



Methodologies to Capture the Multidimensional Effects of Economic Strengthening Interventions

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Produced by the UNICEF Office of Research, this series of briefs on research methods is intended to share contemporary research practice, methods, designs, and recommendations from renowned researchers and evaluators. The primary audience are professionals, including UNICEF staff, who conduct, commission or interpret research and evaluation findings in development contexts to make decisions about programming, policy and advocacy.

This brief is one of seven on research methodologies designed to expand and improve the conduct and interpretation of research on adolescent health and well-being in low- and middle-income countries (LMICs). Building on the recent [Lancet Commission on Adolescent Health and Wellbeing](#), these briefs provide an overview of the methodological quality of research on adolescents. They cover topics including: indicators and data sources; research ethics; research with disadvantaged, vulnerable and/or marginalized populations; participatory research; measuring enabling and protective systems for adolescent health; and economic strengthening interventions for improving adolescent well-being.

The briefs are written by leading experts in adolescent health and well-being. To read other briefs in this series, visit <https://www.unicef-irc.org/adolescent-research-methods/>

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INTRODUCTION

Adolescence is an intense period of development characterized by rapid physical, social and emotional maturation, during which new health and social behaviours are adopted, often influenced by intersecting socio-environmental and economic determinants.

Poverty has been deemed a driver of adolescent risk behaviours such as: transactional and age disparate sex; drug and alcohol use; and violent behaviour. Financial insecurity has been linked to poor mental health outcomes, less frequent adherence to anti-retroviral medication, and vulnerability to exploitative or hazardous labour. The financial incentives of early marriage often compel parents to marry their daughters young, with over 15 million girls per year married before the age of 18,¹ truncating education and exposing young girls to health risks including early pregnancy, vulnerability to sexually transmitted diseases, and higher likelihood of infant and maternal mortality. These potential outcomes of financial insecurity, which are often mutually reinforcing, demonstrate that globally, the economic status of households can and does affect the health and well-being of adolescents.

¹ United Nations Children's Fund, Ending Child Marriage: Progress and prospects, UNICEF, New York, 2014.

To address the intersection between economic deprivations and broader development goals, including health and well-being, governments, aid agencies and non-governmental organizations (NGOs) have begun to include economic strengthening interventions as part of their core programming. Designed to reduce the economic vulnerability of individuals and households, such interventions have contributed to positive outcomes for adolescents in diverse geographic contexts.

This brief presents strategies for examining the multidimensional effects of economic strengthening interventions with a specific focus on the health and well-being of adolescent beneficiaries aged 10–19, highlighting both research gaps and opportunities. Examples of adolescent-specific economic strengthening research and evaluation initiatives are featured throughout the document, drawn from a range of LMICs, and varying from government-supported social protection programmes to smaller-scale donor-funded initiatives.

Box 1. Summary of key points

1. Economic strengthening interventions are designed to reduce the economic vulnerability of individuals and households, holding promise to improve health and well-being outcomes for adolescents.
2. Economic strengthening interventions are recommended to be implemented as part of an integrated package of service delivery.
3. Individual strategies for measuring the effectiveness of economic strengthening interventions are not sufficient. Methods that use both economic and non-economic indicators are required to understand the wider short and long-term impacts of economic strengthening programming.
4. Methodological tools designed specifically to examine and understand the effect of economic strengthening on adolescents, are rare. Until such population-specific tools are developed, researchers and evaluators should adapt and combine existing data collection tools and outcome indicators to examine the multidimensional effects of economic strengthening on adolescent populations.

BACKGROUND

Economic strengthening programmes may be delivered as stand-alone interventions or, increasingly, as components of multi-sectoral initiatives. They can be designed for implementation in either development or emergency contexts and can be targeted directly at adolescents or at an entire household. Economic strengthening interventions targeting adolescents range from those designed to serve people who are economically active, through workforce development, entrepreneurship support and micro-credit, to initiatives such as micro-savings or in-kind asset transfers that are relevant for wider target groups. Micro-savings interventions may include group-based youth village savings and loan associations, or individualized child development accounts. For policy-makers and practitioners seeking to reach the most vulnerable, household-targeted social safety nets, such as micro insurance or cash transfer schemes that are either unconditional or have behaviour-specific conditionality, such as school attendance or participation in a public health initiative, are also common. Box 2 lists common economic strengthening interventions. Interventions with direct cash transfers or credit components are typically aimed at individuals aged 18 or older, with the intention of benefitting all members of the household.

Box 2. Common economic strengthening interventions

Cash and asset transfers – money or productive assets (such as livestock) provided to individuals, households, or community groups by government or non-government agencies. May be used for emergency relief or longer-term social protection. Cash or assets may be transferred conditionally (based on school attendance or health clinic visits) or unconditionally.

Entrepreneurship support – assistance for the design, launch or expansion of a business. May include training, mentorship, business plan development or seed funding.

Micro-credit – lending of small amounts of money at low interest to business endeavours in low-resource settings.

Micro-insurance – protection of low-income earners against economic shocks (such as health or weather) in exchange for regular premium payments

Micro-savings – small deposit accounts tailored towards low-income individuals and families. Include village savings and loans, individual development accounts and child development accounts. May or may not be incentivized through matched deposits.

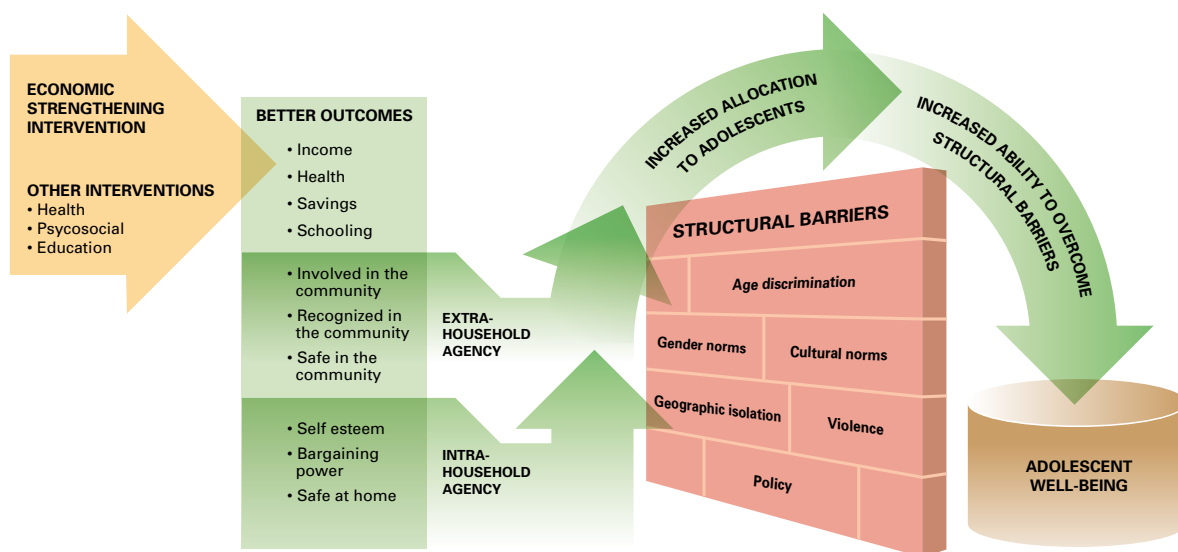
Workforce development – training to help adolescents find and secure employment. May include technical and vocational education and training, apprenticeships and/or readiness skills such as CV writing or interview techniques.

CAUSAL PATHWAYS

A comprehensive description and illustration of how change will occur, including a causal pathway diagram, often referred to by practitioners as a theory of change, improves research and evaluation initiatives. By clearly defining the interconnected elements of programme success, practitioners are able to identify relevant indicators to be measured while evaluators are able to analyse outcome data to determine whether the assumptions guiding the theory of change were accurate, enabling data-informed and policy-relevant recommendations to be made.

Figure 1 shows how economic strengthening interventions may improve adolescent health and well-being. This causal pathway diagram suggests that economic strengthening interventions, in tandem with other development initiatives, result in a host of outcomes that positively influence an adolescent’s agency, which in turn increase the ability to overcome structural barriers and achieve improved health and well-being, both within and outside the home.

Figure 1. Theory of change economic strengthening interventions and adolescent well-being



Source: Adapted from Chaffin, *The Impacts of Economic Strengthening Programs on Children*. *

* Chaffin, Josh, *The Impacts of Economic Strengthening Programs on Children: A review of the evidence*, Mailman School of Public Health, Columbia University and Women’s Refugee Commission, 2011, <www.cpcnetwork.org/wp-content/uploads/2014/04/CPC-Economic-Strengthening-Evidence-Review.pdf> (accessed 21 December 2016).

As Figure 1 illustrates, economic strengthening interventions, ideally situated as part of an integrated package of service delivery, have the potential to influence multiple domains of health and well-being. Therefore, while economic indicators such as savings rates, deposit frequency, loan repayment rates, asset ownership, changes in monthly income, and consumption patterns are all useful mechanisms for identifying the short-term economic outcomes of an economic strengthening programme, numerous non-economic indicators can and should be used to identify the broader health and well-being outcomes associated with economic strengthening interventions. This brief highlights methodological challenges, opportunities and innovations associated with measuring both economic and non-economic outcomes for adolescents.

MEASURING EFFECTS OF ECONOMIC STRENGTHENING – STRENGTHS AND CHALLENGES

Economic strengthening interventions as a component of integrated service delivery

Unlike certain types of programmes that may be extremely effective in isolation, such as vaccine provision and nutrition counselling, the effects of economic strengthening on health and well-being are thought to be maximized when carried out as part of a multisectoral approach. This is because greater economic security can promote a variety of positive behaviours, demonstrating multiple and interconnected benefits, each leveraging the other. Indeed, integrated programming models have gained renewed popularity as a theme within the Sustainable Development Goals, and are positioned for broader development impacts within communities yet pose challenges in terms of outcome measurement. At present, practitioners tend to combine sector-specific indicators for a multidimensional assessment of effectiveness. Together with the disaggregation of data by sex and age, this is a reasonable starting point for conducting research within an integrated platform of service delivery and obtaining information on the effects of such programmes on adolescents. However, greater efforts are needed to examine the synergies between programme components and the cost-effectiveness of bundled services in comparison with individual intervention approaches.

To do so, designs that employ comparison structures must be incorporated into integrated models from the outset (see methodological briefs 'Randomized Controlled Trials'² and 'Quasi-experimental Design and Methods'³). Methods that show causality and attribution of treatment effects can be combined with cost-effectiveness analysis to better understand the benefits of the integrated model and determine if it is more or less effective in achieving desired health and well-being outcomes for adolescents than early intervention with a singular economic strengthening programme component.

Study design

Where feasible and appropriate, randomized controlled trials (RCTs) counter selection bias, offer more accurate depictions of causality, and should be thoughtfully considered for inclusion within economic strengthening research or evaluation frameworks. Having the key feature of random assignment, RCTs can often operate within the phased roll-out of programmes to obtain treatment groups and control groups naturally (see Box 7: Case study on Kenya's Orphan and Vulnerable Children Cash Transfer Programme). The work of the Population Council offers an example of an RCT which seeks to understand the effects of economic strengthening interventions on adolescents within the frame of an integrated service delivery platform. The Adolescent Girls Initiative-Kenya (AGI-K) is evaluating various nested combinations of single sector interventions (violence prevention, education, health and wealth creation) in early adolescence to assess if and how various combinations improve multisectoral outcomes for girls after four years. While the gold standard for identifying attribution of treatment effects and often the preferred design for policy advocacy, RCTs are not without challenges. Cost of implementation, attrition rates – especially for those being implemented over an extended period of time, ethical concerns regarding a control group's access to service – and the need to maintain strict fidelity to intervention protocols in contexts where flexibility is often required can all be hindrances to employing an RCT design.

2 White, Howard, Sabarwal, Shagun, and de Hoop, Thomas, 'Randomized Controlled Trials (RCTs)', Methodological Briefs Impact Evaluation No. 7, UNICEF, <<https://www.unicef-irc.org/publications/752/>> (accessed 21 December 2016).

3 White, Howard, and Sabarwal, Shagun, 'Quasi-experimental Design and Methods', Methodological Briefs Impact Evaluation No. 8, UNICEF, <<https://www.unicef-irc.org/publications/753/>> (accessed 21 December 2016).

When RCTs are not feasible or appropriate yet researchers wish to control the implementation of the evaluation, quasi-experimental design (see methodological brief 'Quasi-experimental Design and Methods⁴) is a viable solution for examining treatment effects of economic strengthening interventions. Carried out in a similar manner to experimental studies, quasi-experimental designs use non-randomly assigned comparison groups. Techniques, such as propensity-score matching, can be used to mimic the structure of an RCT by obtaining a comparison group with shared observable characteristics. Such techniques have been used with data from Mexico and Colombia to examine the long-term effects of conditional cash transfers on older adolescents who were exposed to the intervention as school-aged children.⁵ In such designs, unobserved factors continue to be a risk to selection bias.

Qualitative design must also be given due credence in the study of economic strengthening interventions and their effects as they provide insight on the perceptions of adolescents, including the social and economic environment in which they live and the rationale behind certain health behaviours. Such data are critical to give context to the quantitative studies that often take precedence in programme design and policy development. An emerging mixed method to study economic strengthening interventions is the use of financial diaries, which

incorporate significant qualitative components. Covering issues ranging from assets and debts, income and expenditure, financial goals and attitudes about money, financial diaries offer an innovative mechanism for researchers to obtain comprehensive data from adolescents and their families on the economic effects of economic strengthening programming. In Mali and Ecuador, Freedom from Hunger, in partnership with the MasterCard Foundation, implemented the project Advancing Integrated Microfinance for Youth – AIM Youth, which served predominately adolescents aged 13–19, and employed financial diaries to best gain understanding as to how savings and expenditures fluctuated over the course of the intervention. Similarly, the Mexico Financial Diaries project, funded by the Bill & Melinda Gates Foundation and the World Bank, tracked cash flows of 185 families over the course of 11 months, finding that formal credit schemes were mismatched with the unpredictable and irregular incomes of families. Such information adds great value to the design of future economic strengthening interventions. Table 1 lists the benefits and limitations of various research designs used to evaluate economic strengthening interventions.

Regardless of which study design is selected to examine the effects of economic strengthening on adolescent health and well-being, there are

Table 1. Benefits and limitations of research designs for evaluating economic strengthening interventions

Study design	Benefits	Limitations
Randomized controlled trial	Can address causality	Cannot interpret the effect of contextual factors or understand why a treatment is or is not effective
Quasi-experimental	Can provide insight regarding causality	Cannot fully avoid selection bias, control for confounding variables or interpret the effect of contextual factors
Qualitative	Can offer rich contextual information to explain quantitative findings or identify areas for further study	Cannot attribute causality or quantitatively determine the effect of an intervention
<u>Cross-sectional</u>	Can examine prevalence and provides <u>retrospective analysis</u> to determine associations between variables	Cannot attribute causality, control for confounding variables or interpret the effect of contextual factors

⁴ Ibid.

⁵ Molina-Millan, T. et al., *Long-Term Impacts of Conditional Cash Transfers in Latin America: Review of the evidence*, Inter-American Development Bank, 2016.

important factors to consider depending on the age demographic. For instance, will data be collected at the adolescent level, the household level, or both? What recall periods are most useful for the age of adolescent you wish to study? Will attrition be a concern in your study and if so, how do you intend to address it? How might the time of year affect the data collection process broadly, and the economic indicators, more specifically?

Implementation science

Another approach to researching the effectiveness of economic strengthening programming is through the emerging field of implementation science where operational processes are often examined to better understand why an evidence-based practice has or has not been successful in a given context. Drawn from disciplines such as organizational behaviour and corporate research, implementation science emphasizes non-linear pathways and user feedback to improve programme delivery in complex settings. Specific approaches include the assessment of systems interactions through the use of driver diagrams, process mapping, root cause analysis or hourly profiles of staff time usage to diagnose pitfalls in implementation. Realist evaluations are gaining popularity as a mechanism for understanding 'What works? For whom? In what respects? To what extent? In which contexts? and How?' Going beyond a linear notion of cause and effect, realist evaluations embrace the nuanced contextual landscapes in which development programming occurs and seek to understand various system dynamics to explain project outcomes. The implementation science approach is useful in all contexts but may be particularly of interest to those looking to evaluate economic strengthening interventions in emergency settings where security concerns, migration and the need to deliver aid interventions quickly mandate flexible and adaptive approaches.

One example of an implementation science approach to evaluating the effects of economic strengthening on adolescents is the US Agency for International Development (USAID)-funded 'Applying Science to Strengthen and Improve Systems (ASSIST) Project'. This is an umbrella platform under which multiple initiatives have been undertaken to improve health and social systems in USAID-assisted countries. ASSIST has worked directly with service providers in Uganda and Malawi to identify inefficiencies in programme

operations that impact desired health and well-being outcomes for orphans and vulnerable children, and are using participatory approaches to identify implementation modifications to address these service challenges. Primarily situated within the health sector, implementation science has not yet been fully taken up by other disciplines but is gaining exposure. It may be of interest to evaluators seeking to understand not only the effects of economic strengthening on adolescent health and well-being but also to examine the questions of 'How?' and 'Why?'

Indicator development

As well as considering study design, discussions around the type of indicators to include when measuring the effectiveness of an economic strengthening intervention are needed. In collaboration with partners, UNICEF is developing a set of key indicators to monitor adolescent development and well-being, which are organized across the domains of: health and well-being; education and learning; protection; transition to work; and participation and engagement. Once field tested and finalized, the list of indicators will be disseminated (for more information, see Brief 2 in this series, 'Data and Indicators to Measure Adolescent Development and Well-being'). This comprehensive list of indicators, which aims to capture data specific on adolescent health and well-being will be an asset to researchers and practitioners who seek to understand the wider impacts of economic strengthening on this population. In the interim, a list of common child-specific outcome measures used in economic strengthening research has been compiled based on a systematic review of RCTs evaluating NGO implemented programming.⁶ Box 3 shows sample areas of inquiry from which researchers can draw when designing studies seeking to understand the multidimensional effects of economic strengthening programming on adolescents. One consideration when measuring change among this demographic is how to incorporate indicators that 'grow' with adolescents as they age during the course of an intervention, to ensure that the effects captured are as relevant at age 17 as they were at age 12.

⁶ Chaffin, J., and Ellis, C. M., *Outcomes for Children from Household Economic Strengthening Interventions: A research synthesis*, Child Protection in Crisis Learning Network and Women's Refugee Commission for Save the Children UK, 2015.

Box 3. Sample areas of inquiry to capture multidimensional effects of economic strengthening interventions on adolescents

School enrollment	School performance	School completion	Labour force participation
Health clinic visits	Nutrition	Food security	Psychological health
Height and weight	Illness and disease	Physical health	Gender-based violence
Early marriage	Sexual risk taking	Reproductive health	Household spending on children

In addition to the areas listed in Box 3, several outcome measures should be taken into consideration as they are useful for understanding the effects of economic strengthening interventions on adolescents, although not yet commonly used in economic strengthening research. These are:

Time use

Time-use indicators would help identify how much time adolescents are spending in school, carrying out unpaid household chores, working in hazardous labour situations, or on extracurricular activities such as playing sports or being with friends; all of which have potential impacts on health and well-being.

Intra-household decision-making

Dynamics within a household may be influenced by economic strengthening programming. Questions may seek to understand whether male or female adults have greater (or equal) power in decision-making on household resource allocation and how this affects adolescent health and well-being. Similarly, inquiries into the power of adolescents themselves to influence decisions that affect their health or well-being, are also of interest.

Exposure to violence, exploitation or abuse

Very limited research exists on the effect of economic strengthening interventions on adolescent experiences or perpetration of violence, exploitation or abuse – whether in the household, the school setting or the community. Inclusion of indicators will help uncover whether linkages with economic strengthening interventions exist, for example, through changes in exposure to unsafe environments, decreased needs to engage in sexual relationships with unequal power dynamics, or reduction in poverty-related stress.

Migration

Adolescents living in low-resource settings increasingly undertake independent migration from rural to urban locations for labour opportunities. Seasonal migration of parents seeking income is also typical in such contexts. These migratory patterns often separate adolescents from their families, placing this age group at risk of exploitation and negatively affecting their health and well-being. Similarly, forced migration due to conflict or disaster can influence the health of adolescents with or without family care. Indicators that provide meaningful data on migratory experiences will add value to the knowledge base on economic strengthening programming, helping to understand if economic strengthening can reduce independent child migration, if it has a protective effect for those adolescents who have already migrated, and if or how migration may impact the effectiveness of economic strengthening interventions.

Social support

Strong relational bonds, both within and beyond the household, have been shown to have associations with positive psychological outcomes including improved adjustment and resilience, and reduced depression and risk taking behaviours. In certain contexts, research has found that perceived social support increases following economic strengthening interventions that emphasize household-based financial education or savings. Practitioners seeking to understand the synergies between an economic strengthening intervention and social support may wish to include indicators such as an increase in the number of people on whom an adolescent can rely in a time of crisis or an increase in the amount of perceived emotional support they receive from household members.

Civic participation

Individual and collective actions carried out to address issues of public concern are of growing interest in adolescent research for their potential to reduce risk taking behaviours and enhance violence prevention efforts. Indicators on civic participation regarding economic strengthening initiatives are currently understudied; such indicators would add value to economic strengthening research.

Social inclusion

In many contexts, financial insecurity is often correlated with social exclusion based on demographics such as gender, ethnicity, caste or religion. Examining the extent to which economic strengthening programmes are able to reduce stigma and improve social inclusion would benefit dialogues around how to enhance labour market success for traditionally marginalized adolescents and how such changes affect their health and well-being. Sample indicators may include an increase in perceived satisfaction with opportunities to participate in community leisure activities, an increase in the number of times per month friends or neighbours visit the home, or perceived satisfaction with opportunities to meet new people.

Gender norms

Changing gender norms and perceptions is often an overarching goal of economic strengthening interventions that serve adolescent girls, but one where measurement has historically lacked standardization among practitioners. The 'Compendium of Gender Scales', a product of C-Change, FHI360 and USAID⁷, is an online collection of tools to assess gender-related attitudes and beliefs designed for easy accessibility by health and development practitioners, and can be referenced when selecting a validated scale to measure various aspects of gender norms and relations.

When incorporating indicators into research and evaluation frameworks, it is critical to ensure that they are well defined and operationalized, using standardized and internationally recognized definitions wherever feasible and appropriate. For instance, the International Labour Organization (ILO) has specific

frameworks and questionnaires for categorizing labour force participation by children under 18 years of age, while Demographic and Health Surveys (DHS) Domestic Violence Module offers pre-existing survey items that can be drawn from when surveying certain adolescent populations. The challenge facing researchers and evaluators is that many of these standardized survey tools are lengthy, so incorporating them into multidimensional assessments, as designed, would be prohibitive. There is a need for specialized organizations to develop simplified, validated 'mini-tools' that can be incorporated into economic strengthening research and evaluation frameworks to gain a better understanding of the holistic effects of financial security for adolescents and their households.

Lean Research

When seeking to strengthen scientific rigour and to include multisectoral indicators of economic strengthening programme effectiveness, there is a tendency to increase the size and scope of surveys. Yet if carried out inefficiently, expanding research activities can become burdensome on the respondent and reduce data quality. The Lean Research approach, coined by the Massachusetts Institute of Technology D-Lab in partnership with the Fletcher School and Feinstein International Center at Tufts University, has adopted the principles of 'rigour', 'relevance', 'right-size' and 'respect'. It seeks to address this challenge by minimizing the burden for participants while generating value for all stakeholders involved and obtaining the most useful data to improve implementation or advocate for policy change. The recently released Lean Research Framework offers a series of questions researchers and evaluators can ask themselves before designing a study.⁸

7 C-Change, FHI360 and USAID, 'Compendium of Gender Scales', 2011, <<https://www.c-changeprogram.org/content/gender-scales-compendium/>> (accessed 21 December 2016).

8 Feinstein International Center, *The Fletcher School at Tufts University, and MIT D-LAB, The Lean Research Framework: Principles for Human-Centered Field Research*, 2015, <<https://drive.google.com/file/d/0B36nNXj12OvSMmJhZHRpOHZBMmM/view>> (accessed 21 December 2016).

Box 4. Example of using Lean Research principles

Using Lean Research principles, the programme Technology Enabled Girl Ambassadors (TEGA), part of the Girl Effect initiative funded by UK Aid, trained older adolescent girls in Northern Nigeria to collect data from their female peers using a mobile platform. Girls were trained on interview techniques and tasked with collecting data from a small group of peers within their geographic area, after which they uploaded those data to a secure centralized platform.

The programme not only provides employable skills to adolescent girls, but also has the ability to obtain more authentic responses through the peer-to-peer data collection method than might be attained by adults. In an external evaluation of the process, adolescent respondents were found to be more relaxed and confident with peer interviewers and more willing to self-report potentially stigmatized behaviour than when interviewed by adults, demonstrated by the reporting of substance use with peer but not adult interviewers.

TEGA's mobile platform has also streamlined data processing and analysis, enabling staff to translate and analyse data within 15 minutes of upload, reducing the time to deliver a report from taking up to six months to six weeks. TEGA has committed to disseminating findings in both written and film formats to increase accessibility and ensure relevance for the community. The enhanced local ownership of the research with direct adolescent involvement resulted in communities in Northern Nigeria galvanized to address the needs highlighted in the research. TEGA will be launched in Indonesia, India, Rwanda and Ethiopia in 2017.

As one engages with the Lean Research Framework, it is important to acknowledge that it provides a set of guiding questions and practices rather than a prescriptive methodology. Practitioners and evaluators will need to adapt and operationalize the framework to fit the unique setting in which their economic strengthening research is being carried out.

Collecting data on sensitive topics

Soliciting accurate information from both adolescents and their caregivers can be difficult. Collecting data on economic indicators, such as changes in income, is a challenge - not only because households in low-resource settings tend to engage in a portfolio of work

that can be difficult to track, but also because many respondents consider the information sensitive and may be unwilling to share data for fear that benefits may be rescinded or that they may otherwise be targeted as a consequence of their enhanced financial situation. Data on other sensitive topics such as sexual behaviour, exposure to violence or mental health can also be difficult to obtain among adults and even more so among adolescents, often because of social desirability bias or perceived stigma. Yet data collection on these topics is important as emerging evidence suggests that economic strengthening may be a factor in reducing various forms of violence, though more specific studies identifying these links are needed. It is necessary to include indicators within economic strengthening research and evaluation frameworks to strengthen the evidence base, such as those that measure experiences of intimate partner violence or violence against children.

The Transfer Project is an example of a project seeking to obtain sensitive data to better understand the multidimensional effects of an economic strengthening intervention.⁹ It involves collaboration between the Food and Agriculture Organization of the United Nations, Save the Children, UNICEF and the University of North Carolina. The Transfer Project is currently examining the effects of over a dozen government-run cash transfer programmes throughout sub-Saharan Africa, combining direct and indirect methodologies to obtain data on experiences of violence, from women and adolescents. Direct methodologies use straightforward questioning methods with enumerators trained to carry out interviews in a private and sensitive environment. Despite enumerator skill, fear of stigma may still exist, fostering response bias and a potential to under-report violence. Alternatively, indirect inquiries on sensitive topics often ask respondents if children 'like them' have experienced various forms of violence, with enumerators moving back and forth between sensitive and non-sensitive topics. While indirect questioning has the potential to reduce response bias and the training costs associated with direct questioning, there are concerns about whether such tools measure the prevalence of violence accurately. Aiming to address

9 The Transfer Project, *Measurement of Interpersonal Violence in National Social Cash Transfer Evaluations*, 2016, <<https://transfer.cpc.unc.edu/wp-content/uploads/2015/09/Measurement-of-interpersonal-violence-in-national-social-cash-transfer-evaluations.pdf>> (accessed 21 December 2016).

both of these concerns, the audio computer-assisted self-administered interview (ACASI) gives respondents the greatest level of privacy while reducing enumerator burden. As the technology uses verbal prompts for self-administration, it can be used even among low-literacy populations. See Box 5.

Box 5. The audio computer-assisted self-interview

The Population Council tested ACASI versus traditional face-to-face interview methods in Kenya and Malawi and found there was:

- Higher reporting in face-to-face interviews on 'ever had sex' or 'ever had sex with a boyfriend'
- Higher reporting with ACASI for more stigmatized behaviours (sex with a stranger, teacher, family member or employer)
- Greater consistency with ACASI in reporting sexual activity during follow-up one week later with a health professional.

* Mensch, B., and Hewett, P., 'Obtaining More Accurate and Reliable Information from Adolescents Regarding STI/HIV Risk Behaviors', Population Council, New York, 2007, <www.popcouncil.org/uploads/pdfs/TABriefs/PGY_Brief25_RiskBehaviors.pdf> (accessed 21 December 2016).

Studies have shown that methods matter when interviewing adolescents on sensitive topics. Differential response rates on sexual history and substance use based on whether the respondents were interviewed in person (with additional divergence of reporting based on the sex of the interviewer) or using self-administered technology was found among adolescents in the Dominican Republic.¹⁰ Further study in Malawi found that face-to-face interview techniques which were longer, sought reciprocal exchange, and facilitated trust, were more likely to yield truthful responses about sexual history than shorter interview methods that were strictly quantitative.¹¹

Psychosocial outcomes are another sensitive topic that is often overlooked when seeking to understand the multidimensional benefits of economic strengthening programming. Yet recent studies have demonstrated that economic strengthening programmes have psychosocial outcomes,¹² suggesting that it is important to examine them when studying the effects of economic strengthening on adolescent health and well-being. Psychometric scales are commonly used to obtain needed data on psychosocial outcomes, yet the tools to measure these concepts are often developed in upper-income countries and may lack relevance or validity when used in LMICs. Thus, when seeking to use a psychometric scale, it is imperative to ensure it is culturally congruent. This can be done by engaging local experts from target communities to validate whether items assess the domain to be investigated correctly. Items from the original scale may need to be eliminated or rephrased. An iterative process of pilot testing and adaptation should follow to obtain a scale that can measure a psychological construct with validity and reliability in the study setting. When time does not allow for validity testing, researchers and evaluators may choose to use existing scales that have already been adapted effectively and tested in multiple LMICs. The Children's Depression Inventory and Beck's Hopelessness Scale are two such scales that have been adapted widely across non-conflict settings, whereas tools such as the Childhood Trauma Questionnaire are applicable in settings of protracted humanitarian crisis. The mapping report produced by the Columbia Group for Children in Adversity and the Child Protection in Crisis Learning Network provides a comprehensive list of methodological tools to measure mental health and psychosocial well-being among children (including adolescents) in emergency settings, with corresponding notes on age, context and language availability.¹³

10 Vivo, S. et al., 'How Accurate Is Our Misinformation? A randomized comparison of four survey interview methods to measure risk behavior among young adults in the Dominican Republic', *Development Engineering*, July 2016.

11 Poulin, M., 'Reporting on First Sexual Experience: The importance of interviewer-respondent interaction', *Demographic Research*, vol. 22, no. 11, 2010, p. 237.

12 Ssewamala, F. M., Neilands, T. B., Waldfogel, J., and Ismayilova, L., 'The Impact of a Comprehensive Microfinance Intervention on Depression Levels of AIDS-Orphaned Children in Uganda', *Journal of Adolescent Health*, vol. 50, no. 4, 2012, pp. 346–352; Ssewamala, F. M. et al., 'Applying a Family-Level Economic Strengthening Intervention to Improve Education and Health-Related Outcomes of School-Going AIDS-Orphaned Children: Lessons from a randomized experiment in southern Uganda', *Prevention Science*, vol. 17, no. 1, 2016, pp. 134–143; Baird, S., De Hoop, J., and Özler, B., 'Income Shocks and Adolescent Mental Health', *Journal of Human Resources*, vol. 48, no. 2, 2013, pp. 370–403.

13 Ager, Alastair, Robinson, Sarah, and Metzler, Janna, *Methodologies and Tools for Measuring Mental Health and Psychosocial Wellbeing of Children in Humanitarian Contexts*, Child Protection in Crisis Learning Network, 2014, <www.cpcnetwork.org/wp-content/uploads/2015/06/Measuring-Child-MHPSS-in-Emergencies_CU_Mapping-Report_March-2014.pdf> (accessed 21 December 2016)

The role of institutional structures

Another challenge to consider when measuring economic strengthening programmes is that interventions to improve the economic outlook of adolescents and their families can be hindered by structural deficiencies, including discriminatory business processes, which negatively impact the feasibility and sustainability of the intervention. The supply and willingness of actors within the public and private sector to enact policies and processes that promote the economic participation of adolescents is critical to the long-term success of economic strengthening interventions. Legislation or policy frameworks that limit the ability to open a bank account because of age or gender restrictions is an example of such a structural deficit. Researchers and evaluators seeking to understand the effect of economic strengthening programmes should assess potential contextual constraints that may be affecting desired outcomes. This may involve reviewing relevant laws and policies and undertaking qualitative inquiries into barriers adolescents face when engaging with relevant institutional structures.

Similarly, the relative isolation from or embeddedness of a programme within an existing institutional structure may affect the long-term outcomes of economic strengthening interventions. For instance, matched savings programmes for children in the United States have been found to be particularly effective when integrated within a state's social welfare system, made universally accessible, and facilitated through automatic investments.¹⁴ Researchers may wish to examine if similar findings might be replicated in LMICs, determining to what extent institutionalization and ease of delivery affect outcomes for large-scale economic strengthening interventions.

CASE STUDIES

The following case studies provide practical examples of projects which sought to obtain data on economic strengthening interventions and their effect on adolescent populations across multiple study contexts; benefits and challenges of the projects are discussed.

Box 6. Case study on YouthSave – a global financial inclusion partnership

Partners: Save the Children, Washington University in St Louis, MasterCard Foundation, New America Foundation, Consultative Group to Assist the Poor (CGAP)

Between 2010 and 2015 an innovative, multi-country savings initiative documented over 130,000 adolescents (aged 12–18) who opened savings accounts at local banks in Colombia, Ghana, Kenya and Nepal with data analysed on 70,000 account holders to understand demographic and transactional trends. Analysis of global data found that adolescents who saved benefited from modest gains in non-financial outcomes such as academic performance, health and future orientation. Savings behaviour, disaggregated by age and gender, was also analysed, offering lessons in how to promote financial inclusion among adolescents. Varying methods were used to collect data. Insights into the benefits and challenges of each as noted by programme evaluators are discussed below.

RCT in Ghana – benefits:

- An experimental school-level RCT was carried out with 6,000 adolescents to compare the impacts of in-school banking versus marketing outreach by banks on adolescent well-being.
- It allowed researchers to attribute causality.

RCT in Ghana – challenge:

- Tracking 10,000 interviewees (6,000 adolescents and 4,000 parents) was difficult because of relocation or migration of participants, requiring additional time and effort to track them down. Attrition rate was 30 per cent.

Use of institutional data in Colombia, Ghana, Kenya and Nepal – benefits:

- Allowed for large-scale comparative analysis of the savings behaviours of young people across time.
- Made it possible to initiate more robust data capture by local banks at client intake.

¹⁴ Sherraden, M. et al., 'Universal Accounts at Birth: Building knowledge to inform policy', *Journal of the Society for Social Work and Research*, vol. 6, no. 4, 2015, pp. 541–564.

Box 6. (Cont.)**Use of institutional data in Colombia, Ghana, Kenya and Nepal – challenges:**

- The incorporation of questionnaires and consent forms into account opening procedures was difficult for some financial institutions. To overcome this, some banks instituted branch competitions for data completion while others implemented new management information systems that incorporated the questionnaire as part of system requirements.
- Dated legislation in Colombia limited banks' use of personal information, particularly that of children. The research team, in partnership with legal counsel, worked with the financial partners to enable them to comply with the law, while also supplying limited data for research activities.

Pre- and post-evaluation in Colombia, Nepal and Kenya – benefits:

- The methodology provided an inexpensive glimpse at changes in savings related knowledge, attitudes and practices.

Pre- and post-evaluation in Colombia, Nepal and Kenya – challenges:

- Evaluators were unable to attribute causality, as there was no control or comparison group.
- Self-reported data were subject to bias.
- The time between pre- and post-tests differed among countries because of logistical issues.

* YouthSave Consortium, *YouthSave 2010–2015: Findings from a global financial inclusion partnership*, YouthSave Consortium, 2015, <www.savethechildren.org/atf/cf/%7B9def2ebe-10ae-432c-9bd0-df91d2eba74a%7D/YOUTHSAVE_2010_2015.PDF> (accessed 21 December 2016).

Box 7. Case study on Kenya's Orphans and Vulnerable Children cash transfer programme – findings from the Transfer Project

In 2012, over 150,000 households in Kenya which had at least one child under the age of 18, at least one parent who was deceased or chronically ill, and within the lowest expenditure quintile, benefited from the Kenya Cash Transfer for Orphans and Vulnerable Children programme. Primary caregivers of orphans and vulnerable children received 1,500 Kenyan Shillings (USD15) monthly, with no conditions attached.

Taking advantage of the phased roll-out by the Kenyan Government, an RCT was conducted in 28 communities (14 control communities –

households that had yet to receive the benefit but were eligible; and 14 treatment communities – households actively receiving the benefit). Household surveys were carried out in 2007, 2009 and 2011. Findings demonstrated there was a 5 per cent decrease in first pregnancy and a reduction in the odds of sexual debut of 31 per cent. The transfer did not affect rates of early marriage, condom use, number of sexual partners or transactional sex. The challenges, benefits and suggested methodological improvements offered by the authors of the cited studies are set out below.

Programme challenges:

- It was difficult to follow up participants who migrated.
- Self-reported data on sensitive topics were subject to response bias.
- There were small sample sizes for secondary outcomes such as condom use, number of sexual partners and transactional sex. Powering a study for such secondary outcomes might find statistically significant impacts.
- There was a lack of pre-intervention sexual behaviour data, so researchers were unable to explore changes in behaviour over time.

Programme benefits:

- It was possible to use a natural experiment setting because of the phased roll-out of the Kenya Cash Transfer for Orphans and Vulnerable Children programme.
- It allowed researchers to attribute causality of programme effects to the intervention.

Suggested methodological improvements for future study:

- Investigate outcomes for boys.
- Carry out cost-effectiveness analysis.
- Study designs that focus on tracking respondents, particularly females who migrate for marriage.
- Collect information on reasons for migration and how dynamics of mobility intersect with fertility and marriage.

* Handa, S., et al., 'Impact of the Kenya Cash Transfer for Orphans and Vulnerable Children on Early Pregnancy and Marriage of Adolescent Girls', *Social Science & Medicine*, vol. 141, 2015, pp. 36–45; Handa, S., et al., 'The Government of Kenya's Cash Transfer Program Reduces the Risk of Sexual Debut Among Young People Age 15–25', *PLoS One*, vol. 9, no. 1, 2014, p. e85473; Pereira, A., and Peterman, A., 'Social Cash Transfers, Early Pregnancy and Marriage in the Kenyan National Cash Transfer Programme', Innocenti Research Brief, UNICEF, 2015.

Ethical issues

Economic strengthening interventions should be adapted to fit local context and tailored to the precise needs of the beneficiaries. Evidence-based practice that is effective in one setting may be less effective or even harmful in another. Social norms, gender dynamics, power relations, religion, culture and kinship structures should be assessed to understand potential harmful practices and the possibility that the intervention may put certain groups at risk. Adolescent consultation within the design process and throughout the implementation period is critical to achieve desired results and foster longer-term sustainability (for more information, see Brief 5 in this series, '[Adolescent Participation in Research: Innovation, rationale and next steps](#)').

Risk assessment and safeguarding

Participatory design that includes marginalized groups will not only advance social equity in programme implementation but will also aid in naming and avoiding unintended consequences in the use and evaluation of economic strengthening interventions. For example, many economic strengthening programmes target females as primary beneficiaries. Yet in some contexts this practice may disrupt the existing intra-household power dynamics, potentially putting mothers and their daughters at risk of violence. Similarly, economic strengthening interventions that seek to improve the viability of household economic enterprises have the potential to incentivize increased engagement in hazardous labour among adolescents, putting them at risk while simultaneously limiting their participation in school. Participatory risk assessments, as a key element of the design process, along with continued dialogue with adolescents and child protection experts, are critical aspects of economic strengthening implementation and evaluation.

Further, when seeking to examine the multidimensional effects of economic strengthening programming on adolescents, questions on experiences of violence, exploitation and abuse may be included. It is crucial to ensure that interviewers are trained to inquire about such topics, are of the same sex as the respondent, and that these inquiries occur in private and safe spaces. In certain contexts, divulging information on such topics, particularly sexual violence, can put children at great risk of harm. Innovations such as the ACASI methodology serve to minimize the risks inherent with face-to-face

interviews on such sensitive topics. See 'Collecting data on sensitive topics' above.

These are some guidelines for interviewers:

- *Assent*: obtain the adolescent's affirmative agreement to participate in the research.
- *Parental consent*: when interviewing adolescents under the age of 18, obtain parental consent for participation in the study.
- *Examining violence, exploitation or abuse*: train enumerators on proper direct investigation techniques for sensitive topics or use computer-based technology to reduce risks posed to vulnerable adolescents.
- *Map resources*: Where available, provide enumerators with lists of resources where respondents may be referred should they disclose issues of abuse.

For further information, see Brief 3 in this series, '[Inclusion with Protection: Obtaining informed consent when conducting research with adolescents](#)'.

Methodological gaps and responses

There are gaps in research methods to assess the effectiveness and utility of economic strengthening interventions. Cost-effectiveness research, particularly that which uses a common outcome measure such as the cost per disability adjusted life year (DALY) averted, is limited and would be beneficial for cross-national comparison and critical for informing governments on the costs of operating adolescent focused economic strengthening programmes at scale. Further, large cross-national data sets such as the DHS, Global School Based Health Survey (GSHS), Health Behaviour in School-Aged Children (HBSC) study and Multiple Indicator Cluster Survey (MICS) (Box 9) do not currently include standardized inquiries on adolescent health or household participation in economic strengthening initiatives. The inclusion of such questions within large-scale data collection initiatives would provide a cost-effective mechanism for examining the simulated impact of economic strengthening interventions. For further information, see Brief 2 in this series, '[Data and Indicators to Measure Adolescent Development and Well-being](#)'.

Box 8. Methodological gaps in assessing the effectiveness and use of economic strengthening interventions on adolescent health

There are gaps in:

- Cost-effectiveness research
- Cross-national data collection
- Examination of differential outcomes for marginalized groups
- Technology innovations for data collection and analysis.

Box 9. Data sets for adolescent outcomes

- DHS: Demographic & Health Survey (supported by USAID)
- GSHS: Global School Based Health Survey (supported by the World Health Organization (WHO) in collaboration with the Centers for Disease Control and Prevention)
- HBSC: Health Behaviour in School-Aged Children study (supported by WHO)
- MICS: Multiple Indicator Cluster Survey (supported by UNICEF)

Further, with the exception of sex disaggregation, which has recently been given due attention as critical to the analysis and evaluation of development programmes, data on economic strengthening interventions are very rarely collected or analysed in such a way that allows for an examination of outcome disparity among socially marginalized classifications such as ethnicity, disability, indigenous status or sexual orientation, and often does not include disaggregation of adolescents by age. Greater emphasis must be placed on understanding the differential experiences of adolescents in order to better tailor economic strengthening programmes to reach the most vulnerable.

Advancements in technology have ever more potential to change the landscape of data collection, analysis, presentation and dissemination of research on economic strengthening interventions. The delivery of self-administered mobile phone surveys, while not without challenges, shows promise for routine and rapid data collection on adolescents. Innovative mechanisms for tracking young migrants have the potential to increase study retention and better understand the long-term effects of economic strengthening programmes.

Lastly, increased collaboration between social protection practitioners and medical researchers shows promise as such partnerships often embrace bio-medical technology, often through the use of biomarker data, which have been collected to measure health outcomes such as HIV preventative behaviours or adherence to anti-retroviral medication. These are of interest where self-report among adolescent populations is prone to bias.

PRACTICAL IMPLICATIONS

Accessibility, inclusion and participation

To ensure that economic strengthening interventions target hard-to-reach, impoverished and marginalized groups, efforts must be made to increase the accessibility of these programmes. Demographic indicators such as gender, ethnicity, sexuality, geography, socioeconomic status and disability should be included within research and evaluation frameworks in order to examine the differential effects of economic strengthening programmes on varied adolescent populations, and understand gaps in equity or accessibility. For further information, see Brief 4 in this series, '[Research with Disadvantaged, Vulnerable and/or Marginalized Adolescents](#)'.

Once programmes are deemed accessible, efforts should be made to ensure the full and meaningful participation of all adolescent beneficiaries. Research methods that collect outcome data alone typically fail to deal with inclusion. Additional methods, such as the routine collection of beneficiary feedback on intervention use and satisfaction, will inform practitioner assessment and facilitate needed course corrections to ensure that adolescents are benefitting equally. This participation by young people in routine programme quality assessment, as well as during intervention design and evaluation, are not only essential in achieving programme success but also cited as a positive influence on the social and emotional development of adolescents themselves. For further information, see Brief 5 in this series, '[Adolescent Participation in Research: Innovation, rationale and next steps](#)'.

Assessing sustainable effects

Methodological challenges for evaluating economic strengthening programmes are not limited to questions of how to collect data but include how and when to determine an intervention is effective. Donors often require short-term results while meaningful change in economic outcomes may be more appropriately measured longitudinally. Thus, practitioners should seek to develop indicators that measure relevant impacts in the short term while also building innovative partnerships with academic institutions and local statistical bureaus to assess the long-term effects of an intervention, either via longitudinal data collection or tracer studies that track participants after the study period has concluded. The ILO's Tracer/Tracker Methodology was developed to better understand the long-term impacts of interventions on children and their households and is a beneficial resource from which economic strengthening researchers and evaluators can draw and adapt.

RECOMMENDATIONS AND KEY ACTIONS MOVING FORWARD

- Economic strengthening interventions have shown promise to improve *health and well-being outcomes* for adolescents, but more research is needed to maximize their effectiveness for this age group.
- Researchers and evaluators should seek to measure the *multidimensional* outcomes of economic strengthening interventions. Until a standardized, multidimensional assessment tool for adolescents is available, *adaptations* and *combinations* of other existing tools are required.
- Study designs may be *cross-sectional*, *experimental*, *quasi-experimental*, *qualitative* or *exploratory*. Each has benefits and deficits but all should be pursued to understand the effects of economic strengthening on adolescent health and well-being.
- *Implementation science* can and should be embraced to better understand the processes and system dynamics that enable economic strengthening interventions to either succeed or fail in achieving desired outcomes.
- When combining methodological tools, researchers and evaluators should avoid making inquiries too burdensome for adolescent respondents. The *Lean*

Research Framework offers guidance on how to make survey efforts 'rigorous' while also being 'right-sized', 'relevant' and 'respectful'.

- Direct or indirect techniques may be used to obtain information on sensitive topics. The *ACASI software* should be considered for use in such cases as it allows for ultimate confidentiality and anonymity and may reduce response bias.
- When using *psychometric scales*, ensure they have been validated and pilot tested in the study setting.
- Researchers in *emergency settings* must be flexible and adaptive in their approaches to understanding the effects of economic strengthening programming on adolescents. Review of mapping documents, which highlight methodological tools to measure mental health and psychosocial well-being among children in emergency contexts, are particularly useful.
- Data collected on economic strengthening intervention effectiveness should be disaggregated by *age* and *gender* and researchers may also wish to consider categories such as *ethnicity*, *disability*, *indigenous status* or *sexual orientation*. The *disaggregation of data* in this way will allow researchers to examine the varied experiences of multiple groups to determine if traditionally marginalized adolescents are receiving equal or less than equal benefit from economic strengthening interventions.
- When interviewing adolescents, steps should be taken to ensure they are not placed at risk. *Participatory risk assessments* for programme design should include a review of proposed data collection methodologies.
- Greater investment in *cost-effectiveness research*, and particularly that which uses standardized health measures such as DALYs and calculates cost based on actual expenditures rather than budgets, will benefit policy discussions on economic strengthening as a mechanism for health promotion among adolescents.
- Innovations in *self-administered data collection* show promise for routine and rapid data collection for adolescents.
- Meaningful change in economic outcomes may be more appropriately measured *longitudinally*. Innovative partnerships with academic institutions and local statistical bureaus, either via longitudinal data collection or *tracer studies* that track participants after the study period has concluded, are useful to assess the long-term effects of

- economic strengthening interventions.
- When seeking to understand the health impacts of economic strengthening programming, collaboration with medical researchers can add rigour to the measurement of health outcomes, such as HIV incidence, or adherence to anti-retroviral medication, through the use of *biomarker data*.
 - Outcome indicators for evaluating economic strengthening interventions should be complemented by *routine collection of beneficiary feedback*. This feedback can inform researchers and evaluators on intervention use and participant satisfaction, helping to determine if all sub-groups of adolescents are benefitting equally.

CONCLUSION

Research to date has suggested that economic strengthening interventions can have a range of impacts on adolescent well-being, making such initiatives critical components of any multidimensional response for achieving positive outcomes for this age group. Yet greater efforts are needed to examine and document the synergies between financial security and health and well-being within the context of adolescent development. More intensified collaboration between economic strengthening, public health and other sectors is needed to foster development of more accurate and robust methodologies for evaluating economic strengthening interventions.

READINGS FOR FURTHER EXPLORATION

Cahill, H., et al., *Adolescents in Emergencies*, Youth Research Centre, University of Melbourne, 2010, <http://web.education.unimelb.edu.au/yrclinked_documents/adolescents_in_emergencies.pdf>.

Cortina, Jerónimo, Schraven, Benjamin, and Saab, Rhea, *Methodological Considerations for Survey Research on Children, Adolescents and Youth in the Context of Environmental Change and Migration*, UNICEF, 2014, <<https://www.die-gdi.de/uploads/media/2.-Methodological-Considerations-Environmental-Change.pdf>>.

MEASURE Evaluation, *Child, Caregiver and Household Well-being Survey Tools for Orphans and Vulnerable Children Programs*, 2015, <<https://www.measureevaluation.org/resources/tools/child-health>>.

Mierzwa, S., et al., *Approaches That Will Yield Greater Success When Implementing Self-Administered Electronic Data Capture ICT Systems in the Developing World With an Illiterate or Semi-Literate Population*, Population Council, New York, 2013, <www.popcouncil.org/uploads/pdfs/2013_ACASI-ICT.pdf>.

Sanford, Caitlin, *Estirando el Gasto: Findings from the Mexico Financial Diaries*, 2016, <<http://financialdiaries.com/wp-content/uploads/2016/03/ESTIRANDO-English-compressed-1.pdf>>.

US Agency for International Development, *Economic Strengthening Programs for HIV/AIDS Affected Communities: Evidence of impact and good practice guidelines*, USAID, 2009, <http://pdf.usaid.gov/pdf_docs/Pnadv184.pdf>.

GLOSSARY

<u>ACASI</u>	Audio computer-assisted self-interview software. Well suited for inquiring on sensitive topics.
<u>Control group</u>	Serves as a counterfactual. To the greatest extent possible, the control group is identical to the treatment group with the exception that it is not exposed to the intervention being evaluated.
<u>Cross-sectional design</u>	Analyses data collected at one specific point in time. Different from longitudinal designs, which seek repeated observations over time.
<u>Driver diagram</u>	Tool to help translate high level programme improvement goals into a logical set of smaller goals and tasks. Provides a measurement framework for monitoring progress.
<u>Economic strengthening</u>	A variety of interventions designed to reduce the economic vulnerability of individuals or households and reduce reliance on external assistance.
<u>Implementation science</u>	The study of factors that influence the full and effective use of innovations in practice.
<u>Process mapping</u>	Process of visualizing what an organization does, who is responsible for specific tasks, to what standard tasks should be completed, and how success is determined.
<u>Psychometric scales</u>	Scales used to carry out measurement of psychological outcomes such as knowledge, abilities, attitudes or personality traits.
<u>Psychosocial</u>	Underscoring the close connection between psychological and wider social aspects of the human experience.
<u>Qualitative design</u>	Exploratory research used to gain understanding of underlying reasons, opinions and motivations.
<u>Quasi-experimental design</u>	Seeks to estimate causality by using procedures similar to experimental designs. A lack of random assignment is what differentiates quasi- experimental from experimental studies.
<u>Randomized controlled trial (experimental design)</u>	A research or evaluation design with two or more randomly selected groups (a treatment and a control group) in which the researcher controls or introduces an intervention and measures its impact on the dependent variable at a minimum of two time points. Considered the 'gold standard' for research designs.
<u>Realist evaluation</u>	Provides an alternative lens to empiricist evaluation techniques and considers the social and political context crucial to consider in the analysis of programme or policy effectiveness.
<u>Retrospective analysis</u>	Uses previously collected data to examine exposure to suspected risk or protection factors in relation to an outcome.
<u>Root cause analysis</u>	Method of problem solving used to identify factors resulting in harmful outcomes and to determine the actions, inactions and conditions that need to be changed in order to prevent a recurrence.
<u>Theory of change</u>	A comprehensive description and illustration of how and why a desired change is expected to happen in a particular context.
<u>Treatment group</u>	The group exposed to the intervention being evaluated.

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