinuity design (RDD)
  - propensity score matching (PSM) or other matching methods
  - instrumental variables (IV) estimation or other methods using instrumental variables such as Heckman sample selection models
  - difference-in-differences (DID)

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⁸ See *Youth and transferable skills: An evidence gap map* (Rankin et al., 2015), retrieved from [http://www.3ieimpact.org/media/filer_public/2016/07/05/egm2-youth_and_transferable_skills.pdf](http://www.3ieimpact.org/media/filer_public/2016/07/05/egm2-youth_and_transferable_skills.pdf)
mixed methods studies that used one of the above methodologies as part of the overall approach.

A systematic review is a high-level overview of primary research related to a research question, which tries to identify, select, synthesize and appraise all high quality research evidence relevant to that question. Systematic reviews that synthesize empirical experimental or quasi-experimental evidence to evaluate interventions were considered for inclusion. The EGM included only those systematic reviews in which there was high or medium confidence in the findings following quality appraisal (see section 2.5 for further information on the quality appraisal process).

3.5 Framework of interventions and outcomes

EGMs are based upon a framework of interventions and outcomes. This section provides further detail on the categorization of interventions and outcomes developed for this EGM.

Key intervention and outcome types were identified during a rapid review of the literature on adolescent well-being. These were then refined and organized in line with feedback from expert consultations and a design workshop held with UNICEF Innocenti personnel. The intervention and outcome categories were developed with UNICEF strategic priorities in mind, and are intended to be familiar and accessible to both UNICEF personnel and external policymakers and practitioners. A decision was thus made to organize the intervention categories into a hierarchical structure, reflecting the level at which they are implemented (see section 3.5.1 for details of this hierarchy). The outcomes were structured according to the UNICEF priority outcome domains for adolescent health and well-being, and guided by its Adolescent Country Tracker (see Appendix B) and the theoretical framework on the social and structural determinants of adolescent well-being (see Appendix C) that underpins the UNICEF research programme. As such, the approach to structuring the outcomes was different to that taken by some other EGMs, including those published by 3ie, which instead organizes different outcomes along the causal chain (e.g., Rankin et al., 2015; Rankin et al., 2016). Nevertheless, the present EGM framework reflects some level of causality or change logic, for example, through the inclusion of outcome categories such as ‘attitudes, knowledge and skills’ as well as behavioural outcomes. The study protocol includes full definitions of all of the intervention and outcome categories.

3.5.1 Interventions

The interventions were organized into a hierarchical structure, based upon the level at which they are implemented, with various individual categories at each level (see Table 1). The
individual and interpersonal level includes interventions targeted at individuals and at the household level. The group and community level includes interventions targeted towards schools, clubs, cooperatives or community groups, but which have adolescent well-being outcomes. Interventions at the policy and institutional level include programmes and policies designed to have an influence on the macro environment and policy contexts for adolescents.

**Table 1. Hierarchy of interventions**

<table>
<thead>
<tr>
<th><strong>Individual and interpersonal level</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial support (to individuals and households, including cash transfers, loans and grants)</td>
<td></td>
</tr>
<tr>
<td>Material/in-kind support (to individuals, including non-financial support such as food vouchers, educational materials and employment vouchers)</td>
<td></td>
</tr>
<tr>
<td>Psychosocial support (including counselling and therapy, cognitive behavioural therapy and anger management sessions)</td>
<td></td>
</tr>
<tr>
<td>Socio-emotional and life skills sessions (interventions supporting soft skills, and social and emotional skills)</td>
<td></td>
</tr>
<tr>
<td>Second-chance education and literacy</td>
<td></td>
</tr>
<tr>
<td>Auxiliary services (e.g., childcare services, agricultural extension programmes, and veterinary services)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Group and community level</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Group financial support (cash transfers, loans and grants)</td>
<td></td>
</tr>
<tr>
<td>Group material/in-kind support (all non-personal and group support, for example, in schools and clubs)</td>
<td></td>
</tr>
<tr>
<td>Financial literacy and savings schemes (including training/education on savings and the formation of saving groups)</td>
<td></td>
</tr>
<tr>
<td>Norm change interventions (to raise awareness about adolescent well-being among religious leaders, parents, men and boys, and other gatekeepers)</td>
<td></td>
</tr>
<tr>
<td>Support groups (e.g., for teenage mothers, victims of violence)</td>
<td></td>
</tr>
<tr>
<td>Advocacy and campaigns</td>
<td></td>
</tr>
<tr>
<td>Empowerment and engagement (to teach skills and help adolescents to participate in decision-making that affects their lives)</td>
<td></td>
</tr>
<tr>
<td>Safe spaces</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Policy and institutional level</strong></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Human rights and access to justice (e.g., reforms to make laws and policies responsive to adolescent needs)</td>
<td></td>
</tr>
<tr>
<td>Capacity building (the reform of government agencies such as the police or justice system, including the training of government functionaries and front-line workers to</td>
<td></td>
</tr>
</tbody>
</table>
deliver adolescent-friendly services and act according to accepted human rights norms

Prevention and response services for violence

3.5.2 Outcomes

The outcomes are categorized according to the thematic domains of protection, participation, financial and material well-being, and enabling environment (see Table 2).

Table 2. Outcome categories

<table>
<thead>
<tr>
<th>Protection-related attitudes, knowledge and skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Knowledge and attitudes towards accessing and using protective mechanisms (such as courts, police stations, and local women’s and adolescents’ groups)</td>
</tr>
<tr>
<td>• Knowledge and attitude change towards harmful practices, including female genital mutilation/cutting (FGM/C), sexual violence and abuse, intimate partner violence (IPV), child marriage, drug abuse and antisocial behaviour</td>
</tr>
<tr>
<td>• Resilience, problem-solving, confidence and the ability to respond to victimization</td>
</tr>
<tr>
<td>• Sense of belonging, including the perceived extent of isolation, and the sense of adequate social support systems</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Free and safe movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Safe spaces and shelter (including the presence of safe spaces for adolescents to congregate)</td>
</tr>
<tr>
<td>• Ability to move freely and safely</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Connection to family, peers and community</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Connectedness to family, peers and community (e.g., the presence of social support systems, the extent of isolation)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Violence</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Sexual violence and abuse, including IPV</td>
</tr>
<tr>
<td>• Physical violence, abuse and punishment; detention; emotional violence; bullying and harassment; homicide</td>
</tr>
<tr>
<td>• Corporal punishment</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child marriage, harmful practices</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Child marriage</td>
</tr>
<tr>
<td>• Harmful practices such as FGM/C, dowry system, son bias and other forms of gender- and age-based discrimination</td>
</tr>
</tbody>
</table>
- Suicide and self-harm rates

**Child labour, exploitation**
- Adolescent involvement in hazardous, unpaid and illegal labour and crimes such as drug trafficking, smuggling and robbery
- Child labour, slavery and bonded labour
- Trafficking

**Participation**

**Participation-related attitudes, knowledge and skills**
- Confidence; social, cognitive, non-cognitive and emotional skills such as the confidence to speak in public and express one’s opinion without fear; self-confidence and self-efficacy
- Demonstrable pro-social behaviour and skills related to social interaction

**Access, decision-making agency**
- Access to family and community resources
- Decision-making in the household, in school and in local governance
- Engagement of adolescents in advocacy and awareness groups (youth clubs, unions, advocacy and self-help groups, and violence monitoring groups)
- Involvement in developmental programming (including in the delivery of programmes)
- Interpersonal communication, increased social networks and social interactions, and increased participation in community activities

**Information and communication technology (ICT)**
- Access to and benefit from ICT

**Financial and material well-being**

**Financial literacy**
- Financial literacy, which includes the attitudes, knowledge and skills required to manage money, save and make suitable investment decisions

**Income generation**
- Wages and income (explicit outcomes related to changes in adolescent wages and income, but not participation in income-generating activities or household-level income)
Savings, assets
- Actual ability of adolescents (not households) to save (e.g., open a bank account) and to have savings (e.g., the ability to open a bank account and deposit savings)

Enabling environment

Social norms, attitudes towards adolescents
- Changes in gender attitudes, behaviours and norms (including perceptions of masculinity and femininity, and perceptions of women’s and girls’ roles)
- Involvement of gatekeepers (including men and boys), family and community in enabling adolescents, including by changing discriminatory norms and practices
- Extent of respect from and appreciation by family and community members

Legal norms
- Adolescents’ rights to inclusion and participation are protected by law
- Application of legislation in line with international norms and standards

Service capacity
- Capacity of front-line workers (governmental and non-governmental) to deliver adolescent-friendly services

Access to services
- Access to and affordability and availability of facilities relevant to adolescents (play and recreational activities, libraries, meeting halls, counselling centres, information centres)
- Access to and availability of preventative and protective services for adolescents, including adolescent protection systems, counselling services, and security and justice services

3.5.3 Cross-cutting themes
As well as interventions and outcomes, we included several cross-cutting themes in our framework (see Table 3). When extracting data from the included studies, we looked for evidence of these key policy, programming and analytical concerns, which cut across the adolescent well-being thematic domains.

Table 3. Cross-cutting themes
<table>
<thead>
<tr>
<th><strong>Cross-sectoral effects</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>When interventions have an impact in two or more outcome domains. For example, a cash transfer intervention might have impacts on child labour (protection domain) AND savings and assets (financial and material well-being domain).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Subjective well-being</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence of the impact of interventions on subjective well-being measures such as ‘happiness’, ‘life satisfaction’ and ‘aspirations for the future’.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Preventative interventions</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>When the study explicitly indicates that interventions are preventative in nature.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Long-term impacts</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Where there is evidence for generational impacts, for longer-term impacts on social norms and practices, and on reducing household poverty.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Gender</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>When the study includes coverage of gender-related issues – as they relate to both adolescent girls and boys, and the relationships between them – or where the effects of interventions are disaggregated by gender.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Cost-effectiveness</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>When the study includes an explicit cost-effectiveness or cost-benefit analysis for interventions.</td>
</tr>
</tbody>
</table>
4. Search results

The evidence mapping process and search results are presented below (see Figure 1). The systematic searches resulted in 7,181 results, which were screened together with 76 studies recommended by experts. Following the screening process, 71 impact evaluations and 8 systematic reviews were deemed to meet the inclusion criteria. Five of these systematic reviews were subsequently excluded following a quality appraisal, due to their low confidence rating. The references section of this report contains details for all of the included studies and also the five excluded systematic reviews.

Figure 1. Search results

![Flowchart showing the search process](#)

The thematic scope of this EGM allows for considerable crossover into related but excluded topics such as health, education and employment generation. As a result, the screening process entailed a detailed unpacking of the evidence to assess which studies explicitly met the inclusion criteria. The overwhelming majority of studies excluded at the title stage related
to physical health, and had a focus on sexual health and behaviours; prevention and treatment of STIs including HIV/AIDS; child and maternal health; biomedical trials; or the prevention of other diseases. This suggests that that the potential evidence base for adolescent health outcomes is much broader than the evidence base for adolescent protection, participation, and financial and material well-being outcomes.

Many other studies were excluded at the title or abstract stage because they did not evaluate interventions, but instead assessed the effects of other pre-existing social phenomena. Most studies excluded at the full-text stage did not meet the age range criteria. It was often difficult to determine the precise age range covered by an intervention without reading the full text. In some cases, studies were vague about the precise age range targeted, even if they explicitly mentioned that the intervention targeted children, adolescents or youth. Many studies excluded at the abstract or full-text stage also did not meet the methodological inclusion criteria (see section 3.4). Though many of these were quasi-experimental studies, they used methods or analysis techniques other than those permitted by the inclusion criteria, or were vague about the precise methodology used.
5. Features of the evidence base

This section presents the features of the impact evaluations and systematic reviews included in the EGM. It firstly describes for impact evaluations the findings in relation to various characteristics of studies and interventions, including the research design, geographic focus, age range covered and gender focus. The features of the systematic reviews are discussed separately at the end of this section.

5.1 Features of the impact evaluations

5.1.1 Research design

Figure 2. Number of impact evaluations by research method/analysis

Data on the number of impact evaluations by research method/analysis is shown above (see Figure 2). The categories are not mutually exclusive, as some studies used more than one method of analysis. Forty-five studies are RCTs, including cluster RCTs. Twelve of these also used other methods – including DID estimators, PSM and IV techniques – to analyse the effect of experimental interventions. Twenty-six studies used DID as part of the analysis, and eight of these combined DID with PSM or other matching techniques. Studies were coded as ‘other’ if they used another methodology in addition to one of those already included on the list (see section 3.4). These were primarily experimental or quasi-experimental studies with qualitative or thematic analysis. In such cases, the counterfactual
design was accompanied by qualitative data from focus group discussions, semi-structured interviews and/or key informant interviews.

5.1.2 Document type
The EGM contains slightly more peer-reviewed journal articles (38 studies) than grey literature publications (33 studies). Grey literature studies are published by a range of organizations, including international non-governmental organizations such as Building Resources Across Communities (BRAC) and the International Center for Research on Women (ICRW); think tanks and academic institutions such as the Overseas Development Institute (ODI); and international development agencies such as UNICEF, the World Bank and the United States Agency for International Development (USAID).

5.1.3 Geographic focus and document language

Figure 3. Number of impact evaluations by regional location

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9 The UNICEF classification for regions and countries has been followed. For more information, see UNICEF data: Monitoring the situation of children and women. Regional classifications (UNICEF, n.d.), retrieved from https://data.unicef.org/regionalclassifications/
Figures 3 and 4 show the regional and country location of the evaluated interventions included in the EGM. Eastern and Southern Africa is the most studied region (28 studies). Countries in this region covered by the EGM include Uganda, which has the largest number of impact evaluations, and South Africa and Kenya also feature multiple times. Seventeen studies evaluate interventions in Latin America and the Caribbean, with Mexico featuring prominently. Fourteen studies evaluate interventions in South Asia, with Bangladesh, India and Pakistan appearing relatively frequently in the evidence base.

The evidence is clustered around certain countries and interventions. Only 31 countries appear in total in the EGM, and multiple studies focus on the same programmes. These programmes include the: Suubi-Maka savings-led economic empowerment intervention (Uganda); Cash Transfer for Orphans and Vulnerable Children (Kenya); Progresa/Oportunidades conditional cash transfer programme (Mexico); Familias en Acción conditional cash transfer programme (Colombia); Zomba Cash Transfer Programme (Malawi); and the Ishraq Program, which focuses on empowering adolescent girls (Egypt).

The overwhelming majority of studies were published in English (68 out of 71 impact evaluations). Only 2 of the 17 studies that focus on Latin America and the Caribbean are written in Spanish (these evaluate interventions in Mexico and Peru). There is just one French language impact evaluation (focusing on Mexico). Only two impact evaluations focus
on West and Central African countries (Burundi and Burkina Faso) and these are written in English.

5.1.4 Age range
Conducting research with adolescents involves a number of methodological challenges, including those posed by: social desirability bias (adolescents are sensitive to social standing); reliance on parents (data on younger adolescents are often based on parental/guardian reports and may be unreliable); representative sampling (marginalized groups are often under-represented); appropriateness of measures (measures developed for adults or children are often inappropriate for adolescents); and the need for sensitive methodologies when working with marginalized, vulnerable and/or disadvantaged adolescents (for details see Auerswald, Piatt & Mirzazadeh, 2017; Azzopardi, Kennedy & Patton, 2017; Reavley & Sawyer, 2017). How adolescents are defined across different studies poses another challenge for the comparison and generalization of results. Although UNICEF and the World Health Organization define an adolescent as a person aged between 10 and 19 years, data are not always disaggregated in this way, making it difficult to isolate adolescent outcomes from those of children under 10 or young adults. Furthermore, an expansion of adolescent years (e.g., because of earlier onset of puberty and later entry into the workforce or marriage) has resulted in greater differences between younger and older adolescents and, in many instances, findings for one age segment of the adolescent population do not apply to others (Reavley & Sawyer, 2017). To strengthen the evidence base, consistency in the definitions of adolescence in studies and data collection efforts is necessary, as is disaggregation by age – including within the different segments of the adolescent period.
Various target age groups were covered by the impact evaluations in the EGM (see Figure 5). ‘More than one of these categories may apply to a single study – for example, an impact evaluation assessing the outcomes of an intervention on participants aged 6 to 18 years would be coded against ‘children under 10’, ‘early adolescence’, ‘middle adolescence’ and ‘late adolescence’. Among the included studies, middle adolescence (13–15 years) is the age group most frequently targeted by interventions, followed by late adolescence (16–19 years) and then early adolescence (10–12 years). The predominance of the adolescence age groups over the non-adolescence age groups reflects the focus of the EGM and the search strategy design.

One objective of recording the target age range for each study was to get a sense of how adolescents are defined in the literature, and the extent to which interventions and/or impact evaluations group adolescents together with other age groups. Taking account of all of the included studies, the minimum age targeted by an intervention is 4 years and the maximum 29 years. The majority of studies (47 studies) focus on an age range that contains middle to late adolescence, while a slightly smaller number (45 studies) focus on early to middle adolescence. There are 30 studies that cover all adolescent age groups from early to late adolescence (10–19 years). Only 17 of these studies contain any reference to ‘adolescence’ or ‘adolescents’, however, with the target population of interventions also variously referred to as ‘children’, ‘youth’ and ‘teenagers’.

There are 19 impact evaluations that include children under 10 years of age. These do so as part of a broad target age range, which extends into middle adolescence in all 19 cases, and in 15 cases also extends into late adolescence. Impact evaluations covering this broad age
range mostly assess the effect of financial support, such as cash transfers, on child labour outcomes. In these studies, the target population is most often defined as ‘children’, even where the age range extends into late adolescence, and often without any mention of the term ‘adolescent’ or ‘adolescence’. In two cases where the target age range extends from children under 10 to young people over 20, the target population is referred to as ‘children and youth’.

There are 14 impact evaluations that include youth over 20. Interventions targeting this age group usually also target middle and late adolescence, and most often target females only. Studies covering this age group most frequently evaluate the impacts of: i) financial support interventions, such as cash transfers, on child marriage outcomes; and ii) life skills interventions on protection-related attitudes outcomes (such as attitudes towards sexual violence and GBV), women’s participation and agency, child marriage, and social norms around gender roles. In cases where the target age range extends from middle adolescence to youth over 20, the participants are referred to variously as ‘adolescent girls’, ‘youth’, ‘young women/men’ and ‘women’.

5.1.5 Gender focus
Impact evaluations were classified according to whether interventions focused on females, males or all genders. The vast majority of interventions (50 studies out of 71) targeted both female and male participants. Most of the 20 interventions that targeted only females focus on financial support towards delaying marriage, and on life skills interventions to change attitudes towards gender equity as part of broader participation and empowerment initiatives. The one intervention to target only males focuses on promoting attitudes towards gender equity among young men to reduce GBV (see Verma et al., 2008).
Coverage of cross-cutting themes was also examined for the impact evaluations in the EGM (see Figure 6). Cross-cutting themes are key policy, programming or analytical concerns that cut across the adolescent well-being thematic domains. The categories are not mutually exclusive, as interventions often aim to influence multiple themes.

Coverage of gender is very prominent in the EGM; gender equity or empowerment is the focus of a wide range of interventions, and many studies disaggregate the effects of interventions by gender.

The nine preventative interventions are varied in their focus and include interventions to prevent child marriage, child labour, suicide and violence (including intra-family and sexual violence). Three of the preventative interventions primarily focus on HIV or STI prevention, but also record effects on income and savings, protection-related attitudes and child marriage rates as secondary outcomes (see Chaudhury et al., 2016; Jennings, Ssewamala & Nabunya, 2016; Hallfors et al., 2011).

Only seven studies include an explicit cost-effectiveness or cost-benefit analysis. These are a mixture of studies that evaluate cash transfers, material support (e.g., vouchers or food for education schemes) and girls’/women’s empowerment programmes with life skills elements.
It was difficult to identify subjective well-being measures of ‘happiness’, ‘life satisfaction’ and ‘aspirations for the future’ in the literature. Those studies that do explicitly provide evidence or commentary on subjective well-being measures mainly evaluate socio-emotional or psychosocial interventions and their impacts on outcomes related to resiliency or pro-social skills in the context of conflict or violence.

Identifying explicit evidence on long-term impacts was also difficult. Only two studies were identified that explore long-term impacts: the first in terms of the long-term durability of psychosocial interventions in conflict zones (Constandinides, Kamens, Marshoud & Flefel, 2011); and the second focusing on the long-term impacts of child marriage prevention on future earnings and income (Bandiera et al., 2014).

5.2 Features of the systematic reviews

Eight systematic reviews were identified for inclusion in the EGM following the screening process. These were quality appraised using the 3ie checklist to determine how much confidence to place in the findings of a systematic review (see section 2.5). Three systematic reviews were judged to have a medium confidence rating and these are included in the EGM.

The first is a global review of the evidence on cash transfer interventions and their impacts in LMICs (Bastagli et al., 2016). Falling within the financial support to individuals and households intervention category, it synthesizes the findings of 165 studies covering 56 different programmes, which mainly comprise conditional cash transfers, but also include unconditional cash transfers, social pensions and enterprise grants. The key outcomes of interest to this EGM are child labour and child marriage, although the review also evaluates the effects on education, health and nutrition, and employment. The interventions of interest to this EGM cover an age range of 6 to 17 years. More than 50 per cent of the interventions are in Latin America, 38 per cent are in sub-Saharan Africa, and the remaining interventions are from other regions. In assessing the effects of interventions, the review only considers experimental and quasi-experimental designs, and uses a combination of vote counting and descriptive analysis to analyse effect sizes.

Second is a systematic review of interventions for preventing adolescent IPV (de Koker, Mathews, Zuch, Bastien & Mason-Jones, 2014). It synthesizes the findings from eight studies that collectively report on six RCTs. Only one RCT was conducted in an LMIC, for the Stepping Stones programme in South Africa. The review disaggregates the findings of the Stepping Stones evaluation from the other RCTs, all of which were conducted in the United States of America and Canada. Stepping Stones is categorized as a life skills
intervention, which includes an element of norm change and community sensitization, and the key outcome studied is violence. The intervention consisted of single-sex, school-based workshops on sex and love, GBV and communication skills, and the participant sample averaged 18 years of age. The evaluation measures physical or sexual IPV perpetration after 12 and 24 months, and shows a reduction at the 24-month follow-up point.

Third is a systematic review of interventions to prevent child marriage among young people in LMICs (Kalamar, Lee-Rife & Hindin, 2016). It collates evidence from 11 studies that evaluate interventions in Colombia, Mexico, Zimbabwe, India, Ethiopia, Malawi, Bangladesh and Kenya. The interventions are varied and include financial support in the form of cash transfers, material/in-kind support through school vouchers, school-based life skills programmes, and the provision of local clubs and support groups. The ages covered by the review range from 9 to 24 years. The authors assessed the quality of all studies as part of the screening process for the review; those included use designs that involve randomization and pre-/post-test comparisons. Descriptive analysis is used to assess the effects of interventions.

It is difficult to draw trends from just three systematic reviews, but an interesting finding is that all of the reviews use some form of descriptive analysis to assess the effects of interventions. The heterogeneity of the populations, interventions and outcomes measures covered in the studies meant that meta-analysis could not be performed in any of these reviews.

Commonalities can also be seen in the reasons why none of these reviews attained a high confidence rating. In most cases, these reasons relate to: ambiguity around methodological issues such as the presence of language bias in searches; the publication periods covered; whether two or more independent researchers undertook the screening or data extraction; and the quality appraisal process used to assess studies. Therefore, rather than there being a limitation inherent in the design of these systematic reviews, it was their lack of methodological transparency that lowered their overall quality rating.
6. EGM analysis

This section provides an analysis of the EGM, and comments on the areas where the evidence is relatively abundant, where it is scarce and where the key evidence gaps appear. It presents the overarching areas of evidence abundance before describing the key evidence clusters, as represented by larger bodies of evidence for certain intervention–outcome combinations. It also describes the overall areas of evidence scarcity before presenting the key evidence gaps in the map, as represented by a lack of evidence in intervention–outcome combinations.

The evidence is generally more abundant in expected areas and in combination with those intervention types that are prevalent within adolescent programming and which appear more frequently in the EGM. Such types include financial support to individuals and households, and social-emotional learning and life skills interventions. These interventions focus on the individual level rather than on addressing structural barriers at the policy and institutional level. This reflects an emphasis within the evidence base on the tangible needs of adolescents over the contextual and underlying drivers of adolescent well-being.

6.1 Overview of the EGM

The EGM, which is presented as a matrix, maps interventions against outcomes. Individual cells within the matrix display information on the abundance of evaluative evidence for the effects of interventions on outcomes, showing visually where evidence for programming and policy exists or where a research topic might benefit from new primary research or from further synthesis such as a systematic review. The gap map only illustrates the presence or absence of evidence. It does not provide information on what the evidence says, nor does it comment on the nature of linkages between interventions and outcomes. Indeed, the evidence may show positive, neutral or negative effects, or it may be inconclusive. Individual studies may appear in multiple cells because most of the studies explore multiple types of intervention and outcome. The interactive EGM is available online at www.unicef-irc.org/evidence-gap-map. To view a static version, see Appendix A.

6.2 Overall areas of evidence abundance

Figures 7 shows the number of studies (impact evaluations and systematic reviews) by intervention and outcome type. Evidence is most abundant at the individual and interpersonal level, and the most frequently appearing intervention in the EGM is financial support to individuals and households. The majority of these interventions are cash
transfers, and conditional cash transfers (mainly conditional on school attendance) are more common than unconditional cash transfers. The impacts of cash transfers appear most often in the protection domain and, to a lesser extent, in the financial and material well-being domain.

**Figure 7. Number of studies by intervention type**

![Figure 7: Number of studies by intervention type](image)

- **INDIVIDUAL AND INTERPERSONAL LEVEL**
  - Financial support: 35 studies
  - Material/in-kind support: 12 studies
  - Psychosocial support: 13 studies
  - Socio-emotional and lifeskills: 27 studies
  - Second-chance education and literacy: 4 studies
  - Auxiliary services: 1 study

- **GROUP AND COMMUNITY LEVEL**
  - Group financial support: 1 study
  - Group material/in-kind support: 1 study
  - Financial literacy and savings schemes: 8 studies
  - Norm change interventions: 9 studies
  - Support groups: 5 studies
  - Advocacy and campaigns: 1 study
  - Adolescent empowerment and...: 4 studies
  - Safe spaces: 8 studies

- **POLICY AND INSTITUTIONAL LEVEL**
  - Human rights and access to justice: 1 study
  - Capacity building: 0 studies
  - Prevention and response services: 0 studies
Socio-emotional learning and life skills is the second most frequently appearing intervention type. These interventions are likely to have cross-sectoral impacts in two or more of the outcome domains. Evidence is abundant on the impacts of socio-emotional learning and life skills in the protection domain and, to a lesser extent, the participation domain. Such programmes are more often delivered in school settings than in informal out-of-school spaces, and they sometimes involve a peer education element. Psychosocial support is the third most frequently appearing intervention type. The programmes evaluated consist of cognitive behavioural, cooperative play and group interpersonal therapy.
At the group and community level, financial literacy and savings schemes, and norm change interventions are the most frequently occurring intervention types. Two distinct approaches were identified in the financial literacy and savings schemes category. The first is to have a multidimensional intervention involving a group-level savings element, such as village savings associations, combined with financial training and an individual-level loans element. Such interventions are mostly aimed at women and adolescent girls, but some target households, parents or caregivers with the objective to improve child or adolescent well-being. The second approach is to offer matched savings schemes for children and adolescents themselves. The norm change interventions identified are predominantly elements of broader, multidimensional adolescent well-being or empowerment initiatives, and are also likely to have cross-sectoral impacts.

Figure 8 shows the number of studies (impact evaluations and systematic reviews) by outcome type. The evidence is most abundant for outcomes in the protection domain, and protection-related attitudes, knowledge and skills is the outcome category that appears most frequently in the EGM. There is also a relatively large number of studies containing evidence for child labour and exploitation outcomes, which is the second most frequently occurring outcome category in the EGM. This may be related to the large number of cash transfer evaluations. A similar explanation can likely account for the relative abundance of evidence on child marriage and harmful practices outcomes.

In the participation domain, the most frequently occurring outcome is participation-related knowledge, attitudes and skills, followed by access, decision-making and agency. The evidence is generally more limited in the financial and material well-being domain, and is scarce in the enabling environment domain.

Attitudes, knowledge and skills outcomes generally appear more frequently than behavioural outcomes. These are often the shorter-term upstream effects of interventions, and are assessed using self-reported measures and/or indicators related to attitudes scales.

6.3 Key evidence clusters

6.3.1 Individual and interpersonal level evidence clusters
The largest cluster of evidence in the EGM evaluates the impacts of cash transfers on child labour outcomes. Twenty-three studies (including two systematic reviews) analyse adolescent time use and how changes in child labour and domestic work rates relate to changes in school attendance as a secondary outcome. This large clustering of evidence was to be expected, given that cash transfer interventions are prevalent in adolescent
programming, especially as a means of encouraging parents to keep children in school or to increase school enrolment.

Eleven studies (including two systematic reviews) evaluate the impacts of cash transfers and educational stipends on child marriage. Programmes are mainly directed at families and households, although financial support is sometimes channelled through schools. An objective of several cash transfer interventions is to delay marriage among adolescent girls by providing support for education or other livelihood opportunities. This cluster of evidence was also expected and reflects the broader literature base on child marriage, which contends that girls who drop out of school are more likely to marry early than those who attend school (Kyomuhendo Bantebya et al., 2015; Ghimire & Samuels, 2014; Jones et al., 2014).

Some cash transfer interventions were found to have different objectives. For example, South Africa’s Child Support Grant focuses on adolescent attitudes towards drug abuse, criminal activity and gang membership (Department of Social Development, South African Social Security Agency & UNICEF, 2012). Other types of financial support include social protection and social assistance grants, school stipends and micro-credit loans. In some cases, programmes combine different types of financial support such as cash transfers or micro-credit loans with savings schemes, or with impacts on the savings and assets of adolescents (see Bundervoet, Annan & Armstrong, 2013; Erulkar & Chong, 2005; Ssewamala & Ismayilova, 2009).

The second largest cluster in the EGM, which comprises 18 studies, explores the impacts of socio-emotional learning and life skills interventions on protection-related attitudes, knowledge and skills. None of the included systematic reviews synthesize this evidence, and exploring the suitability of this evidence base for a systematic review may prove fruitful. The interventions in these studies include life skills with a gender equity/girls’ empowerment focus, with the exception of one study of an intervention targeting boys to improve attitudes towards gender roles (see Verma et al., 2008). In terms of outcomes, most look at attitudes towards harmful practices, largely focusing on child marriage and GBV. Additionally, some studies explore resilience as an outcome, using measurement scales such as the Behavioral and Emotional Rating Scale and the Fortitude Scale (see de Villiers & van den Berg, 2012).

The third largest cluster, with 12 studies, evaluates the impacts of socio-emotional learning and life skills interventions on participation-related attitudes, knowledge and skills, and 9 studies evaluate their impacts on access, decision-making and agency. This suggests that programmes with objectives to encourage adolescents’ voice and agency are prevalent,
however, this evidence has not been systematically reviewed. Most such programmes have a gender equity and empowerment focus, with outcomes related to pro-social behaviour, self-esteem and self-efficacy.

Eight studies explore the impacts of psychosocial support interventions on protection-related attitudes, knowledge and skills, while seven studies evaluate their impacts on participation-related attitudes, knowledge and skills. No systematic reviews appear in either of these intervention–outcome combinations. Many of the interventions are implemented in the context of conflict and/or political violence, and have aims relating to: HIV prevention; treatment of internalizing or externalizing behaviours such as anger, low attention, alcohol use and violence (including IPV); or pro-social behaviour and communication skills. These interventions are mostly channelled through families and schools, institutions that have been shown in the broader evidence base to be important in shaping the emotional well-being of adolescents and their social relationships with wider society (Marcus & Brodbeck, 2015; Watson & Harper, 2016).

6.3.2 Group and community level evidence clusters
At the group and community level, one of the joint largest evidence clusters, with five studies, explores the impacts of financial literacy and savings schemes interventions on savings and assets outcomes. A smaller body of evidence comprising four impact evaluations connects financial literacy and savings schemes with access, decision-making and agency. These impacts are explored through: the extent of adolescent influence on household decision-making; parent–adolescent or inter-partner dialogue; and adolescent girls’ social interactions/networks. Three studies assess the impacts of financial literacy and savings schemes on child marriage outcomes. Financial literacy interventions often accompany financial incentives (e.g., micro-credit loans) or vocational skills training, which aim to encourage adolescent girls to marry at a later age (see Amin & Suran, 2005; Buchmann et al., 2016; Bandiera et al., 2012).

The other cluster of five studies evaluates the impacts of norm change interventions on protection-related attitudes, knowledge and skills outcomes, while three studies explore their impacts on social norms. These interventions often occur as part of programmes operating at the individual and community levels, in combination with life skills sessions and the provision of safe spaces to adolescents, with norm change education directed towards families and communities. The individual-level attitudes of adolescents and the norms among families and communities that are covered within the studies primarily relate to gender roles and to harmful practices such as IPV. The effects of norm change interventions on violence are relatively well covered. Four impact evaluations assess the effects on
different aspects of violence such as child discipline (Bundervoet et al., 2013), GBV (Brady et al., 2007; Verma et al., 2008) and teacher-to-student violence (Devries et al., 2015), while one systematic review synthesizes the evidence on norm change interventions to prevent IPV (de Koker et al., 2014).

6.4 Overall areas of evidence scarcity

Overall, interventions focus on the individual level, rather than on addressing structural barriers at the policy and institutional level. This reflects an emphasis within the evidence base on the tangible needs of adolescents over the contextual and underlying drivers of adolescent well-being. Thus there are evidence gaps at the policy and institutional level for interventions, and in the enabling environment outcome domain.

At the policy and institutional level, only one intervention was identified in the human rights and access to justice category. This was child employment legislation enacted in Pakistan to regulate the participation of children in labour markets (Fasih, 2007). The paucity of evidence could suggest difficulties in assessing the effects of policy-level initiatives using experimental or quasi-experimental designs; several impact evaluations commenting on social policy were excluded during the screening process because they did not use an accepted research design. It may also indicate that individual-level interventions are more tangible and discrete, and thus more likely candidates for evaluation. Furthermore, because programming and implementation is part of the policy cycle, localized interventions are often the product of national-level policy decisions. For example, studies in the EGM that evaluate the Oportunidades cash transfer intervention in Mexico are essentially assessing the local- and/or regional-level manifestations of a national-level anti-poverty programme.

In the enabling environment domain, while some evidence exists on the impacts of individual financial support on social norms outcomes, there is limited coverage of legal norms and access to services outcomes, and no evidence at all on service capacity outcomes. Arguably, this could be linked to the fact that neither were any capacity building interventions identified, and this is perhaps a surprising finding given the ubiquity of institutional capacity building in international development programming. It may be the case that the impact evaluation literature focusing on adolescent well-being is distinct from the literature focusing on institutional capacity building interventions, even for those institutions that are important to the delivery of adolescent well-being initiatives. Interventions in the EGM appear to be sectoral, focusing on specific issues such as child marriage or child labour, and operating at the individual and interpersonal level rather than tackling institutional and structural issues.
The searches for this EGM emphasized adolescent-specific interventions and outcomes, and this may also explain the scarcity of evidence in this domain.

No studies considered the impacts of interventions on the use of and access to ICT by adolescents. This implies that adolescent well-being interventions do not consider the use of ICT a key outcome, or that evaluation of the use of ICT and the subsequent downstream effects is insufficient. This is despite the fact that, in the broader evidence base, adolescents are considered early adopters of technologies such as computers, mobile phones and social media (Balsa, Gandelman & Porzecanski, 2010). Similarly, literature reviews contend that the use of ICT can have both positive and negative impacts on inequality and child development (Fallahi, 2011; Kleine, Hollow & Poveda, 2014).

Coverage of gender is very prominent in the EGM and most interventions target both female and male participants. Only one intervention specifically targets males to promote attitudes towards gender equity (see Verma et al., 2008), while another intervention that works towards preventing sexual assault has separate strands and activities for females and males (see Baiocchi et al., 2016).

6.5 Key evidence gaps

6.5.1 Individual and interpersonal level evidence gaps

The evidence suggests that second-chance education and literacy interventions can have impacts on protection-related attitudes, knowledge and skills by affecting attitudes towards harmful practices (see Brady et al., 2007; Echavez, Babajanian, Hagen-Zanker, Akter & Bagaporo, 2014; Sieverding & Elbadawy, 2016). There are notable gaps in the financial and material well-being domain, however. This suggests that downstream impacts from second-chance education on outcomes such as income generation and savings and assets are not being considered or evaluated.

The lack of evidence for the impacts of financial support to individuals and households on any of the financial and material well-being outcomes is interesting. Thematically, one would expect a relationship between cash transfer interventions and livelihoods outcomes, but there appears to be more evidence for their impacts in the protection domain. This is possibly a function of the scope of this EGM and the inclusion criteria. Financial and material well-being outcomes such as changes in income or assets were usually measured at the household level in studies rather than at the level of individual adolescents. Furthermore, in many cases, the outcomes measured from cash transfers related to employment generation,
school enrolment or staying in education and so were excluded from this EGM as they were out of scope.

There is a lack of evidence on material/in-kind support to individuals in combination with all of the outcome categories. This appears to be noteworthy and reflects the frequency with which evidence on cash transfers appears in comparison to evidence on material support such as school vouchers, and food and material for education schemes.

Auxiliary services were identified in the literature during the scoping phase for the EGM as supporting life skills and financial support interventions, and providing a channel for these interventions to affect income generation. One study evaluates the impacts on time use of a production safety net programme that includes financial and material support and agricultural extension programme components (see Woldehanna, 2009). Further evidence is lacking in all other outcome categories, most notably in the financial and material well-being domain.

Within the child marriage and harmful practices category, the evidence for child marriage outcomes far outweighs the evidence on other aspects of this category such as FGM/C, and only one study specifically evaluates suicide outcomes (see Abil et al., 2016).

Within the violence category, more evidence exists on sexual violence and GBV than on the other violence types such as physical abuse and punishment, and IPV. There is no coverage of homicide outcomes.

6.5.2 Group and community level evidence gaps

At the group and community level, evidence on the impacts of advocacy and campaigns interventions in the protection, participation and enabling environment domains is scarce. One study in the EGM evaluates the impacts of school poster campaigns on parent–student violence (see Devries et al., 2015). However, there is a general lack of evidence on how advocacy and campaigns interventions affect social norms. This is an anomaly, given that the broader literature base emphasizes the role of communications strategies in the empowerment of adolescents and in changing harmful social norms (e.g., Kyomuhendo Bantebya et al., 2015; Marcus & Page, 2014; Watson & Harper, 2016).

The evidence for group financial and material support is limited across all domains. This reflects the trend among interventions to target individuals and households rather than groups and institutions. The lack of comparative evidence means that it is difficult to conclude why individual transfers are preferred over group transfers, however.
Evidence is scarce for the effect of financial literacy and savings schemes on participation-related attitudes, knowledge and skills, and on financial literacy outcomes. Indeed, there is more evidence on the impacts of this intervention on actual savings and assets, meaning that studies emphasize behavioural outcomes over attitudes and skills outcomes.

There is some evidence that norm change interventions affect violence rates. But there is limited evidence on the impacts of norm change interventions on other protection outcomes such as connection to family, peers and community; free and safe movement; and child marriage and harmful practices. Adolescent mobility is recognized in the broader literature base as an important issue in emergency and non-emergency situations (e.g., Kyomuhendo Bantebya et al., 2015; Calder, Ghimire, Shrestha & Suwal, 2017; Temin, Montgomery, Engebretsen & Barker, 2013). A programmatic focus on adolescent mobility is largely lacking in the EGM, however, apart from in two programmes that combine norm changes and safe spaces elements (see Ara & Das, 2010; Sieverding & Elbadawy, 2016).
7. Conclusions and recommendations

A strong and continued focus on adolescents is necessary to sustain the progress made in health and well-being during early childhood and to facilitate momentum towards achieving the Sustainable Development Goals (SDGs). Research plays an important role in guiding policies and programmes to achieve the best possible outcomes for adolescents and the recent surge in EGMs that summarize interventions targeting adolescents is a welcome contribution to evidence-informed decision-making in this area. Recent EGMs that summarize evaluated interventions targeting adolescents have focused on adolescent sexual and reproductive health,10 employment generation and transferable skills,11 education12 and young people’s agency in advocacy for development.13 The present EGM set out to complement these efforts and build a more holistic picture of adolescent well-being interventions and outcomes by focusing on the domains not captured in previous work – namely protection, participation, and financial and material well-being.

This EGM identifies thematic areas with evidence abundance, scarcity or gaps in knowledge to inform programming and policy, and future avenues for research. The recommendations set out below stem from the analysis of the EGM and consider the demand for evidence expressed by experts consulted during the scoping stage. As is the case for other EGMs, it presents information on ‘what exists’ and some of the trends and features of the summarized evidence base, but does not answer the question of ‘what works’. Further synthesis and analysis of specific interventions and outcomes is necessary to examine which interventions work for whom, under what circumstances.

7.1 Research and policy development implications

Before considering the key conclusions and recommendations, several research and policy development implications emerging from the analysis presented in this report are outlined:

- **Lack of evidence at the policy and institutional level**: An overall finding is that interventions in the EGM tend towards addressing the tangible needs of adolescents

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10 See Adolescent sexual and reproductive health: An evidence gap map (Rankin et al., 2016), retrieved from [http://www.3ieimpact.org/media/filer_public/2016/12/29/egm5-asrh.pdf](http://www.3ieimpact.org/media/filer_public/2016/12/29/egm5-asrh.pdf). See also the World Health Organization EGM of social, behavioural and community engagement interventions for reproductive, maternal, newborn, child and adolescent health. This was under construction at the time of writing this report, but further information is available at: [http://www.who.int/pmnch/media/news/2016/evidence_gap/en/](http://www.who.int/pmnch/media/news/2016/evidence_gap/en/)

11 See Youth and transferable skills: An evidence gap map (Rankin et al., 2015), retrieved from [http://www.3ieimpact.org/media/filer_public/2016/07/05/egm2-youth_and_transferable_skills.pdf](http://www.3ieimpact.org/media/filer_public/2016/07/05/egm2-youth_and_transferable_skills.pdf)


at the individual level. Further consideration is required of how interventions can be implemented at the policy and institutional level, and of how these interventions can effect change at the macro level to address the structural barriers to adolescent well-being. Research on social policy targeted towards adolescents is largely descriptive and does not evaluate the impacts of policy-level interventions. Notwithstanding the difficulties of measurement, the presence of one study in the EGM indicates that evaluation of discrete policy-level interventions is possible (see Fasih, 2007).

- **Greater focus on boys and men needed:** Given the powerful role men and boys play in the empowerment of girls, the scarcity of evaluated interventions targeting adolescent boys represents a vital gap in programming and research. The area is a fruitful one for primary research, which should pay attention to programmes that specifically target boys. Clearer analysis of the gendered effects of programmes that target both girls and boys would also be beneficial.

- **Expand the geographic scope of evidence generated:** The evidence base is clustered in a limited number of countries and around a limited number of programmes. It seems sensible to consider how the evidence base can be broadened to cover interventions in countries not covered in the EGM, and for regions with limited coverage. This would include West and Central Africa, particularly francophone countries where studies written in or translated into French may help to influence policy. Other regions with limited coverage include the Middle East and North Africa, East Asia and the Pacific, and Europe and Central Asia.

- **Improved conceptualization and comparability of adolescent well-being terminology required:** Only three systematic reviews were included in the EGM following screening and quality appraisal. From assessing the systematic reviews, however, it is clear that there is a lack of uniformity and comparability among the variables, scales and indicators used to measure adolescent well-being across interventions. This means that current systematic reviews largely rely on descriptive analysis to assess the effects of adolescent well-being interventions. That is not to say that statistical synthesis methods are more valid than descriptive ones, but that homogeneity in populations, definitions, variables and indicators may allow for greater comparability across interventions and more diversity in synthesis methods. UNICEF is currently working on the development of National Adolescent Assessment Cards with the aim of providing a common platform to track progress in adolescent well-being, which may help to address this issue in the long term.

- **Greater clarity around, and increased use of, the terms ‘adolescence’ and ‘adolescent’:** The definitions of ‘adolescence’ and ‘adolescent’ are contested in
policy and academic spheres. This EGM uses the UNICEF and World Health Organization definition of an adolescent – that is, a person aged between 10 and 19 years. Many studies that evaluate interventions targeting this age range (either in whole or in part) do not describe their target populations as adolescents at all, posing a challenge to the identification, comparison and generalizability of research on adolescents. Furthermore, the rapid social, emotional, cognitive and physical changes that take place during adolescence mean that certain outcomes for early, middle and late adolescence can differ substantially, making disaggregation by age within the adolescent period vital to a more detailed understanding of adolescents’ situation. Uniform definition of adolescents in research and disaggregation are necessary to improve the comparability of evidence from different interventions and contexts.

- **More explicit emphasis required on documenting and assessing the cost of interventions to aid programming:** Furthermore, few impact evaluations include an explicit cost-effectiveness analysis for interventions. Thus there is little understanding of the relative costs and outcomes of different interventions. Further consideration of how cost-effectiveness analysis can be built into interventions and evaluations is recommended.

- **Greater transparency and clarity needed in research design and analysis methods:** Impact evaluations that were vague about their research design or analysis methods could not be included in the EGM. Furthermore, some systematic reviews were unclear about certain aspects of the methodology used, and greater methodological transparency may have improved their confidence rating as determined by the quality appraisal process undertaken for this EGM.14

Finally, when considering the recommendations presented below, it is important to keep in mind that life skills, financial literacy, financial support, norm change and safe spaces interventions often appear together in different combinations as part of broader, multidimensional empowerment programmes. The effects of individual components cannot be easily isolated in the evaluative literature.

**7.2 Topics suitable for research synthesis**

Consultations with experts during the scoping phase revealed a strong demand for more rigorous evidence in the protection and participation domains. In the protection domain, this demand was expressed in the areas of physical and sexual violence. In the participation

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14 A caveat is that systematic reviews presented in academic journal articles have limited space in which to describe their methodology. This was considered in the quality appraisal.
domain, the demand for information centred on civic engagement, and on the types of socio-emotional and cognitive development needed for meaningful participation.

The EGM suggests that evidence exists in the protection domain and, to a lesser extent, in the participation domain. There are several potential entry points for research synthesis and for strengthening the evidence base for these domains and in the areas where there is a demand for evidence:

- **More evidence synthesis needed on the impacts of socio-emotional learning and life skills in the protection and participation domains.** In the protection domain, research synthesis could focus on the effects of socio-emotional learning and life skills sessions on protection-related attitudes, knowledge and skills. Research synthesis here could expand upon existing systematic reviews that evaluate the impacts of life skills interventions on child marriage and violence. In the participation domain, there is potential to synthesize the evidence on the impacts of socio-emotional learning and life skills on participation-related attitudes, knowledge and skills, and on access, decision-making and agency.

- **More evidence synthesis needed on the impacts of psychosocial support on protection- and participation-related attitudes, knowledge and skills.** The evidence for psychosocial support is less abundant for the behavioural outcomes in the protection and participation domains. So any systematic review focusing on attitudinal impacts should possibly be supplemented with primary research to evaluate the impacts on outcomes such as connection to families, violence, and access, decision-making and agency.

### 7.3 Priority areas for primary research

The EGM suggests that several areas would benefit from primary research. The following recommended research areas reflect key gaps in the map as well as the demand for research expressed in expert consultations:

- **Capacity building and the enabling environment:** There is a demand for evidence on how adolescents access services, what can be done to improve access, and how the effectiveness of institutions and front-line workers can be improved to deliver adolescent-friendly services. The lack of evidence on capacity building interventions and their effect on the enabling environment for adolescent well-being, particularly in terms of increasing the capacity and accessibility of adolescent-friendly institutions, suggests that this is a priority avenue for future research.
• **Second-chance education and literacy**: Consultations indicated a strong desire for evidence on supporting adolescent livelihoods through second-chance education and literacy interventions for those who drop out of school. Further investigation is required on the impacts of second-chance education on financial and material well-being.

• **Financial literacy**: Further evaluative research is needed on the impacts of financial literacy interventions on the financial capacity of adolescents, and the extent to which changes in financial knowledge and skills affect the actual accumulation of assets and savings.

• **Social norms**: The entire area of social norms transformation was considered an evidence gap during the scoping discussions. The EGM indicates that a focus is necessary on the impacts of norm change and community sensitization interventions in the protection domain in general, and particularly on outcomes such as connection to family, peers and community; free and safe movement; and child marriage, harmful practices and self-harm. The EGM also indicates that further rigorous research is required on the impacts of advocacy and campaign interventions in the enabling environment domain, particularly on social and legal norms.

• **Prevention of violence and harmful practices**: Within these categories, research could be targeted towards interventions tackling FGM/C, suicide, physical abuse and punishment, IPV and homicide. Related to this, further investigation into the impacts of violence prevention and response interventions on the protection of adolescents would be beneficial.

• **ICT**: Further evaluative research is required on interventions that aim to improve the use of and access to ICT among adolescents. Evidence on ICT outcomes is entirely lacking in the EGM, suggesting that this area is not considered a priority, or that ICT interventions with adolescents are rarely evaluated. Given the high use of ICT by adolescents, and its potential to facilitate the delivery of programmes and knowledge to this group, this represents a major gap in research and practice.

• **Material/in-kind support to individuals and households**: The evidence for this category is far more limited than the evidence on financial support to individuals and households. Further evaluative evidence would help to make clear the comparative advantages, if any, of each approach.

• **Auxiliary services**: Evidence on the impacts of auxiliary services interventions is extremely limited. Future research could focus on evaluating these interventions where they are delivered together with life skills and financial support interventions,
and on assessing the extent to which they enhance progress towards livelihoods outcomes.

7.4 Conclusion

This EGM is a first attempt to provide a snapshot of evaluated interventions that target adolescents living in LMICs in the domains of protection, participation, and financial and material well-being. It complements other recently completed EGMs that examine different areas of adolescent well-being, including secondary education, transferable skills and youth employment, and sexual and reproductive health, to provide the research community, policymakers and international development professionals with a more complete summary of what evidence exists regarding adolescent interventions. While the EGM does not identify ‘what works’ in adolescent programming, it certainly points to fruitful areas where evidence could be synthesized to answer this question. The fact that the evidence base collated for this EGM consists of 71 impact evaluations but only 3 systematic reviews reveals that more syntheses of evidence are greatly needed to understand the effectiveness of interventions.

The EGM also identifies areas where knowledge about what works for adolescents is scarce and sometimes non-existent, and can thus be used as a tool for prioritizing future primary research. Most of the evidence is on financial support to individuals and households, particularly cash transfer interventions. Socio-emotional learning and life skills, and psychosocial support interventions also appear frequently in the EGM. At the group and community level, the evidence is more limited, but the largest bodies of evidence are on financial literacy and savings schemes, and norm change interventions.

There is a lack of focus on the enabling environment for adolescent well-being, and coverage on the use of and access to ICT by adolescents is also missing from the EGM. One notable evidence gap relates to second-chance education interventions, particularly in terms of their impacts on outcomes in the financial and material well-being domain. Evidence on the impacts of material/in-kind support interventions is limited across all outcome domains. There is also limited evidence for harmful practices outcomes other than child marriage, and for violence outcomes other than GBV.

Evaluations of interventions at the group and community level appear less frequently in the EGM than for those at the individual and household level. Evidence is particularly scarce for the impacts of advocacy and campaigns interventions on adolescent protection and participation, and for group financial and material support interventions across all of the outcome domains. The absence of evidence for adolescent interventions at the policy and
institutional level is particularly concerning given the demand in many LMICs for the development of adolescent-responsive policies and systems. Strategic documents written by UNICEF and other organizations emphasize the importance of cross-sectoral programming in responding more holistically and effectively to adolescent needs. The EGM identified several intervention types with impacts on outcomes across the three examined domains, including socio-emotional learning and life skills, financial literacy and savings schemes, and financial support interventions. A closer analysis of how well these interventions work across the different domains is an important step towards strengthening cross-sectoral collaboration.

As the “torchbearers” of the SDGs, adolescents must actively engage in decisions affecting their lives. Yet outside of socio-emotional and life skills sessions, only a relatively low number of interventions in the EGM examined access, decision-making and agency (United Nations, 2014, p. 3). This needs to change dramatically for young people truly to be the “architects of their own future” (UNICEF, 2017, p. 2) and if the emphasis placed on the importance of engaging adolescents to help achieve the SDGs is more than a gesture.
References

External references cited in this report


**Studies included in the EGM (impact evaluations and systematic reviews)**


**Excluded systematic reviews**


Appendix A: Evidence Gap Map on Adolescents in Low- and Middle-income Countries: Protection, participation, and financial and material well-being
# Appendix B: UNICEF Adolescent Country Tracker (2016 draft)

## Adolescent Country Tracker (ACT)

### 5x5 PLUS 5

<table>
<thead>
<tr>
<th>Health and Wellbeing</th>
<th>Education and Learning</th>
<th>Protection</th>
<th>Transition to Work</th>
<th>Participation and Engagement</th>
<th>PLUS 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>All cause mortality rate</td>
<td>Proficiency in reading and mathematics*</td>
<td>Child marriage (by 15 and 18)*</td>
<td>Child labour*</td>
<td>Indicators in this domain are under development</td>
<td>Adolescent population</td>
</tr>
<tr>
<td>Suicide mortality rate*</td>
<td>Youth literacy rate*</td>
<td>Homicide mortality rate*</td>
<td>Time spent on unpaid household services*</td>
<td></td>
<td>Adolescents living below the international poverty line*</td>
</tr>
<tr>
<td>Adolescent birth rate*</td>
<td>Completion rate for primary education</td>
<td>Intimate partner violence*</td>
<td>Information and communication technology (ICT) skills*</td>
<td>Use of improved drinking water source and sanitation facility*</td>
<td></td>
</tr>
<tr>
<td>Prevalence of undernutrition and overnutrition</td>
<td>Completion rate for lower and upper secondary education</td>
<td>Violent discipline*</td>
<td>Adolescents not in education, employment or training*</td>
<td>Gini (inequality) index</td>
<td></td>
</tr>
<tr>
<td>Alcohol consumption</td>
<td>Out-of-school rate</td>
<td>Experience of bullying</td>
<td>Unemployment rate*</td>
<td>Social institutions and gender index</td>
<td></td>
</tr>
</tbody>
</table>

* SDG indicator

**Country Specific Indicators**

*Draft for ACT Pilot*
Appendix C: Social and structural determinants of adolescent well-being – Theoretical framework for UNICEF research programme