

## Protocol for a Systematic Review:

# Saving Promotion Interventions for Improving Saving Behaviour and Reducing Poverty in Low- and Middle-Income Countries: A Systematic Review and Meta-Analysis

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Submitted to the Coordinating Group of:

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| x                        | No    |                                   |   |
| <input type="checkbox"/> | Yes   | <input type="checkbox"/> Cochrane | <input type="checkbox"/> Other (PROSPERO) |
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## BACKGROUND

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More than a billion people worldwide live on less than 1 US dollar a day (UN Millenium Project, n.a.). Lack of income is amplified by restricted access to a range of basic human capabilities such as education, health, self-determination, and self-worth (Sen, 1993 & 1992). Apart from research that has focused on the consequences of living in poverty, there is a large body of literature exploring how poor people manage their (little) financial resources from day to day (e.g. Collins, Murdoch, Rutherford, & Ruthven, 2009; Rutherford & Arora, 2009; Banerjee & Duflo, 2007). These analyses have found that, despite meagre incomes, the financial portfolios of the world's poor often go beyond mere hand-to-mouth survival and unfold in complex systems of money saving, borrowing, and various financial relationships (Collins *et al.*, 2009). While it might appear that people living in poverty are 'too poor to save', research has shown that certain events in their lives – such as health emergencies, traditional ceremonies (weddings or funerals), and educational requirements – necessitate considerably large sums of money and therefore make saving a prerequisite (Collins *et al.*, 2009; Rutherford & Arora, 2009).

As access to formal banking is usually confined for poor households, a range of alternative financial instruments are needed. Over 80 per cent of poor people in low and middle income countries (LMICs) do not hold a formal bank account, but have developed informal mechanisms for saving money. These include: a) saving at home, for instance with lock boxes, b) money guards/deposit collectors who are entrusted with personal savings so as to ascertain that the money will not be spent, c) self-help groups and peer monitoring systems for implementing and formalising saving plans, and d) rotating savings and credit associations (ROSCAs) in which members pay into a shared savings pot at periodic intervals and receive pay-outs on a rotating basis (Karlan, Ratan, & Zinman, 2014; Beaman, Karlan, & Thuysbaert, 2014; Rutherford, 2000; Banerjee & Duflo, 2007; Ambec & Treich, 2007; Ashraf, Karlan, & Yin, 2006; Ashraf, Gons, Karlan, & Yin, 2003; Bouman, 1997). Alternatively, a large number of people living in poverty save in cash and in kind at home, by buying a goat or hiding money in a pillow or under their mattress (Karlan *et al.*, 2014; Hulme, Moore, & Barrientos, 2009; Banerjee & Duflo, 2007).

The microfinance paradigm has evolved in response to the poor's need for financial systems and mechanisms that help them manage and potentially increase their (little) money. In the most general terms, microfinance institutions seek to lift their clients out of poverty by providing them with capital and schemes for investments in micro-enterprises and income generating activities. The movement's origins lie in Bangladesh where Nobel Peace Prize winner Muhammad Yunus had set up the Grameen bank 30 years ago, providing microloans to turn the country's rural poor into small entrepreneurs (Duvendack *et al.*, 2011). However, recent evidence has highlighted potential adverse outcomes for microcredit clients, such as indebtedness, spiralling into poverty through taking out new loans to repay old loans, damages in reputation and social status, and impoverishment through the loss of collateral

(Schicks, 2014; Agnihotri, 2013; Stewart *et al.*, 2010, Bateman, 2010; Epstein & Yuthas, 2010; Copestake, 2002; Adams & Von Pischke, 1992). Echoing this critique more polemically, the *Boston Globe* writes: “Billions of dollars and a Nobel Prize later, it looks like ‘microlending’ doesn’t actually do much to fight poverty” (Bennett, 2009).

In light of this recent disenchantment with micro-credit, an increasing number of microfinance institutions have broadened their focus from microloans to the provision of saving products (Karlan *et al.*, 2014; Stewart, van Rooyen, Dickson, Majoro. & de Wet, 2010; Robinson, 2001). Banerjee and Duflo (2011) go so far as to portray microsaving as “the next microfinance revolution” (p. 190). Practitioners and scholars are now advocating for saving as the superior poverty alleviation tool (Hulme *et al.*, 2009; Karlan *et al.*, 2014; Duflo, Banerjee, Glennerster, & Kinnan, 2013; Berg, 2010; Stewart *et al.*, 2010). This growing interest amplifies in 72 million microsaving clients globally (Microfinance Information Exchange, 2012). Yet, to date, there has been no systematic investigation of the impact of such interventions on a range of welfare-related outcomes for poverty-affected households and individuals.

### ***The Intervention***

In a constrained economic climate, it is essential to evaluate the poverty-alleviating potential of interventions that do not necessitate infusion of large external capital but instead emphasise behavioural change and sustainable management of available resources. In consequence, scholars and practitioners have touted saving promotion interventions as a promising poverty-reduction tool in international development. Different forms of saving interventions are outlined below, grouped into three main categories: 1) product-based interventions, 2) motivational-based interventions, and 3) knowledge-based interventions. In line with Pande *et al.* (2012), the former category can be understood as *supply-side* saving interventions seeking to increase access to saving services and schemes whereas the latter two categories denote *demand-side* saving interventions, targeting usage of saving services. It is important to note that all of these categories may well overlap and that some interventions can be hybrids of different categories. The intervention types described below include both formal as well as informal saving mechanisms. In consequence of constrained access to formal banking for poor individuals in developing countries, use of informal saving devices is more prevalent and more diverse in comparison to the developed world.

### ***Supply side: Product-based Interventions***

Access to formal banking services is commonly restricted to poor people due to far distance from bank branches and a range of demanding rules and requirements such as minimum balances, opening, maintenance, and withdrawal fees, or regulatory barriers (Karlan *et al.*, 2014; Pande *et al.*, 2012; Collins *et al.*, 2009). A range of interventions have been developed to address this problem and facilitate *access to formal bank accounts*. For instance, a trial by Dupas and Robinson (2009) offered market vendors and bicycle taxi drivers in Kenya the opportunity to open a bank account at no costs to themselves by covering the opening fee

and minimum balance. Likewise, in a study by Prina (2013), Nepalese women in the intervention arm were given access to a fully liquid bank account at a local branch without any associated fees for maintenance or withdrawals. Innovative designs and saving technologies can further promote usage and demand of banking services (Pande, Cole, Sivasankaran, Bastian, Durlacher, 2012). For instance, *mobile banking* has increased in popularity and may be particularly well suited for people living in remote distance to bank branches. Accordingly, a study in Sri Lanka (de Mel, Herath, McIntosh, & Woodruff, 2012) introduced scratch cards that clients could buy and use to make a deposit into their personal saving accounts. Other studies have used *banking agents* for improving access to banking in rural remote areas. For instance, Dupas *et al.* (2014) conducted a study in Kenya in which banking agents visited individuals at home in order to deliver information on account opening and maintenance as well as distribute vouchers for the opening of free saving accounts. Further, a project by Ssewamala and Ismayilova (2009) in Uganda adds *saving incentives* to youth accounts: Participants receive the matched sum of the amount of money they pay into their account as a top-up. Lastly, access to formal banking may be promoted on a state-level. Burgess and Pande (2005), for instance, examine the economic consequences of a policy-driven branch expansion across India in a quasi-experimental design.

Alternatively, interventions can provide simple saving devices such as *metal boxes/safes*, *lock boxes*, or *piggy banks* that could help to make saving more secure for poor households (Dupas & Robinson, 2011). Several interventions have combined the provision of saving devices such as lock boxes with a self-control mechanism where the key to the lock box is kept by a third person (here: the researcher) and is only returned to the owner after a certain period of time or after a specified saving amount has been reached (Dupas & Robinson, 2011; Rutherford & Arora, 2009; Ashraf, Gons, Karlan, & Yin, 2003).

Finally, a last method is to introduce *group-based saving schemes* such as ROSCAs, group-based bank accounts, or financial self-help groups that usually operate as a system of regular ‘pay-ins’ and rotating ‘pay-outs’ or ‘prizes’ (Rutherford & Arora, 2009; Ambec & Treich, 2007). Group-based approaches such as self-help saving groups might make saving practices more secure and regulated (when compared to saving at home) and additionally assert more control over the individual through peer pressure and common rules (Dupas & Robinson, 2011; Matthews & Ali, 2003; Ashe & Parrot, 2003; Zapata, 2003).

### ***Demand-side: Motivation-based Interventions***

Interventions can further leverage on motivational elements that seek to facilitate and encourage saving practices. For instance, Fiorill and colleagues (2014) and Soman & Cheema (2011) examine how visual representations of saving goals, the drafting of detailed saving plans, and sms- or mail-delivered saving reminders can increase the uptake of saving products or realised saving balances. Further, there is a growing body of literature on saving commitments (Karlan & Linden, 2014; Giné, Goldberg, Silverman, & Yang, 2012; Brune, Giné, Goldberg, & Yang, 2011; Ashraf, Karlan, & Yin, 2006). Scholars often distinguish

between a) *hard commitments* that are either associated with flexibility constraints or economic penalties for failure and b) *soft commitments* that are primarily associated with psychological costs for failure. An example for the former can be found in a study by Ashraf and colleagues (2010) in the Philippines in which clients had to define a goal amount of money to be saved and agree that withdrawals from the account are restricted until the goal has been reached. Conversely, Soman & Cheema (2011) provide an example of a soft commitment where participants earmark amounts of money for specific purposes such as education. It is hypothesised that violations of these self-established rules or commitments would result in feelings of failure and guilt (Benabou & Tirole, 2004). The primary function of commitment devices – whether soft or weak – is thus to increase individuals’ self-control and promote the motivation to save money.

### **Demand-side: Knowledge-based Interventions**

In addition to the low provision of formal banking services, a lack of financial knowledge is commonly cited as a barrier to pro-saving behaviour (Karlan *et al.*, 2014). In consequence, non-product interventions that emphasise financial literacy and knowledge have increasingly gained popularity (Karlan, McConnell, Mullainathan, & Zinman, 2010). Programmatic efforts are thereby based on the assumption that financial knowledge is an antecedent to healthy financial decision-making and that increases in financial literacy will ultimately increase savings and financial wellbeing (Fernandes, Lynch, & Netemeyer, 2014; Karlan *et al.*, 2014). One of the most prominent examples here is the Aflatoun program that was designed to promote financial skills among children and adolescents. The curriculum includes lessons about financial planning, budgeting, saving and proper spending. The curriculum is available in over 30 languages and the programme has been implemented in 113 countries to date (see <http://www.aflatoun.org/>).

### ***How the Intervention Might Work***

The primary focus of saving promotion interventions typically lies on promoting saving and thus increasing saving amounts. And yet, the ultimate goal remains poverty alleviation. This review will therefore examine the effects of interventions on: a) *intermediate outcomes*, namely uptake of and increases in savings, saving-relevant motivations and knowledge, as well as b) *distal outcomes*, namely the wider multi-dimensional aspects of household poverty and economic wellbeing.

Although initially developed for health research, behavioural theories (e.g. Fishbein & Yzer, 2003; Bandura, 1986; Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975) are now widely applied in intervention research and can illustrate how saving promotion interventions may help to realise savings. Most behavioural theories postulate that performance of a specific behaviour (here: saving money) is determined by a person’s intention to perform that behaviour. Intention, in turn, is viewed as a function of a) attitude towards the behaviour, b) perceived norms with regards to the behaviour (formed by a person’s social network), and c) self-efficacy of performing the specific behaviour (Fishbein & Yzer, 2003). Following this,

saving promotion interventions – particularly interventions with a motivational component – may change people’s *attitudes* about the importance of savings, which could then translate in the uptake of saving practices. Similarly, product-based as well as knowledge-based interventions might raise individual’s awareness about available saving devices and thereby affect their attitudes. In addition, interventions could promote *self-efficacy*, for instance by increasing financial planning skills or increasing knowledge about different saving techniques. Further, self-efficacy could be enhanced by providing participants with tools and mechanisms that make it easier and safer to save money, for instance through access to bank accounts. Alternatively, addressing self-control problems and providing financial tools such as commitment devices that can help inhibit spending on temptation goods or present-biased accounting could increase self-efficacy. Lastly, motivational and group-based saving approaches (e.g. promoting membership in saving groups) can seek to leverage on the dimension of *perceived norms* about the value and importance of saving money and thereby promote intentions to save. In the same vein, the presence of banking agents or administration of saving reminders can alter individual’s perception of certain social values and expectations and thus have a significant impact on their perceived norms. While each type of saving promotion may have an impact on the different behavioural concepts outlined above, it is conceivable that a combination of several approaches is most likely to alter all three components and thus effectively instil behavioural change with regards to saving.

Turning to the hypothesised distal outcomes, it is essential to elaborate on the mechanisms of how increased savings may causally translate into poverty alleviation. First, savings can increase the resilience of individuals and households to unexpected economic shocks and adverse events. In consequence, vulnerability to poverty, that is, the threat of future poverty, is likely decreased (Klasen, Lechtenfeld, Povel, 2015). Unanticipated events such as illness or death of a household member can eliminate income sources and necessitate high expenditures on medical or funeral costs (Booyesen, 2004; Bollinger & Stover, 1999). Hence, household savings can be viewed as substitute for a formal insurance mechanism and thus cushion the downstream impact of a financial crisis. Alternative coping mechanisms such as the sale of productive assets, borrowing at disproportionately high interest rates, or removal of children from school would likely lead to further impoverishment (Dupas & Robinson, 2009; Barnes, Gaile, & Kimbombo, 2001; Jacoby & Skoufias, 1997).

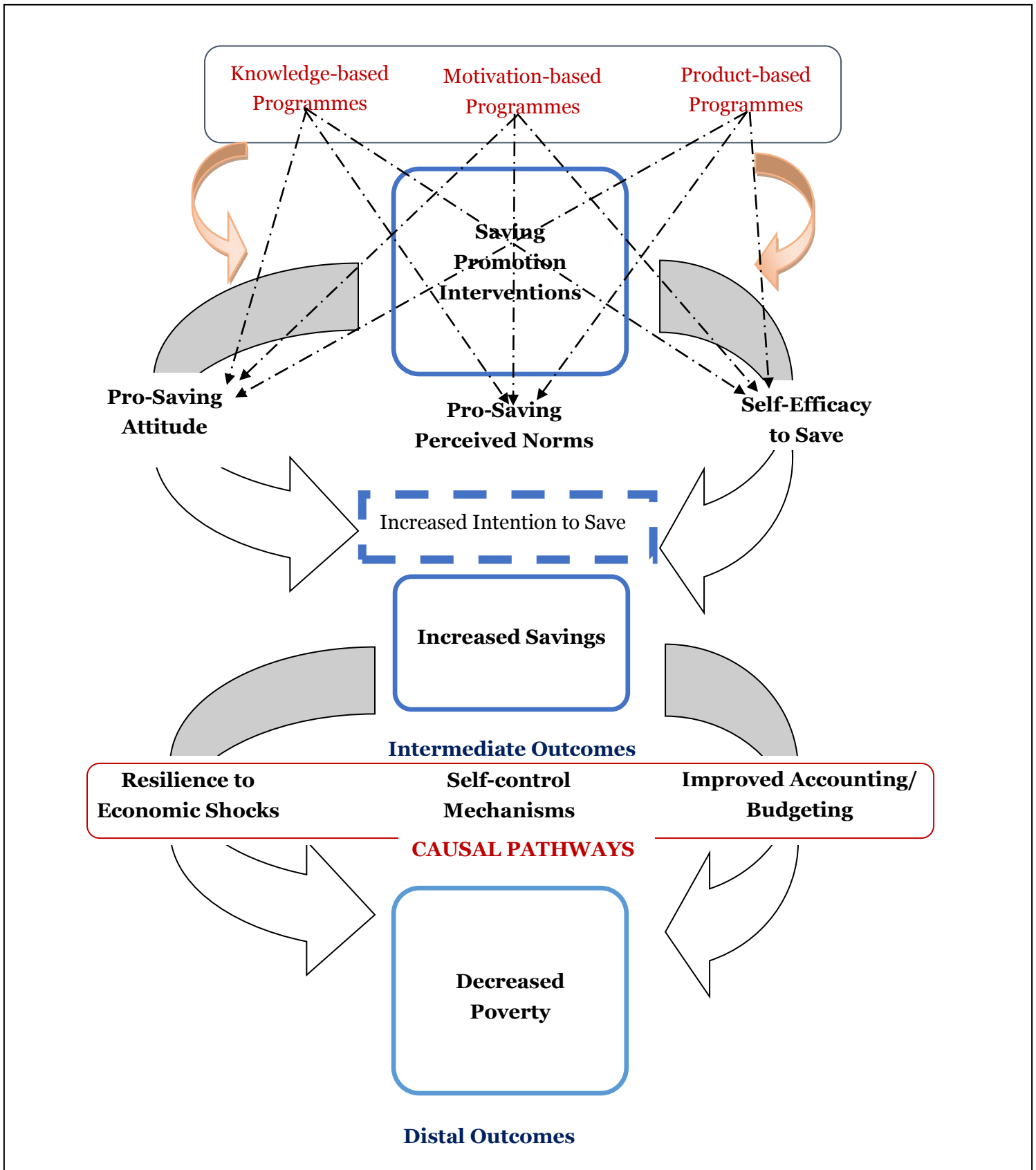
Second, while “behavioural anomalies“ (Bryan, Karlan, & Nelson, 2010, p.681) such as the purchase of temptation goods or present-biased decision-making are characteristic of individuals across the globe, Banerjee and Mullainathan (2010) argue that the poor have less resources for absorbing such self-control problems. The authors demonstrate how the proportion of income spent on temptation goods is higher for individuals with very low income. Temptation spending and present-biased decision-making are therefore more consequential for the poor (ibid; Collins, Morduch, Rutherford, Ruthven, 2009; Prahalad & Hammond, 2002). Based on these considerations, poor individuals require mechanisms that can help them set aside money and thus decrease the immediate availability of cash. In consequence, time-inconsistent decision-making and purchase of temptation goods become

less likely (Prina, 2013; Ambec & Treich, 2007).

Third, it has been argued that the accumulation of savings can take the form of investments in the future through the accumulation of larger lump sums (Collins *et al.*, 2009). As Thaler (1990) described, once people dedicate a certain amount of their moneys to the purpose of saving, they are more likely to consider this money as unavailable for other expenses (Stewart *et al.*, 2010; Dupas & Robinson, 2009; Rutherford, 2000). Such behaviour could potentially a) increase the overall wellbeing of poverty-ridden households with regards to health and housing quality, b) increase household income through sustainable accounting and investment in productive assets, and c) reduce the inter-generational transmission of poverty by investing in children's education, health, and nutrition (*ibid*).

*Figure 1* illustrates the logic model of the above mechanisms. The arrows indicate how different types of saving promotion programmes may have an impact on the three behavioural aspects outlined above. Instilled behavioural change may then amplify in the uptake of saving and increases in realised saving amounts. In the long run, changes in these intermediate outcomes can have a downstream effect on distal outcomes such as poverty via the three causal pathways displayed in the bottom part of *Figure 1*.

**Figure 1. Logic Model**





## ***Why it is Important to do the Review***

Savings interventions are advocated as a new promising anti-poverty tool in international development. Yet, there is to date little systematic evidence on whether saving promotion interventions can effectively reduce poverty. A number of randomised controlled trials have found indication of a positive impact of pro-saving interventions on intermediate outcomes such as increases in saving amounts and uptake of saving products (Prina, 2013; Dupas & Robinson, 2009; Ashraf, Karlan, & Yin, 2010; Ssewamala, Han, Neilands, Ismayilova, & Sperber, 2010a; Ssewamala *et al.*, 2010b; Ssewamala & Ismayilova, 2009). There is less empirical evidence, however, on whether saving interventions can effectively influence more distal outcomes such as household poverty and findings from primary studies vary.

Six systematic reviews have been published on related topics (Brody *et al.*, 2015; O'Prey & Shephard, 2014; Fernandes *et al.*, 2014; Pande *et al.*, 2012; Stewart *et al.*, 2012; Duvendack *et al.*, 2011). However, none of these reviews have looked at the same kind of saving promotion programmes as proposed in this review. Fernandes *et al.* (2014) investigate the impact of financial literacy and financial education programmes that are, however, not exclusively savings-oriented. Further, the majority of studies that this review considered were implemented in populations of industrialised countries, which are likely to exhibit a range of different characteristics when compared to participants in low- and middle-income countries. Pande *et al.* (2012) focus exclusively on formal banking services and thus exclude a range of other saving interventions such as those promoting access to saving groups or training financial literacy on savings. Stewart *et al.* (2012) and Duvendack *et al.* (2011) examine a broader range of programmes, including microfinance interventions while Brody *et al.* (2015) analyse a range of self-help groups and not exclusively those with economic objectives. Lastly, O'Prey and Shephard (2014) examine the impact of financial literacy programmes, but thereby go beyond savings and include programmes that emphasise other literacy-relevant aspects such as numeracy in general. Also, again, their review includes studies from developed countries as well and findings might therefore not be valid for populations in LMICs. The proposed review project therefore attempts to exclusively look at saving interventions in LMICs that are not combined with microloan schemes or other cash transfers as these could potentially confound findings on poverty alleviation.

Following the above considerations, this systematic review intends to fill a gap in recent literature by exploring different kinds of saving interventions and their effectiveness in a) promoting intermediate outcomes such as increases in individuals' savings as well as b) promoting more distal outcomes such as decreases in household poverty and improvement in households' wider wellbeing.

In order to determine overall effect sizes, this review also aims to conduct a meta-analysis if possible – which no synthesis on savings has previously reported. We hope that the accumulated data will allow us to conduct meta-regression that would help establish which

population groups benefit most from saving interventions and which programme types (e.g. access to bank accounts, financial literacy, etc.) have the largest impact on poverty alleviation. These findings would have important implications for policy makers and development activists and will provide essential information on the directing of funding resources towards the most effective types of saving programmes.

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## **OBJECTIVES**

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The objective of this review is to synthesise evidence of individual studies investigating the impact of various kinds of saving promotion interventions on a) increases in savings (*intermediate outcomes*) and b) reductions in poverty levels (*distal outcomes*). The review will also look at how contextual and implementation factors, such as characteristics of study participants, setting of the intervention and programmatic components moderate intervention effects and thus affect outcomes.

Although there are previous reviews on the impact of related intervention, none has conducted a meta-analysis on the effects of saving promotion. We believe that quantitative aggregation of data from primary studies can add important insights to existing literature. Saving interventions have become considerably popular in international development practices over the recent years and organisations such as the Abdul Latif Jameel Poverty Action Lab (J-PAL) and Innovations for Poverty Action (IPA) have launched a range of impact evaluations of said programmes. Based on a preliminary scoping search, we are confident that we will find sufficient primary data to be able to conduct meta-analysis.

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## METHODOLOGY

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### INCLUSION CRITERIA

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#### *Criteria for including and excluding studies*

##### *Types of study designs*

Eligible study designs should feature a credible comparison group or appropriate counterfactual condition to allow for an unbiased estimate of the treatment effect. Although there is a range of high-quality quasi-experimental study designs, comparison analyses have pointed to discrepancies in findings when compared to truly experimental study designs, with a tendency of the former to over-estimate effect sizes (Glazerman, Levy, & Myers, 2003; Shadish & Ragsdale, 1996). Therefore, randomised controlled trials (RCTs) have long been considered as a ‘gold standard’ in impact evaluation and are best equipped to maximise internal validity. Over the recent years, the evidence-based paradigm has gained prominence in international development. Duflo and colleagues (2004) note: “*Rigorous evaluations through randomised experiments can revolutionise the social policies of the 21st century as randomised experiments have revolutionised the 20th century medicine.*” Duvendack *et al.* (2011) have included quasi-experimental study designs in their microfinance review in light of a scarcity of randomised controlled trials. The authors conclude that almost all of the identified impact evaluations suffer from weak research designs. Since the publication of this review, organisations such as *J-Pal* and *Innovations for Poverty Action* have launched a large number of RCTs on microfinance and saving initiatives. Following this, the present review will draw on the most reliable and rigorous evidence and thus only include those study designs that are individual or cluster randomised controlled trials.

The quantitative synthesis of this review will exclude quasi-experimental studies, observational studies, as well as qualitative studies.

While the proposed review will not systematically search for qualitative evidence, efforts will be made to identify key qualitative papers that can help further elucidate the causal pathways that run from saving promotion to increases in savings (intermediate outcomes) and eventually reductions in poverty levels (distal outcomes) (Harachi *et al.*, 1999). Further, the review project aims to identify relevant qualitative and contextual records for included studies. These could include qualitative outlets such as from focus group discussions or qualitative programme piloting. Further, detailed programme documentation will be searched such as intervention manuals or training plans. Lastly, major efforts will be made to identify information on programme implementation (e.g. was dose and duration of the

programme as intended?), delivery (e.g. quality and fidelity to the manual), and participants' engagement with the programme (e.g. attendance and active participation). Understanding implementation/process and fidelity can help explain variations in programme outcomes and contribute to a more nuanced understanding on why some participants may show most improvements while others do not (Durlak & DuPre, 2008; Carroll *et al.*, 2007; Dane & Schneider, 1998). We will mainly conduct Google searches and screen through trial reports on J-Pal, 3ie, and Innovation for Poverty Action websites. Further, all first authors will be contacted with requests for relevant qualitative material.

### *Types of participants*

The review will include interventions that are targeted at poor individuals or households in low- and middle-income countries (as defined by the World Bank in 2015). The inclusion criteria are not further restricted to gender, age, or occupational status. If the retrieved data allows, meta-analysis will examine whether effect sizes vary for different subgroups (defined by gender, age, occupational status, etc.).

### *Types of interventions*

The review will *include* all kinds of saving promotion interventions.

This may comprise programmes with the following components:

| Product-based interventions  | Motivation-based interventions  | Knowledge-based interventions   |
|--|---|---|
| <ul style="list-style-type: none"> <li>- Providing access to formal bank accounts</li> <li>- Advertising/promoting membership in saving groups/ROSCAs</li> <li>- Distribution of saving boxes/lock boxes/etc.</li> </ul> | <ul style="list-style-type: none"> <li>- Administering saving reminders (home visits, sms/mail reminders, etc.)</li> <li>- Commitment schemes for saving (e.g. time restrictions for withdrawals, keeping the key of lock box, etc.)</li> </ul> | <ul style="list-style-type: none"> <li>- Financial literacy training around savings (how to save?, where to save?, why to save?)</li> </ul> |

The review will *exclude* any intervention that combines saving promotion (as outlined above) with additional components that could hypothetically have an impact on poverty, financial stress, or savings behaviour. This may include microfinance programmes that combine microloans with micro-saving schemes, insurance programmes with saving schemes, or cash transfers with integrated saving schemes. It will further exclude programmes that integrate financial incentives to save, such as provision of monetary top-ups contingent on realised saving amounts. An exception from this can be multi-arm trials, as long as saving promotion, as defined above, is employed as a stand-alone treatment arm. A further exception would be if control and intervention group received the same kind of services with the only difference of an additional saving component in the intervention group. The potential poverty alleviating impact of micro-credits, financial incentives, or cash transfers would in this case be balanced across groups.

## *Types of outcome measures*

The primary interest of this review lies on whether saving promotion interventions can effectively reduce poverty. Literature exhibits broad variations in the operationalisation and measurement of poverty. Essentially, one can distinguish between a) a *money-metric approach* that relies primarily on households' incomes or expenditures as proxies for poverty and b) a *multidimensional approach* that considers wider human wellbeing, namely aspects of health, education, food security, quality of housing, and standards of living (see Sen, 1993, 1992). A prominent example for the latter approach is the Multidimensional Poverty Index (Alkire *et al.* 2016; OPHI 2013; Alkire & Foster 2011) that aggregates indicators of nutrition, mortality, schooling, and living standard into a poverty ranking and is used in the annual Human Development that is released by the United Nations Development Program. Following this, the primary outcomes listed below seek to reflect the multiple dimensions that are commonly used for measuring poverty. Studies will be considered eligible irrespective of the operationalization of poverty they apply and will be grouped accordingly.

In addition, this review will examine the intermediate outcomes that lie on the hypothesised causal pathway from saving promotion to poverty reduction. It can be assumed that these outcomes are more malleable to change and easier to capture/measure and will therefore be more frequently reported by identified studies.

### **Primary/Distal outcomes:**

- Poverty (chronic as well as transitory)
- Food security and nutrition
- Educational achievement (e.g. attending school, graduating from school)
- Sexual risk behaviour <sup>1</sup>
- Expenditures on health, education, nutrition
- Business profit

### **Intermediate outcomes:**

- Aggregated savings in all forms<sup>2</sup>

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<sup>1</sup> A range of recent programmatic efforts have leveraged on economic empowerment which has been linked with sexual risk behaviours such as (quasi)-transactional or age-disparate sexual relationships (e.g. Baird, Garfein, McIntosh, & Berk, 2012; Ssewamala & Ismayilova, 2009; Kim, Pronyk, Barnett, & Watts, 2008; Pronyk *et al.*, 2005).

- Uptake of a saving product/tool
  - Knowledge and financial literacy about saving
  - Attitudes towards savings
  - Intentions to save
  - Consumption smoothing
- Investments in profitable business

### *Types of control condition*

The control group should be either untreated (i.e. ‘treatment as usual’), be placed on a waiting list, or receive placebo treatment. Placebo treatment could exist in the form of an intervention focused on a fully unrelated topic such as health or hygiene.

### *Duration of follow-up*

No restrictions are put on the duration of follow-up. However, it is conceivable that more distal poverty-related outcomes will only amplify after a certain amount of time. Therefore, longer follow-up periods will be considered as particularly important.

### *Types of settings*

The review will include all studies that were implemented in low- or middle-income countries, defined as at the time the intervention was carried out. The [World Bank](#) provides a comprehensive list of all the countries falling under this definition.

Any post-hoc changes to the eligibility criteria that may occur at the data extraction stage will be reported explicitly in the final review.

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## **SEARCH STRATEGY**

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The following databases will be searched:

### *a) For Systematic Reviews:*

- Cochrane Collaboration Library
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<sup>2</sup> This denotes the *total* amount of realised savings, including savings held in a bank account, at home, in a savings group, savings in kind, etc. The outcome is intentionally defined broadly and aims to capture possible substitution effects, for instance reductions in savings held at home due to the opening of a saving account.

- Campbell Collaboration Library
- EPPI-Centre Library
- DFID Database for Systematic Reviews  
(<http://r4d.dfid.gov.uk/SystematicReviews.aspx>)
- 3ie Database for Systematic Reviews  
(<http://www.3ieimpact.org/en/evidence/systematic-reviews/>)

b) *For Individual Studies:*

- PsycINFO
- International Bibliography of Social Science (IBSS)
- SCOPUS
- Web of Sciences
- Applied Social Science Index and Abstracts (ASSIA)
- Conference Proceedings Citation Index - social science&Humanities
- JOLIS (database of 14 World Bank and International Monetary Fund libraries)
- ECONLIT
- IDEAS/ RePEc
- Business Source Premier
- 3ie Impact Evaluation repository (indexed list of impact evaluations)
- 3ie RIDIE (list of on-going/registered impact evaluations)
- Abdul Latif Jameel Poverty Action Lab (J-PAL)
- Innovations for Poverty Action (IPA)

In addition, to identify relevant grey literature, the following databases of international organizations will be searched:

- Elvis
- USAID Development Experience Clearing House:

- World Bank Impact Evaluation Working Paper Series
- Research4Development (DFID)
- African Development Bank Evaluation Reports:
- <http://www.afdb.org/en/documents/evaluation-reports/>
- Agence Française de Développement: Impact Evaluations
- Asian Development Bank Evaluation Resources

#### Inter-American Development Bank Evaluations

Lastly, we will hand-search reference lists of all included studies as well as of the following seven systematic reviews and research syntheses: Brody *et al.* (2015); Pande *et al.* (2012); Stewart *et al.* (2012), Duvendack *et al.* (2011), Fernandes, Lynch, & Netemeyer (2014) ; O’Prey & Shephard (2014); Karlan, Ratan, & Zinman (2014).

The following search string will be applied in slight variations depending on database/interface specifics (see Appendix for all search strings). Search terms will be in English, but publications in other languages will not be excluded. In order to increase sensitivity to other languages, subject headings will be searched where possible. The review team has scope to access studies in French, German, Spanish, Portuguese, and Russian. The search will be restricted to publications from 1990 up to the date of search. Experimental research has only entered the field of Development Economics more recently, largely with the foundation of the Poverty Action Lab at the Department of Economics at the Massachusetts Institute of Technology by professors Abhijit Banerjee, Esther Duflo, and Sendhil Mullainathan. We therefore do not expect to find publications before 2000, but use 1990 as a conservative cut-off.



| Search number        | Search   |
|----------------------|--|
| #1<br>[Program]      | TI, AB (saving* OR micro-saving* OR "micro saving*" OR microsaving* OR ROSCA* OR stokvel* OR "saving group*" OR VSLA OR ASCA OR "village bank*" OR (financial ADJ2 (literacy OR literate)) OR Aflatoun OR YouthSafe OR (financial ADJ2 education) OR (economic ADJ2 literacy OR literate)) OR (economic ADJ2 education) OR (financial ADJ2 skills) OR (economic ADJ2 skills) OR (financial ADJ2 training) OR (economic ADJ2 training) OR (financial ADJ2 knowledge) OR (economic ADJ2 knowledge) OR "financial inclusion" OR banking OR budgeting OR "money manag*" OR earmarking OR "saving ADJ2 account*" OR "bank account*" OR "youth account*" OR "lock box" OR "piggy bank" OR "cash box" OR "saving box" OR "safe deposit box" OR "safe-deposit box)   |
| #2<br>[Study Design] | TI, AB, KW ("randomized control* trial" OR "randomised control* trial" OR randomised OR randomized OR RCT OR randomly OR trial OR experiment* OR "control group" OR "comparison group)   |
| #3<br>[Country]      | TI, AB, KW, SO, PL (Africa OR Asia OR Caribbean OR "West Indies" OR "South America" OR "Latin America" OR "Central America" OR Afghanistan OR Albania OR Algeria OR Angola OR Antigua OR Barbuda OR Armenia OR Armenian OR Aruba OR Azerbaijan OR Bahrain OR Bangladesh OR Barbados OR Benin OR Byelarus OR Byelorussian OR Belarus OR Belorussian OR Belorussia OR Belize OR Bhutan OR Bolivia OR Bosnia OR Herzegovina OR Hercegovina OR Botswana OR Brasil OR Brazil OR Bulgaria OR "Burkina Faso" OR "Burkina Fasso" OR "Upper Volta" OR Burundi OR Urundi OR Cambodia OR "Khmer Republic" OR Kampuchea OR Cameroon OR Cameroons OR Cameron OR Camerons OR "Cape Verde" OR "Central African Republic" OR Chad OR Chile OR China OR Colombia OR Comoros OR "Comoro Islands" OR Comores OR Mayotte OR Congo OR Zaire OR "Costa Rica" OR "Cote d'Ivoire" OR "Ivory Coast" OR Croatia OR Cuba OR Cyprus OR Czechoslovakia OR "Czech Republic" OR Slovakia OR "Slovak Republic" Djibouti OR "French Somaliland" OR Dominica OR "Dominican Republic" OR "East Timor" OR "East Timur" OR "Timor Leste" OR Ecuador OR Egypt OR "United Arab Republic" OR "El Salvador" OR Eritrea OR Estonia OR Ethiopia OR Fiji OR Gabon OR "Gabonese Republic" OR Gambia OR Gaza OR Georgia OR Georgian OR Ghana OR "Gold Coast" OR Greece OR Grenada OR Guatemala OR Guinea OR Guam OR Guiana OR Guyana OR Haiti OR Honduras OR India OR Maldives OR Indonesia OR Iran OR Iraq OR "Isle of Man" OR Jamaica OR Jordan OR Kazakhstan OR Kazakh OR Kenya OR Kiribati OR Korea OR Kosovo OR Kyrgyzstan OR Kirghizia OR "Kyrgyz Republic" OR Kirghiz OR Kirgizstan OR "Lao PDR" OR Laos OR Latvia OR Lebanon OR Lesotho OR Basutoland OR Liberia OR Libya OR Lithuania Macedonia OR Madagascar OR "Malagasy Republic" OR Malaysia OR Malaya OR Malay OR Sabah OR Sarawak OR Malawi OR Nyasaland OR Mali OR Malta OR "Marshall Islands" OR Mauritania OR Mauritius OR "Agalega Islands" OR Mexico OR Micronesia OR "Middle East" OR Moldova OR Moldavia OR Moldovan OR Mongolia OR Montenegro OR Morocco OR Ifni OR Mozambique OR Myanmar OR Myanma OR Burma OR Namibia OR Nepal OR |

|    |   |
|----|---|
|    | "Netherlands Antilles" OR "New Caledonia" OR Nicaragua OR Niger OR Nigeria OR "Northern Mariana Islands" OR Oman OR Muscat OR Pakistan OR Palau OR Palestine OR Panama OR Paraguay OR Peru OR Philippines OR Philipines OR Phillipines OR Phillippines OR Poland OR Portugal OR "Puerto Rico" Romania OR Rumania OR Roumania OR Russia OR Russian OR Rwanda OR Ruanda OR "Saint Kitts" OR "St Kitts" OR Nevis OR "Saint Lucia" OR "St Lucia" OR "Saint Vincent" OR "St Vincent" OR Grenadines OR Samoa OR "Samoan Islands" OR "Navigator Island" OR "Navigator Islands" OR "Sao Tome" OR "Saudi Arabia" OR Senegal OR Serbia OR Montenegro OR "Sierra Leone" OR Slovenia OR "Sri Lanka" OR Ceylon OR "Solomon Islands" OR Somalia OR Sudan OR "South Sudan" OR Suriname OR Surinam OR Swaziland OR Syria OR Tajikistan OR Tadjhikistan OR Tadjikistan OR Tadjhik OR Tanzania OR Thailand OR Togo OR "Togolese Republic" OR Tonga OR Trinidad OR Tobago OR Tunisia OR Turkey OR Turkmenistan OR Turkmen OR Uganda OR Ukraine OR Uruguay OR USSR OR "Soviet Union" OR "Union of Soviet Socialist Republics" OR Uzbekistan OR Uzbek OR Vanuatu OR "New Hebrides" OR Vietnam OR "Viet Nam" OR "West Bank" OR Yemen OR Yugoslavia OR Zambia OR Zimbabwe OR Rhodesia OR ((developing OR "less* developed" OR "under developed" OR underdeveloped OR "middle income" OR low* income OR underserved OR "under served" OR deprived OR poor*) ADJ (countr* OR nation? OR population? OR world)) OR ((developing OR "less* developed" OR "under developed" OR underdeveloped OR "middle income" OR "low* income") ADJ (economy OR economies)) OR (low* ADJ (gdp OR gnp OR "gross domestic" OR "gross national")) OR (low ADJ3 middle ADJ3 countr*) OR (lmic OR lmics OR "third world" OR "lami countr*") OR "transitional countr*" |
| #4 | Search #1 AND #2 AND #3   |

A PRISMA flow chart will be used to document the search process, including the flow of eligible impact evaluations and the numbers of linked programme implementation documents obtained. For each individual database, search date and number of retrieved records will be documented. Further, dates of title and full text screening will be recorded.

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## DATA EXTRACTION AND ANALYSIS

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All identified titles will be screened by the first author (JIS). A subset of titles (20 per cent of all titles) will be double screened by the second review author (AM) to check for consistency in decisions on the inclusion/exclusion of studies. The screening process will be assisted by the online screening tool Rayyan.<sup>3</sup> Discrepancies between two authors will be flagged automatically by the tool and subsequently discussed and potentially referred to a third author (YS) in order to reach consensus. In case of a substantial number of discrepancies in screening decisions, the second review author will screen all titles rather than only a subset

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<sup>3</sup> See <http://rayyan.qcri.org/>

in order to increase accuracy and inter-rater reliability. Full text screening will be done by two review authors (JIS AM, JZ) for each individual study. Data from included studies will be extracted independently by two review authors respectively (JIS, AM, JZ, UF). Likewise, risk of bias assessment will be conducted by two review authors per individual study (JIS, AM, JZ, UF). Disagreements between the two review authors will be discussed and in case no agreement is reached, a third review author (YS) will be consulted. All extracted data will be entered into an Excel data extraction form (see Appendix 1). The form has been piloted by three review authors (JIS, AM, JZ) and applied to two pre-known eligible studies and was revised accordingly.

### *Coding of Included Studies:*

Extracted data will be documented in a Table with 'Characteristics of Included Studies':

#### **1. Study Characteristics**

- Authors
- Publication type
- Publication date
- Country/Region of study
- 

#### **2. Intervention**

- Program subtype
- Length of the program
- 

#### **3. Target Population**

- Gender
- Age
- Ethnicity
- Initial income/poverty level
- 

#### **4. Methodology**

- Study design
- Sample size
- Length of follow-up
- 

#### **5. Outcomes**

- Intermediate outcomes
- Distal outcomes
- Measurements/Scales used

-

For studies with multiple records/publications, the latest will be listed as identifying study reference. All records will be assessed in full in order to retrieve all relevant outcomes.

If information is missing from studies, efforts will be made to contact first authors. In case of no response, co-authors will be contacted and reminders sent. It is further possible that information required for meta-analysis cannot be retrieved or is not available. In this case, the study can only be reflected in the narrative synthesis of the review.

#### *Risk of bias assessment:*

The risk of bias assessment will be based on the *Cochrane Risk of Bias Assessment Tool for Randomised Controlled Trials* (Higgins *et al.*, 2011). Six domains are assessed for risk of bias and quality of evidence: 1) random sequence generation, 2) allocation concealment, 3) blinding of participants/personnel, 4) blinding of outcome assessors, 5) incomplete outcome data, 6) selective outcome reporting. Each of the six domains is assessed according to the following categorization scheme: a) low risk of bias, b) high risk of bias, and c) unclear risk of bias. The Cochrane Handbook provides detailed guidelines on how to code the risk of bias for each of these six domains. However, recognising that blinding of participants to the intervention is impossible (even when authors use ‘no saving placebo’ for controls such as a hygiene intervention which cannot affect outcomes of interest), further potential sources of bias will be assessed including likelihood of spillover effects and motivation bias, drawing on the risk assessment tool developed by Hombrados and Waddington (2012), and implementation fidelity.

#### *Meta-Analysis*

##### *Calculating Effect Sizes:*

Individual study effects will be synthesised statistically using Stata SE/13. Effect size estimates and 95 per cent confidence intervals will be extracted for each individual study (if applicable). The following effect size measures will be used:

1) For continuous outcome measures, standardised mean differences (SMD) will be calculated. To adjust for potential bias from small sample sizes, we use Hedges’ g correction for all effect sizes.<sup>4</sup> An SMD greater than zero will indicate increases in the outcome of interest in the intervention group compared to the control group. An SMD less than zero will denote a reduction in the outcome in the intervention group as compared to the control group.

2) For outcomes that are measured on a continuous scale in some studies and dichotomised in other studies (e.g. increases in saving amounts), we will transform odds ratios (ORs) into

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<sup>4</sup>  $SMD_{corrected} = SMD_{uncorrected} * (1 - (3/4 * (nt + nc - 2) - 1))$

SMDs and use Hedge's  $g$  correction as described above (for transformation, see: Borenstein, Hedges, Higgins, & Rothstein, 2009; Sánchez-Meca, Marín-Martínez, & Chacón-Moscoso, 2003).

3) For outcomes that are predominantly measured on a binary scale (e.g. uptake of savings), odds ratios will be reported as effect size measure.

Effect sizes across studies will be combined using the inverse variance weight method. A random-effects meta-analysis will be applied, assuming differences in individual studies. All meta-analyses will be conducted separately for a) different outcomes of interest (e.g. increases in savings, decreases in poverty levels, etc.), b) different intervention types (e.g. access to bank accounts, financial literacy, etc.), and c) different follow-up periods (e.g. six months, one year, etc.) corresponding to those listed above. In the case of multi-arm trials, each treatment arm will be analysed independently and coded as one intervention type.

Some of the specified outcomes such as poverty may show large variations in how they are operationalised across studies. Once all data are extracted, it will be judged whether meta-analysis of these outcomes is appropriate. If studies report multiple effect sizes for the same construct (e.g. expenditures and assets for household poverty), multilevel meta-analysis with random effects will be considered (Polanin, 2014; Van den Noortgate, López-López, Marín-Martínez & Sánchez-Meca, 2013).

Unit of analysis errors can arise if the unit of allocation and the unit of analysis differ. If not already accounted for in the included primary studies, we will adjust the effect estimates using an intraclass correlation coefficient to correct for unit of analysis error in cluster randomised controlled trials (see Littell, Corcoran, & Pillai, 2008). In case individual studies do not report ICC estimates, we will seek to include ICCs from similar cluster RCTs.

#### *Assessing of Heterogeneity:*

In order to adequately address heterogeneity of results, the proposed review intends to examine evidence by global regions. Therefore, the review project will initially focus on evidence from Sub-Saharan Africa, while maintaining plans to later extend the analysis to Asian/Pacific and Middle/South American regions.

Heterogeneity of results will be assessed by visual inspection of forest plots and statistical heterogeneity tests. I-squared and Q as well as tau-squared will be calculated to assess heterogeneity. Q will be tested for significance whereas I-squared and tau-squared are used to give some indication on the magnitude of heterogeneity. In contrast to Q, I-squared and tau-squared are not directly affected by the number of included studies (Borenstein *et al.*, 2009; Littell, 2008). Acknowledging that I-squared and tau-squared are less reliable with a small number of individual studies, we avoid the use of simple thresholds to diagnose heterogeneity.

### *Subgroup Analysis:*

Subgroup analyses will be run to assess whether programme features and participant characteristics show differential impacts on the intervention outcome. For this purpose the following moderator variables will be assessed, if possible:

- a) gender of participants
- b) age group of participants (dichotomous variable: children/adolescents versus adults)
- c) baseline poverty level of participants
- d) educational level of participants (ordinal variable: no schooling, primary school, secondary school, higher)
- e) programme component (categorical variable differentiating between different programme types: a) educational programmes, b) motivational programmes, c) product-based programmes, e) mixed-component programmes)
- f) duration of the programme (dichotomous variable brief vs. long whereby we define brief as three or less sessions)
- g) study setting (rural vs. urban)
- h) quality of programme implementation (dichotomous variable capturing whether a fidelity assessment suggested low or high quality of implementation)

A random-effects statistical model will be used to weight and estimate effect sizes for each moderator category. If the sample size within a sub-group is lower than 5, we employ a pooled estimate of the variance component (Borenstein *et al.*, 2009). To test for differences in average effect sizes between subgroups, we apply a Q-test based on ANOVA.

An alternative methodological approach would be to conduct meta-regression in order to explain some of the variance in treatment effects. However, the use of meta-regression requires an appropriately large ratio of studies examining covariates (Borenstein *et al.*, 2009). That is, decision to perform meta-regression will depend on the number of identified eligible studies for this review and will be considered as inappropriate for less than ten individual studies (Higgins & Green, 2011).

### *Sensitivity Analysis:*

Sensitivity of results will be assessed via sub-group analyses based on risk of bias assessments. Three categories will be compared with regards to effect sizes, namely high, unclear, and low risk of bias. In cases where effects from studies using different operationalisations of an overall concept (e.g. household poverty) were combined, we will investigate sensitivity of results before and after pooling effect sizes.

### *Assessing Publication Bias:*

To assess the potential for publication bias, we compare mean effect sizes of published studies with those from unpublished sources. If the number of eligible studies is sufficient (recommended minimum of ten studies), funnel plots will be inspected to assess whether estimates from individual studies are symmetrically distributed around the mean effect size. In addition, Egger's (1997) test will be utilized to test for funnel plot asymmetry. Duval and Tweedie's (2000) 'trim-and-fill' method will be used to correct for possible publication bias. The method provides a) an estimate of the number of missing studies, and b) an adjustment of the estimated intervention effects. (Higgins & Green, 2011).

### *Treatment of Qualitative Data:*

Retrieved qualitative data from programmatic records or possible process evaluation will be reflected in the narrative synthesis of study evidence. At the very least, this information will be used to report intervention components clearly. Clear information about intervention components can be used in moderator analysis, something which other systematic reviews on microfinance topics have not been able to do because they have not collected systematic information about intervention components (Vaessen *et al.*, 2014; Brody *et al.*, 2015). If we find sufficient information on programme fidelity and implementation, we will determine for included studies whether a fidelity assessment suggested low or high quality of implementation and run sub-group moderator analyses on this (for fidelity appraisal tool, see Appendix 3).

### *Summary of findings Assessment:*

We will use the GRADE approach to interpret and assess the quality of evidence of the review findings (Guyatt *et al.*, 2011). For this purpose, we will use the GRADE profiler (GRADEpro) to construct the "Summary of findings" tables. These tables effectively summarise the evidence for separate review outcomes providing information on the assumed and corresponding risks in each of the groups of the chosen comparison, the magnitude of effect (binary or continuous) and the quality of evidence rating. We will consider all the primary/distal outcomes of the review for inclusion in the "Summary of findings" table.

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## APPENDIX

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### 1. Data Extraction Form

| General Information  |                   |                   |
|--|-------------------|-------------------|
|  | Author 1 Initials | Author 2 Initials |
| Date of Extraction   |                   |                   |
| Study ID   |                   |                   |
| Study Authors  |                   |                   |
| Year of Publication  |                   |                   |
| Full Citation  |                   |                   |
| Publication type: Source                                   |                   |                   |
| Publication type: published/unpublished                    |                   |                   |
| Funding Source   |                   |                   |
| Conflict of Interest                                       |                   |                   |
| Study Characteristics                                      |                   |                   |
| Country of study   |                   |                   |
| Setting of study   |                   |                   |
| Type of study  |                   |                   |
| Study participants: general                                |                   |                   |
| Study participants: sex                                    |                   |                   |
| Study participants: age                                    |                   |                   |
| Study participants: other (e.g. educational/poverty level) |                   |                   |
| Intervention type  |                   |                   |
| Description of intervention components                     |                   |                   |
| Duration and dose of the intervention                      |                   |                   |
| Intermediate outcomes                                      |                   |                   |
| Distal outcomes  |                   |                   |
| Other outcomes   |                   |                   |
| Methodology  |                   |                   |
| Recruitment of participants                                |                   |                   |
| Data collection  |                   |                   |
| Total number of intervention groups                        |                   |                   |
| Trial design   |                   |                   |

|  |  |
|--|--|
| Statistical analyses                                 |  |
| Sample size  |  |
| Sample size intervention group                       |  |
| Sample size control group                            |  |
| Baseline differences?                                |  |
| Attrition?   |  |
| Any fidelity/process evaluation reports?             |  |
| <b>Meta-Analysis</b>                                 |  |
| Findings: description in text                        |  |
| Outcome category                                     |  |
| Operationalization                                   |  |
| Length of follow-up                                  |  |
| Are unit of randomization and of analysis the same?  |  |
| cRCTs: ICC or other adjustment (e.g. clustered SEs)  |  |
| <b><i>For continuous outcomes:</i></b>               |  |
| Intervention group mean:                             |  |
| Comparison group mean                                |  |
| Intervention group standard deviation/standard error |  |
| Comparison group standard deviation/standard error   |  |
| t-value from independent t-test                      |  |
| <b><i>For dichotomous outcomes:</i></b>              |  |
| Interv. group: number/proportion experiencing change |  |
| Control group: number/proportion experiencing change |  |
| Logged odds-ratio                                    |  |
| Standard error of logged odds-ratio                  |  |
| Chi-square value                                     |  |
| <b>Calculated Data</b>                               |  |
| Cohen's D/Hedge's g                                  |  |
| Standard error of Cohen's d/Hedge's g                |  |
| Odd ratios   |  |
| Standard error of odds ratios                        |  |
| <b>Risk of Bias</b>                                  |  |
| Random sequence generation                           |  |
| Allocation concealment                               |  |

|  |  |
|--|--|
| Blinding of participants and personnel |  |
| Blinding of outcome assessment         |  |
| Incomplete Outcome Data                |  |
| Selective Reporting                    |  |
| Other Sources of Bias                  |  |
| <b>Further Action Required</b>         |  |
| Comments/Clarifications                |  |
| Missing Information                    |  |
| Questions to the author(s)             |  |

## 2. Search String by Database

### 1) Web of Sciences – Web of Sciences Core Collection, sciELO Citation Index, Medline

| Search number                     | Search   |
|-----------------------------------|--|
| #1<br>[Program]                   | TITLE(saving* OR micro-saving* OR “micro saving*” OR microsaving* OR ROSCA* OR stokvel* OR “saving group*” OR VSLA OR ASCA OR “village bank*” OR (financial NEAR/2 (literacy OR literate)) OR Aflatoun OR YouthSafe OR (financial NEAR/2 education) OR (economic NEAR/2 (literacy OR literate)) OR (economic NEAR/2 education) OR (financial NEAR/2 skills) OR (economic NEAR/2 skills) OR (financial NEAR/2 training) OR (economic NEAR/2 training) OR (financial NEAR/2 knowledge) OR (economic NEAR/2 knowledge) OR (financial inclusion) OR banking OR budgeting OR “money manag*” OR earmarking OR (saving NEAR/2 account*) OR “bank account*” OR “youth account*” OR “lock box” OR “piggy bank” OR “cash box” OR “saving box” OR “safe deposit box” OR “safe-deposit box”)   |
| #2<br>[Study Design] <sup>5</sup> | TOPIC (“randomized control* trial” OR “randomised control* trial” OR “controlled clinical trial” OR randomised OR randomized OR RCT OR placebo OR randomly OR trial OR experiment OR “control group” OR “comparison group” OR field-experiment OR efficacy OR “treatment effectiveness” OR “impact evaluation”)  |
| #3<br>[Country] <sup>6</sup>      | TOPIC (Africa OR Asia OR Caribbean OR "West Indies" OR "South America" OR "Latin America" OR "Central America" OR Afghanistan OR Albania OR Algeria OR Angola OR Antigua OR Barbuda OR Armenia OR Armenian OR Aruba OR Azerbaijan OR Bahrain OR Bangladesh OR Barbados OR Benin OR Byelarus OR Byelorussian OR Belarus OR Belorussian OR Belorussia OR Belize OR Bhutan OR Bolivia OR Bosnia OR Herzegovina OR Hercegovina OR Botswana OR Brasil OR Brazil OR Bulgaria OR "Burkina Faso" OR "Burkina Fasso" OR "Upper Volta" OR Burundi OR Urundi OR Cambodia OR "Khmer Republic" OR Kampuchea OR Cameroon OR Cameroons OR Cameron OR Camerons OR "Cape Verde" OR "Central African Republic" OR Chad OR Chile OR China OR Colombia OR Comoros OR "Comoro Islands" OR Comores OR Mayotte OR Congo OR Zaire OR "Costa Rica" OR "Cote d'Ivoire" OR "Ivory Coast" OR Croatia OR Cuba OR Cyprus OR Czechoslovakia OR "Czech Republic" OR Slovakia OR "Slovak Republic" Djibouti OR "French Somaliland" OR Dominica OR "Dominican Republic" OR "East Timor" OR "East Timur" OR "Timor Leste" OR Ecuador OR Egypt OR "United Arab Republic" OR "El Salvador" OR Eritrea OR Estonia OR Ethiopia OR Fiji OR Gabon OR "Gabonese Republic" OR Gambia OR Gaza OR Georgia OR Georgian OR Ghana OR "Gold Coast" OR Greece OR Grenada OR Guatemala OR Guinea OR Guam OR Guiana OR Guyana OR Haiti OR Honduras OR India OR Maldives OR Indonesia OR Iran OR Iraq OR "Isle of Man" OR Jamaica OR Jordan OR Kazakhstan |

<sup>5</sup> Adapted for social sciences publications from: Cochrane Highly Sensitive Search Strategy for identifying randomized trials in MEDLINE: sensitivity- and precision-maximizing version (2008 revision)

<sup>6</sup> Using Cochrane EPOC LMIC filter which was developed for the World Bank classification 2009 and which we then updated for 2015

OR Kazakh OR Kenya OR Kiribati OR Korea OR Kosovo OR Kyrgyzstan OR Kirghizia OR "Kyrgyz Republic" OR Kirghiz OR Kirgizstan OR "Lao PDR" OR Laos OR Latvia OR Lebanon OR Lesotho OR Basutoland OR Liberia OR Libya OR Lithuania Macedonia OR Madagascar OR "Malagasy Republic" OR Malaysia OR Malaya OR Malay OR Sabah OR Sarawak OR Malawi OR Nyasaland OR Mali OR Malta OR "Marshall Islands" OR Mauritania OR Mauritius OR "Agalega Islands" OR Mexico OR Micronesia OR "Middle East" OR Moldova OR Moldavia OR Moldovan OR Mongolia OR Montenegro OR Morocco OR Ifni OR Mozambique OR Myanmar OR Myanma OR Burma OR Namibia OR Nepal OR "Netherlands Antilles" OR "New Caledonia" OR Nicaragua OR Niger OR Nigeria OR "Northern Mariana Islands" OR Oman OR Muscat OR Pakistan OR Palau OR Palestine OR Panama OR Paraguay OR Peru OR Philippines OR Philipines OR Phillipines OR Phillippines OR Poland OR Portugal OR "Puerto Rico" Romania OR Rumania OR Roumania OR Russia OR Russian OR Rwanda OR Ruanda OR "Saint Kitts" OR "St Kitts" OR Nevis OR "Saint Lucia" OR "St Lucia" OR "Saint Vincent" OR "St Vincent" OR Grenadines OR Samoa OR "Samoan Islands" OR "Navigator Island" OR "Navigator Islands" OR "Sao Tome" OR "Saudi Arabia" OR Senegal OR Serbia OR Montenegro OR "Sierra Leone" OR Slovenia OR "Sri Lanka" OR Ceylon OR "Solomon Islands" OR Somalia OR Sudan OR "South Sudan" OR Suriname OR Surinam OR Swaziland OR Syria OR Tajikistan OR Tadzhikistan OR Tadjikistan OR Tadzhih OR Tanzania OR Thailand OR Togo OR "Togolese Republic" OR Tonga OR Trinidad OR Tobago OR Tunisia OR Turkey OR Turkmenistan OR Turkmen OR Uganda OR Ukraine OR Uruguay OR USSR OR "Soviet Union" OR "Union of Soviet Socialist Republics" OR Uzbekistan OR Uzbek OR Vanuatu OR "New Hebrides" OR Vietnam OR "Viet Nam" OR "West Bank" OR Yemen OR Yugoslavia OR Zambia OR Zimbabwe OR Rhodesia OR "developing country" OR "developing countries" OR "developing nation" OR "developing nations" OR "developing population" OR "developing populations" OR "developing world" OR "less developed country" OR "less developed countries" OR "less developed nation" OR "less developed nations" OR "less developed population" OR "less developed populations" OR "less developed world" OR "lesser developed country" OR "lesser developed countries" OR "lesser developed nation" OR "lesser developed nations" OR "lesser developed population" OR "lesser developed populations" OR "lesser developed world" OR "under developed country" OR "under developed countries" OR "under developed nation" OR "under developed nations" OR "under developed population" OR "under developed populations" OR "under developed world" OR "underdeveloped country" OR "underdeveloped countries" OR "underdeveloped nation" OR "underdeveloped nations" OR "underdeveloped population" OR "underdeveloped populations" OR "underdeveloped world" OR "middle income country" OR "middle income countries" OR "middle income nation" OR "middle income nations" OR "middle income population" OR "middle income populations" OR "low income country" OR "low income countries" OR "low income nation" OR "low income nations" OR "low income population" OR "low income populations" OR "lower income country" OR "lower income countries" OR "lower income nation" OR "lower income nations" OR "lower income population" OR "lower income populations" OR "underserved country" OR "underserved countries" OR "underserved nation" OR "underserved nations" OR "underserved"

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|    | <p>population" OR "underserved populations" OR "underserved world" OR "under served country" OR "under served countries" OR "under served nation" OR "under served nations" OR "under served population" OR "under served populations" OR "under served world" OR "deprived country" OR "deprived countries" OR "deprived nation" OR "deprived nations" OR "deprived population" OR "deprived populations" OR "deprived world" OR "poor country" OR "poor countries" OR "poor nation" OR "poor nations" OR "poor population" OR "poor populations" OR "poor world" OR "poorer country" OR "poorer countries" OR "poorer nation" OR "poorer nations" OR "poorer population" OR "poorer populations" OR "poorer world" OR "developing economy" OR "developing economies" OR "less developed economy" OR "less developed economies" OR "lesser developed economy" OR "lesser developed economies" OR "under developed economy" OR "under developed economies" OR "underdeveloped economy" OR "underdeveloped economies" OR "middle income economy" OR "middle income economies" OR "low income economy" OR "low income economies" OR "lower income economy" OR "lower income economies" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR lmic OR lmics OR "third world" OR "lami country" OR "lami countries" OR "transitional country" OR "transitional countries"</p> |
| #4 | <p>Search #1 AND #2 AND #3 Refined by: [excluding] PUBLICATION YEARS: ( 1986 OR 1976 OR 1972 OR 1982 OR 1984 OR 1983 OR 1975 OR 1989 OR 1965 OR 1971 OR 1964 OR 1969 OR 1959 OR 1968 OR 1963 OR 1966 OR 1958 OR 1988 OR 1962 OR 1970 OR 1985 OR 1960 OR 1981 OR 1974 OR 1961 OR 1977 OR 1987 OR 1973 OR 1980 OR 1967 OR 1957 OR 1979 OR 1978 OR 1956 ) AND Databases: (WOS OR MEDLINE OR SCIELO )</p>  |

**2) Conference Proceedings Citation Index - Social Science & Humanities (via Web of Sciences)**

| Search number        | Search   |
|----------------------|--|
| #1<br>[Program]      | <p>TOPIC (saving* OR micro-saving* OR "micro saving*" OR microsaving* OR ROSCA* OR stokvel* OR "saving group*" OR VSLA OR ASCA OR "village bank*" OR (financial NEAR/2 (literacy OR literate)) OR Aflatoun OR YouthSafe OR (financial NEAR/2 education) OR (economic NEAR/2 (literacy OR literate)) OR (economic NEAR/2 education) OR (financial NEAR/2 skills) OR (economic NEAR/2 skills) OR (financial NEAR/2 training) OR (economic NEAR/2 training) OR (financial NEAR/2 knowledge) OR (economic NEAR/2 knowledge) OR (financial inclusion) OR banking OR budgeting OR "money manag*" OR earmarking OR (saving NEAR/2 account*) OR "bank account*" OR "youth account*" OR "lock box" OR "piggy bank" OR "cash box" OR "saving box" OR "safe deposit box" OR "safe-deposit box")</p> |
| #2<br>[Study Design] | <p>TOPIC ("randomized control* trial" OR "randomised control* trial" OR "controlled clinical trial" OR randomised OR randomized OR RCT OR placebo OR randomly OR trial OR experiment OR "control group" OR "comparison group")</p>   |



|                         |  |
|-------------------------|--|
| <p>#3<br/>[Country]</p> | <p>TOPIC (Africa OR Asia OR Caribbean OR "West Indies" OR "South America" OR "Latin America" OR "Central America" OR Afghanistan OR Albania OR Algeria OR Angola OR Antigua OR Barbuda OR Armenia OR Armenian OR Aruba OR Azerbaijan OR Bahrain OR Bangladesh OR Barbados OR Benin OR Byelarus OR Byelorussian OR Belarus OR Belorussian OR Belorussia OR Belize OR Bhutan OR Bolivia OR Bosnia OR Herzegovina OR Hercegovina OR Botswana OR Brasil OR Brazil OR Bulgaria OR "Burkina Faso" OR "Burkina Fasso" OR "Upper Volta" OR Burundi OR Urundi OR Cambodia OR "Khmer Republic" OR Kampuchea OR Cameroon OR Cameroons OR Cameron OR Camerons OR "Cape Verde" OR "Central African Republic" OR Chad OR Chile OR China OR Colombia OR Comoros OR "Comoro Islands" OR Comores OR Mayotte OR Congo OR Zaire OR "Costa Rica" OR "Cote d'Ivoire" OR "Ivory Coast" OR Croatia OR Cuba OR Cyprus OR Czechoslovakia OR "Czech Republic" OR Slovakia OR "Slovak Republic" Djibouti OR "French Somaliland" OR Dominica OR "Dominican Republic" OR "East Timor" OR "East Timur" OR "Timor Leste" OR Ecuador OR Egypt OR "United Arab Republic" OR "El Salvador" OR Eritrea OR Estonia OR Ethiopia OR Fiji OR Gabon OR "Gabonese Republic" OR Gambia OR Gaza OR Georgia OR Georgian OR Ghana OR "Gold Coast" OR Greece OR Grenada OR Guatemala OR Guinea OR Guam OR Guiana OR Guyana OR Haiti OR Honduras OR India OR Maldives OR Indonesia OR Iran OR Iraq OR "Isle of Man" OR Jamaica OR Jordan OR Kazakhstan OR Kazakh OR Kenya OR Kiribati OR Korea OR Kosovo OR Kyrgyzstan OR Kirghizia OR "Kyrgyz Republic" OR Kirghiz OR Kirgizstan OR "Lao PDR" OR Laos OR Latvia OR Lebanon OR Lesotho OR Basutoland OR Liberia OR Libya OR Lithuania Macedonia OR Madagascar OR "Malagasy Republic" OR Malaysia OR Malaya OR Malay OR Sabah OR Sarawak OR Malawi OR Nyasaland OR Mali OR Malta OR "Marshall Islands" OR Mauritania OR Mauritius OR "Agalega Islands" OR Mexico OR Micronesia OR "Middle East" OR Moldova OR Moldovia OR Moldovian OR Mongolia OR Montenegro OR Morocco OR Ifni OR Mozambique OR Myanmar OR Myanma OR Burma OR Namibia OR Nepal OR "Netherlands Antilles" OR "New Caledonia" OR Nicaragua OR Niger OR Nigeria OR "Northern Mariana Islands" OR Oman OR Muscat OR Pakistan OR Palau OR Palestine OR Panama OR Paraguay OR Peru OR Philippines OR Philipines OR Phillipines OR Phillippines OR Poland OR Portugal OR "Puerto Rico" Romania OR Rumania OR Roumania OR Russia OR Russian OR Rwanda OR Ruanda OR "Saint Kitts" OR "St Kitts" OR Nevis OR "Saint Lucia" OR "St Lucia" OR "Saint Vincent" OR "St Vincent" OR Grenadines OR Samoa OR "Samoa Islands" OR "Navigator Island" OR "Navigator Islands" OR "Sao Tome" OR "Saudi Arabia" OR Senegal OR Serbia OR Montenegro OR "Sierra Leone" OR Slovenia OR "Sri Lanka" OR Ceylon OR "Solomon Islands" OR Somalia OR Sudan OR "South Sudan" OR Suriname OR Surinam OR Swaziland OR Syria OR Tajikistan OR Tadzhiestan OR Tadjikistan OR Tadzhi OR Tanzania OR Thailand OR Togo OR "Togolese Republic" OR Tonga OR Trinidad OR Tobago OR Tunisia OR Turkey OR Turkmenistan OR Turkmen OR Uganda OR Ukraine OR Uruguay OR USSR OR "Soviet Union" OR "Union of Soviet Socialist Republics" OR Uzbekistan OR Uzbek OR Vanuatu OR "New Hebrides" OR Vietnam OR "Viet Nam" OR "West Bank" OR Yemen OR Yugoslavia OR Zambia OR Zimbabwe OR Rhodesia OR "developing country" OR "developing countries" OR "developing nation" OR "developing nations" OR "developing population" OR "developing populations" OR "developing world" OR</p> |
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|    | <p>"less developed country" OR "less developed countries" OR "less developed nation" OR "less developed nations" OR "less developed population" OR "less developed populations" OR "less developed world" OR "lesser developed country" OR "lesser developed countries" OR "lesser developed nation" OR "lesser developed nations" OR "lesser developed population" OR "lesser developed populations" OR "lesser developed world" OR "under developed country" OR "under developed countries" OR "under developed nation" OR "under developed nations" OR "under developed population" OR "under developed populations" OR "under developed world" OR "underdeveloped country" OR "underdeveloped countries" OR "underdeveloped nation" OR "underdeveloped nations" OR "underdeveloped population" OR "underdeveloped populations" OR "underdeveloped world" OR "middle income country" OR "middle income countries" OR "middle income nation" OR "middle income nations" OR "middle income population" OR "middle income populations" OR "low income country" OR "low income countries" OR "low income nation" OR "low income nations" OR "low income population" OR "low income populations" OR "lower income country" OR "lower income countries" OR "lower income nation" OR "lower income nations" OR "lower income population" OR "lower income populations" OR "underserved country" OR "underserved countries" OR "underserved nation" OR "underserved nations" OR "underserved population" OR "underserved populations" OR "underserved world" OR "under served country" OR "under served countries" OR "under served nation" OR "under served nations" OR "under served population" OR "under served populations" OR "under served world" OR "deprived country" OR "deprived countries" OR "deprived nation" OR "deprived nations" OR "deprived population" OR "deprived populations" OR "deprived world" OR "poor country" OR "poor countries" OR "poor nation" OR "poor nations" OR "poor population" OR "poor populations" OR "poor world" OR "poorer country" OR "poorer countries" OR "poorer nation" OR "poorer nations" OR "poorer population" OR "poorer populations" OR "poorer world" OR "developing economy" OR "developing economies" OR "less developed economy" OR "less developed economies" OR "lesser developed economy" OR "lesser developed economies" OR "under developed economy" OR "under developed economies" OR "underdeveloped economy" OR "underdeveloped economies" OR "middle income economy" OR "middle income economies" OR "low income economy" OR "low income economies" OR "lower income economy" OR "lower income economies" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR lmic OR lmics OR "third world" OR "lami country" OR "lami countries" OR "transitional country" OR "transitional countries" )</p> |
| #4 | Search #1 AND #2 AND #3   |

### 3) PsycINFO (via Ovid, 1987 -2016)

| Search number | Search |
|---------------|--------|
|---------------|--------|

|                              |  |
|------------------------------|--|
| <p>#1<br/>[Program]</p>      | <p>(saving* or micro-saving* or micro saving* or microsaving* or ROSCA* or stokvel* or saving group* or VSLA or ASCA or village bank* or (financial adj2 (literacy or literate)) or Aflatoun or YouthSafe or (financial adj2 education) or ((economic adj2 literacy) or literate) or (economic adj2 education) or (financial adj2 skills) or (economic adj2 skills) or (financial adj2 training) or (economic adj2 training) or (financial adj2 knowledge) or (economic adj2 knowledge) or financial inclusion or banking or budgeting or money manag* or earmarking or (saving adj2 account*) or bank account* or youth account* or lock box or piggy bank or cash box or saving box or safe deposit box or safe-deposit box).ti,ab.</p>  |
| <p>#2<br/>[Study Design]</p> | <p>(randomized control* trial OR randomised control* trial OR randomised OR randomized OR RCT OR randomly OR trial OR experiment* OR control group OR comparison group).ti,ab.</p>   |
| <p>#3<br/>[Country]</p>      | <p>(Africa OR Asia OR Caribbean OR "West Indies" OR "South America" OR "Latin America" OR "Central America" OR Afghanistan OR Albania OR Algeria OR Angola OR Antigua OR Barbuda OR Armenia OR Armenian OR Aruba OR Azerbaijan OR Bahrain OR Bangladesh OR Barbados OR Benin OR Byelarus OR Byelorussian OR Belarus OR Belorussian OR Belorussia OR Belize OR Bhutan OR Bolivia OR Bosnia OR Herzegovina OR Hercegovina OR Botswana OR Brasil OR Brazil OR Bulgaria OR "Burkina Faso" OR "Burkina Fasso" OR "Upper Volta" OR Burundi OR Urundi OR Cambodia OR "Khmer Republic" OR Kampuchea OR Cameroon OR Camerouns OR Cameron OR Camerons OR "Cape Verde" OR "Central African Republic" OR Chad OR Chile OR China OR Colombia OR Comoros OR "Comoro Islands" OR Comores OR Mayotte OR Congo OR Zaire OR "Costa Rica" OR "Cote d'Ivoire" OR "Ivory Coast" OR Croatia OR Cuba OR Cyprus OR Czechoslovakia OR "Czech Republic" OR Slovakia OR "Slovak Republic" Djibouti OR "French Somaliland" OR Dominica OR "Dominican Republic" OR "East Timor" OR "East Timur" OR "Timor Leste" OR Ecuador OR Egypt OR "United Arab Republic" OR "El Salvador" OR Eritrea OR Estonia OR Ethiopia OR Fiji OR Gabon OR "Gabonese Republic" OR Gambia OR Gaza OR Georgia OR Georgian OR Ghana OR "Gold Coast" OR Greece OR Grenada OR Guatemala OR Guinea OR Guam OR Guiana OR Guyana OR Haiti OR Honduras OR India OR Maldives OR Indonesia OR Iran OR Iraq OR "Isle of Man" OR Jamaica OR Jordan OR Kazakhstan OR Kazakh OR Kenya OR Kiribati OR Korea OR Kosovo OR Kyrgyzstan OR Kirghizia OR "Kyrgyz Republic" OR Kirghiz OR Kirgizstan OR "Lao PDR" OR Laos OR Latvia OR Lebanon OR Lesotho OR Basutoland OR Liberia OR Libya OR Lithuania Macedonia OR Madagascar OR "Malagasy Republic" OR Malaysia OR Malaya OR Malay OR Sabah OR Sarawak OR Malawi OR Nyasaland OR Mali OR Malta OR "Marshall Islands" OR Mauritania OR Mauritius OR "Agalega Islands" OR Mexico OR Micronesia OR "Middle East" OR Moldova OR Moldovia OR Moldovian OR Mongolia OR Montenegro OR Morocco OR Ifni OR Mozambique OR Myanmar OR Myanma OR Burma OR Namibia OR Nepal OR "Netherlands Antilles" OR "New Caledonia" OR Nicaragua OR Niger OR Nigeria OR "Northern Mariana Islands" OR Oman OR Muscat OR Pakistan OR Palau OR Palestine OR Panama OR Paraguay OR Peru OR Philippines OR Philipines OR Phillipines OR Phillippines OR Poland OR Portugal OR "Puerto Rico" Romania OR Rumania OR Roumania OR Russia OR Russian OR Rwanda OR Ruanda OR "Saint Kitts" OR "St Kitts" OR Nevis OR "Saint Lucia" OR "St Lucia"</p> |

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|    | OR "Saint Vincent" OR "St Vincent" OR Grenadines OR Samoa OR "Samoan Islands" OR "Navigator Island" OR "Navigator Islands" OR "Sao Tome" OR "Saudi Arabia" OR Senegal OR Serbia OR Montenegro OR "Sierra Leone" OR Slovenia OR "Sri Lanka" OR Ceylon OR "Solomon Islands" OR Somalia OR Sudan OR "South Sudan" OR Suriname OR Surinam OR Swaziland OR Syria OR Tajikistan OR Tadjhikistan OR Tadjikistan OR Tadjhik OR Tanzania OR Thailand OR Togo OR "Togolese Republic" OR Tonga OR Trinidad OR Tobago OR Tunisia OR Turkey OR Turkmenistan OR Turkmen OR Uganda OR Ukraine OR Uruguay OR USSR OR "Soviet Union" OR "Union of Soviet Socialist Republics" OR Uzbekistan OR Uzbek OR Vanuatu OR "New Hebrides" OR Vietnam OR "Viet Nam" OR "West Bank" OR Yemen OR Yugoslavia OR Zambia OR Zimbabwe OR Rhodesia OR ((developing OR "less* developed" OR "under developed" OR underdeveloped OR "middle income" OR low* income OR underserved OR "under served" OR deprived OR poor*) ADJ (count* OR nation? OR population? OR world)) OR ((developing OR "less* developed" OR "under developed" OR underdeveloped OR "middle income" OR "low* income") ADJ (economy OR economies)) OR (low* ADJ (gdp OR gnp OR "gross domestic" OR "gross national")) OR (low ADJ3 middle ADJ3 count*) OR (lmic OR lmics OR "third world" OR "lami count*") OR "transitional count*").af |
| #4 | Search #1 AND #2 AND #3  |

- 4) International Bibliography of Social Science (IBSS)**  
**5) Applied Social Science Index and Abstracts (ASSIA)**  
**(via ProQuest)**

| Search number        | Search  |
|----------------------|---|
| #1<br>[Program]      | AB, TI (saving* OR micro-saving* OR "micro saving*" OR microsaving* OR ROSCA* OR stokvel* OR "saving group*" OR VSLA OR ASCA OR "village bank*" OR (financial N/2 (literacy OR literate)) OR Aflatoun OR YouthSafe OR (financial N/2 education) OR (economic N/2 (literacy OR literate)) OR (economic N/2 education) OR (financial N/2 skills) OR (economic N/2 skills) OR (financial N/2 training) OR (economic N/2 training) OR (financial N/2 knowledge) OR (economic N/2 knowledge) OR "financial inclusion" OR banking OR budgeting OR "money manag*" OR earmarking OR "saving N/2 account*" OR "bank account*" OR "youth account*" OR "lock box" OR "piggy bank" OR "cash box" OR "saving box" OR "safe deposit box" OR "safe-deposit box") |
| #2<br>[Study Design] | AB, TI ("randomized control* trial" OR "randomised control* trial" OR randomised OR randomized OR RCT OR randomly OR trial OR experiment* OR "control group" OR "comparison group")   |
| #3<br>[Country]      | (Africa OR Asia OR Caribbean OR "West Indies" OR "South America" OR "Latin America" OR "Central America" OR Afghanistan OR Albania OR Algeria OR Angola OR Antigua OR Barbuda OR Armenia OR Armenian OR Aruba OR Azerbaijan OR Bahrain OR Bangladesh OR Barbados OR Benin OR Byelarus OR Byelorussian OR Belarus OR Belorussian OR Belorussia OR Belize OR Bhutan OR Bolivia OR Bosnia OR Herzegovina OR Hercegovina OR Botswana OR Brasil OR Brazil OR   |

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|  | <p> Bulgaria OR "Burkina Faso" OR "Burkina Fasso" OR "Upper Volta" OR<br/> Burundi OR Urundi OR Cambodia OR "Khmer Republic" OR<br/> Kampuchea OR Cameroon OR Cameroons OR Cameron OR Camerons<br/> OR "Cape Verde" OR "Central African Republic" OR Chad OR Chile OR<br/> China OR Colombia OR Comoros OR "Comoro Islands" OR Comores OR<br/> Mayotte OR Congo OR Zaire OR "Costa Rica" OR "Cote d'Ivoire" OR<br/> "Ivory Coast" OR Croatia OR Cuba OR Cyprus OR Czechoslovakia OR<br/> "Czech Republic" OR Slovakia OR "Slovak Republic" Djibouti OR<br/> "French Somaliland" OR Dominica OR "Dominican Republic" OR "East<br/> Timor" OR "East Timur" OR "Timor Leste" OR Ecuador OR Egypt OR<br/> "United Arab Republic" OR "El Salvador" OR Eritrea OR Estonia OR<br/> Ethiopia OR Fiji OR Gabon OR "Gabonese Republic" OR Gambia OR<br/> Gaza OR Georgia OR Georgian OR Ghana OR "Gold Coast" OR Greece<br/> OR Grenada OR Guatemala OR Guinea OR Guam OR Guiana OR<br/> Guyana OR Haiti OR Honduras OR India OR Maldives OR Indonesia OR<br/> Iran OR Iraq OR "Isle of Man" OR Jamaica OR Jordan OR Kazakhstan<br/> OR Kazakh OR Kenya OR Kiribati OR Korea OR Kosovo OR Kyrgyzstan<br/> OR Kirghizia OR "Kyrgyz Republic" OR Kirghiz OR Kirgizstan OR "Lao<br/> PDR" OR Laos OR Latvia OR Lebanon OR Lesotho OR Basutoland OR<br/> Liberia OR Libya OR Lithuania Macedonia OR Madagascar OR<br/> "Malagasy Republic" OR Malaysia OR Malaya OR Malay OR Sabah OR<br/> Sarawak OR Malawi OR Nyasaland OR Mali OR Malta OR "Marshall<br/> Islands" OR Mauritania OR Mauritius OR "Agalega Islands" OR Mexico<br/> OR Micronesia OR "Middle East" OR Moldova OR Moldovia OR<br/> Moldovian OR Mongolia OR Montenegro OR Morocco OR Ifni OR<br/> Mozambique OR Myanmar OR Myanma OR Burma OR Namibia OR<br/> Nepal OR "Netherlands Antilles" OR "New Caledonia" OR Nicaragua OR<br/> Niger OR Nigeria OR "Northern Mariana Islands" OR Oman OR Muscat<br/> OR Pakistan OR Palau OR Palestine OR Panama OR Paraguay OR Peru<br/> OR Philippines OR Philipines OR Phillipines OR Phillippines OR Poland<br/> OR Portugal OR "Puerto Rico" Romania OR Rumania OR Roumania OR<br/> Russia OR Russian OR Rwanda OR Ruanda OR "Saint Kitts" OR "St<br/> Kitts" OR Nevis OR "Saint Lucia" OR "St Lucia" OR "Saint Vincent" OR<br/> "St Vincent" OR Grenadines OR Samoa OR "Samoan Islands" OR<br/> "Navigator Island" OR "Navigator Islands" OR "Sao Tome" OR "Saudi<br/> Arabia" OR Senegal OR Serbia OR Montenegro OR "Sierra Leone" OR<br/> Slovenia OR "Sri Lanka" OR Ceylon OR "Solomon Islands" OR Somalia<br/> OR Sudan OR "South Sudan" OR Suriname OR Surinam OR Swaziland<br/> OR Syria OR Tajikistan OR Tadjhikistan OR Tadjikistan OR Tadjhik OR<br/> Tanzania OR Thailand OR Togo OR "Togolese Republic" OR Tonga OR<br/> Trinidad OR Tobago OR Tunisia OR Turkey OR Turkmenistan OR<br/> Turkmen OR Uganda OR Ukraine OR Uruguay OR USSR OR "Soviet<br/> Union" OR "Union of Soviet Socialist Republics" OR Uzbekistan OR<br/> Uzbek OR Vanuatu OR "New Hebrides" OR Vietnam OR "Viet Nam" OR<br/> "West Bank" OR Yemen OR Yugoslavia OR Zambia OR Zimbabwe OR<br/> Rhodesia Rhodesia OR "developing country" OR "developing countries"<br/> OR "developing nation" OR "developing nations" OR "developing<br/> population" OR "developing populations" OR "developing world" OR<br/> "less developed country" OR "less developed countries" OR "less<br/> developed nation" OR "less developed nations" OR "less developed<br/> population" OR "less developed populations" OR "less developed<br/> world" OR "lesser developed country" OR "lesser developed countries"<br/> OR "lesser developed nation" OR "lesser developed nations" OR<br/> "lesser developed population" OR "lesser developed populations" OR<br/> "lesser developed world" OR "under developed country" OR "under </p> |
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|    | <p>developed countries" OR "under developed nation" OR "under developed nations" OR "under developed population" OR "under developed populations" OR "under developed world" OR "underdeveloped country" OR "underdeveloped countries" OR "underdeveloped nation" OR "underdeveloped nations" OR "underdeveloped population" OR "underdeveloped populations" OR "underdeveloped world" OR "middle income country" OR "middle income countries" OR "middle income nation" OR "middle income nations" OR "middle income population" OR "middle income populations" OR "low income country" OR "low income countries" OR "low income nation" OR "low income nations" OR "low income population" OR "low income populations" OR "lower income country" OR "lower income countries" OR "lower income nation" OR "lower income nations" OR "lower income population" OR "lower income populations" OR "underserved country" OR "underserved countries" OR "underserved nation" OR "underserved nations" OR "underserved population" OR "underserved populations" OR "underserved world" OR "under served country" OR "under served countries" OR "under served nation" OR "under served nations" OR "under served population" OR "under served populations" OR "under served world" OR "deprived country" OR "deprived countries" OR "deprived nation" OR "deprived nations" OR "deprived population" OR "deprived populations" OR "deprived world" OR "poor country" OR "poor countries" OR "poor nation" OR "poor nations" OR "poor population" OR "poor populations" OR "poor world" OR "poorer country" OR "poorer countries" OR "poorer nation" OR "poorer nations" OR "poorer population" OR "poorer populations" OR "poorer world" OR "developing economy" OR "developing economies" OR "less developed economy" OR "less developed economies" OR "lesser developed economy" OR "lesser developed economies" OR "under developed economy" OR "under developed economies" OR "underdeveloped economy" OR "underdeveloped economies" OR "middle income economy" OR "middle income economies" OR "low income economy" OR "low income economies" OR "lower income economy" OR "lower income economies" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR lmic OR lmic OR "third world" OR "lami country" OR "lami countries" OR "transitional country" OR "transitional countries"</p> |
| #4 | Search #1 AND #2 AND #3  |

**6) ECONLIT  
(via ProQuest)**

| Search number   | Search   |
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| #1<br>[Program] | <p>AB, TI (saving* OR micro-saving* OR "micro saving*" OR microsaving* OR ROSCA* OR stokvel* OR "saving group*" OR VSLA OR ASCA OR "village bank*" OR (financial N/2 (literacy OR literate)) OR Aflatoun OR YouthSafe OR (financial N/2 education) OR (economic N/2 (literacy OR literate)) OR (economic N/2 education) OR (financial N/2 skills) OR (economic N/2 skills) OR (financial N/2 training) OR (economic N/2 training) OR (financial N/2 knowledge) OR (economic N/2 knowledge) OR "financial inclusion" OR banking OR budgeting OR "money manag*" OR earmarking OR "saving N/2</p> |

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|                      | account*" OR "bank account*" OR "youth account*" OR "lock box" OR "piggy bank" OR "cash box" OR "saving box" OR "safe deposit box" OR "safe-deposit box")   |
| #2<br>[Program]      | SU (Exact("demography, banking, savings banks, profitability" OR "consumption, saving, production, investment, labor markets, and informal economy: other (e29)" OR "consumption and savings" OR "commitment savings, micro-savings, educational resources, school participation" OR "commitment savings" OR "aid effectiveness, meta study, investments, savings" OR "economic development, mechanisms, life-cycle savings, commodity prices, economic growth, nutritional improvement" OR "consumption, savings, unemployment" OR "consumption, savings, consumption smoothing, precautionary savings, economic shocks, russia" OR "saving and investment correlations." OR "economic insecurity, micro credit, micro insurance, micro savings, micro finance institutions, poverty" OR "consumption, children, precautionary saving, life cycle, structural estimation" OR "credit constraints, savings, recessions, uncertainty" OR "consumption, saving, life-cycle model, permanent-income hypothesis, liquidity constraints" OR "consumption, saving, production, investment, labor markets, and informal economy: general (includes measurement and data) (e20)" OR "consumption-savings" OR "saving goals" OR "current account, age structure, life-cycle saving behavior." OR "consumption/saving decision" OR "saving, africa, household savings, transactions costs, risk management" OR "saving" OR "saving behavior" OR "saving (20.21)"))  |
| #3<br>[Study Design] | AB, TI ("randomized control* trial" OR "randomised control* trial" OR randomised OR randomized OR RCT OR randomly OR trial OR experiment* OR "control group" OR "comparison group")   |
| #4<br>[Country]      | (Africa OR Asia OR Caribbean OR "West Indies" OR "South America" OR "Latin America" OR "Central America" OR Afghanistan OR Albania OR Algeria OR Angola OR Antigua OR Barbuda OR Armenia OR Armenian OR Aruba OR Azerbaijan OR Bahrain OR Bangladesh OR Barbados OR Benin OR Byelarus OR Byelorussian OR Belarus OR Belorussian OR Belorussia OR Belize OR Bhutan OR Bolivia OR Bosnia OR Herzegovina OR Hercegovina OR Botswana OR Brasil OR Brazil OR Bulgaria OR "Burkina Faso" OR "Burkina Fasso" OR "Upper Volta" OR Burundi OR Urundi OR Cambodia OR "Khmer Republic" OR Kampuchea OR Cameroon OR Cameroons OR Cameron OR Camerons OR "Cape Verde" OR "Central African Republic" OR Chad OR Chile OR China OR Colombia OR Comoros OR "Comoro Islands" OR Comores OR Mayotte OR Congo OR Zaire OR "Costa Rica" OR "Cote d'Ivoire" OR "Ivory Coast" OR Croatia OR Cuba OR Cyprus OR Czechoslovakia OR "Czech Republic" OR Slovakia OR "Slovak Republic" Djibouti OR "French Somaliland" OR Dominica OR "Dominican Republic" OR "East Timor" OR "East Timur" OR "Timor Leste" OR Ecuador OR Egypt OR "United Arab Republic" OR "El Salvador" OR Eritrea OR Estonia OR Ethiopia OR Fiji OR Gabon OR "Gabonese Republic" OR Gambia OR Gaza OR Georgia OR Georgian OR Ghana OR "Gold Coast" OR Greece OR Grenada OR Guatemala OR Guinea OR Guam OR Guiana OR Guyana OR Haiti OR Honduras OR India OR Maldives OR Indonesia OR Iran OR Iraq OR "Isle of Man" OR Jamaica OR Jordan OR Kazakhstan OR Kazakh OR Kenya OR Kiribati OR Korea OR Kosovo OR Kyrgyzstan OR Kirghizia OR "Kyrgyz Republic" OR Kirghiz OR Kirgizstan OR "Lao |

PDR" OR Laos OR Latvia OR Lebanon OR Lesotho OR Basutoland OR  
 Liberia OR Libya OR Lithuania Macedonia OR Madagascar OR  
 "Malagasy Republic" OR Malaysia OR Malaya OR Malay OR Sabah OR  
 Sarawak OR Malawi OR Nyasaland OR Mali OR Malta OR "Marshall  
 Islands" OR Mauritania OR Mauritius OR "Agalega Islands" OR Mexico  
 OR Micronesia OR "Middle East" OR Moldova OR Moldavia OR  
 Moldovian OR Mongolia OR Montenegro OR Morocco OR Ifni OR  
 Mozambique OR Myanmar OR Myanma OR Burma OR Namibia OR  
 Nepal OR "Netherlands Antilles" OR "New Caledonia" OR Nicaragua OR  
 Niger OR Nigeria OR "Northern Mariana Islands" OR Oman OR Muscat  
 OR Pakistan OR Palau OR Palestine OR Panama OR Paraguay OR Peru  
 OR Philippines OR Philipines OR Phillipines OR Phillippines OR Poland  
 OR Portugal OR "Puerto Rico" Romania OR Rumania OR Roumania OR  
 Russia OR Russian OR Rwanda OR Ruanda OR "Saint Kitts" OR "St  
 Kitts" OR Nevis OR "Saint Lucia" OR "St Lucia" OR "Saint Vincent" OR  
 "St Vincent" OR Grenadines OR Samoa OR "Samoa Islands" OR  
 "Navigator Island" OR "Navigator Islands" OR "Sao Tome" OR "Saudi  
 Arabia" OR Senegal OR Serbia OR Montenegro OR "Sierra Leone" OR  
 Slovenia OR "Sri Lanka" OR Ceylon OR "Solomon Islands" OR Somalia  
 OR Sudan OR "South Sudan" OR Suriname OR Surinam OR Swaziland  
 OR Syria OR Tajikistan OR TadzhiKistan OR Tadjikistan OR TadzhiK OR  
 Tanzania OR Thailand OR Togo OR "Togolese Republic" OR Tonga OR  
 Trinidad OR Tobago OR Tunisia OR Turkey OR Turkmenistan OR  
 Turkmen OR Uganda OR Ukraine OR Uruguay OR USSR OR "Soviet  
 Union" OR "Union of Soviet Socialist Republics" OR Uzbekistan OR  
 Uzbek OR Vanuatu OR "New Hebrides" OR Vietnam OR "Viet Nam" OR  
 "West Bank" OR Yemen OR Yugoslavia OR Zambia OR Zimbabwe OR  
 Rhodesia Rhodesia OR "developing country" OR "developing countries"  
 OR "developing nation" OR "developing nations" OR "developing  
 population" OR "developing populations" OR "developing world" OR  
 "less developed country" OR "less developed countries" OR "less  
 developed nation" OR "less developed nations" OR "less developed  
 population" OR "less developed populations" OR "less developed  
 world" OR "lesser developed country" OR "lesser developed countries"  
 OR "lesser developed nation" OR "lesser developed nations" OR  
 "lesser developed population" OR "lesser developed populations" OR  
 "lesser developed world" OR "under developed country" OR "under  
 developed countries" OR "under developed nation" OR "under  
 developed nations" OR "under developed population" OR "under  
 developed populations" OR "under developed world" OR  
 "underdeveloped country" OR "underdeveloped countries" OR  
 "underdeveloped nation" OR "underdeveloped nations" OR  
 "underdeveloped population" OR "underdeveloped populations" OR  
 "underdeveloped world" OR "middle income country" OR "middle  
 income countries" OR "middle income nation" OR "middle income  
 nations" OR "middle income population" OR "middle income  
 populations" OR "low income country" OR "low income countries"  
 OR "low income nation" OR "low income nations" OR "low income  
 population" OR "low income populations" OR "lower income country"  
 OR "lower income countries" OR "lower income nation" OR "lower  
 income nations" OR "lower income population" OR "lower income  
 populations" OR "underserved country" OR "underserved countries"  
 OR "underserved nation" OR "underserved nations" OR "underserved  
 population" OR "underserved populations" OR "underserved world"  
 OR "under served country" OR "under served countries" OR "under



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|    | served nation" OR "under served nations" OR "under served population" OR "under served populations" OR "under served world" OR "deprived country" OR "deprived countries" OR "deprived nation" OR "deprived nations" OR "deprived population" OR "deprived populations" OR "deprived world" OR "poor country" OR "poor countries" OR "poor nation" OR "poor nations" OR "poor population" OR "poor populations" OR "poor world" OR "poorer country" OR "poorer countries" OR "poorer nation" OR "poorer nations" OR "poorer population" OR "poorer populations" OR "poorer world" OR "developing economy" OR "developing economies" OR "less developed economy" OR "less developed economies" OR "lesser developed economy" OR "lesser developed economies" OR "under developed economy" OR "under developed economies" OR "underdeveloped economy" OR "underdeveloped economies" OR "middle income economy" OR "middle income economies" OR "low income economy" OR "low income economies" OR "lower income economy" OR "lower income economies" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR lmic OR lmics OR "third world" OR "lami country" OR "lami countries" OR "transitional country" OR "transitional countries" |
| #5 | Search (#1 OR #2) AND #3 AND #4   |

## 7) JOLIS

| Search number        | Search   |
|----------------------|--|
| #1<br>[Program]      | Title (saving\$ OR micro-saving\$ OR micro saving\$ OR microsaving\$ OR ROSCA\$ OR stokvel\$ OR village bank\$ OR saving group\$ OR financial NEAR literacy OR financial inclusion OR banking OR bank account\$ OR lock box OR cash box OR safe-deposit box) |
| #2<br>[Study Design] | Keywords Anywhere (randomized control\$ trial OR randomised control\$ trial OR randomised OR randomized OR RCT OR randomly OR trial OR experiment\$ OR control group OR comparison group)  |
| #3                   | Search #1 AND #2   |

## 8) IDEAS/RePEc

(saving | micro-saving | microsaving | Aflatoun | YouthSafe ) + (“randomized control\* trial” | “randomised control\* trial” | randomised | randomized | RCT | trial | experiment\* )

## 9) SCOPUS

| Search number | Search |
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| #1<br>[Program]      | TITLE-ABS-KEY (saving* OR micro-saving* OR "micro saving*" OR microsaving* OR ROSCA* OR stokvel* OR ASCA OR VSLA OR "village bank*" OR "saving group*" OR (financial PRE/2 literacy) OR (financial PRE/2 education) OR (economic PRE/2 literacy) OR (economic PRE/2 education) OR (financial PRE/2 skills) OR (economic PRE/2 skills) OR (financial PRE/2 training) OR (economic PRE/2 training) OR (financial PRE/2 knowledge) OR (economic PRE/2 knowledge) OR "financial inclusion" OR banking OR budgeting OR "money manag*" OR earmarking OR (saving PRE/2 account*) OR "bank account*" OR "youth account*" OR "lock box" OR "piggy bank" OR "cash box " OR "saving* box" OR "safe deposit box" OR "safe-deposit box") AND PUBYEAR AFT 1989   |
| #2<br>[Study Design] | TITLE-ABS-KEY ("randomized control* trial" OR "randomised control* trial" OR randomised OR randomized OR RCT OR randomly OR trial OR experiment* OR "control group" OR "comparison group") AND PUBYEAR AFT 1989  |
| #3<br>[Country]      | ALL (Africa OR Asia OR Caribbean OR "West Indies" OR "South America" OR "Latin America" OR "Central America" OR Afghanistan OR Albania OR Algeria OR Angola OR Antigua OR Barbuda OR Armenia OR Armenian OR Aruba OR Azerbaijan OR Bahrain OR Bangladesh OR Barbados OR Benin OR Byelarus OR Byelorussian OR Belarus OR Belorussian OR Belorussia OR Belize OR Bhutan OR Bolivia OR Bosnia OR Herzegovina OR Hercegovina OR Botswana OR Brasil OR Brazil OR Bulgaria OR "Burkina Faso" OR "Burkina Fasso" OR "Upper Volta" OR Burundi OR Urundi OR Cambodia OR "Khmer Republic" OR Kampuchea OR Cameroon OR Cameroons OR Cameron OR Camerons OR "Cape Verde" OR "Central African Republic" OR Chad OR Chile OR China OR Colombia OR Comoros OR "Comoro Islands" OR Comores OR Mayotte OR Congo OR Zaire OR "Costa Rica" OR "Cote d'Ivoire" OR "Ivory Coast" OR Croatia OR Cuba OR Cyprus OR Czechoslovakia OR "Czech Republic" OR Slovakia OR "Slovak Republic" Djibouti OR "French Somaliland" OR Dominica OR "Dominican Republic" OR "East Timor" OR "East Timur" OR "Timor Leste" OR Ecuador OR Egypt OR "United Arab Republic" OR "El Salvador" OR Eritrea OR Estonia OR Ethiopia OR Fiji OR Gabon OR "Gabonese Republic" OR Gambia OR Gaza OR Georgia OR Georgian OR Ghana OR "Gold Coast" OR Greece OR Grenada OR Guatemala OR Guinea OR Guam OR Guiana OR Guyana OR Haiti OR Honduras OR India OR Maldives OR Indonesia OR Iran OR Iraq OR "Isle of Man" OR Jamaica OR Jordan OR Kazakhstan OR Kazakh OR Kenya OR Kiribati OR Korea OR Kosovo OR Kyrgyzstan OR Kirghizia OR "Kyrgyz Republic" OR Kirghiz OR Kirgizstan OR "Lao PDR" OR Laos OR Latvia OR Lebanon OR Lesotho OR Basutoland OR Liberia OR Libya OR Lithuania Macedonia OR Madagascar OR "Malagasy Republic" OR Malaysia OR Malaya OR Malay OR Sabah OR Sarawak OR Malawi OR Nyasaland OR Mali OR Malta OR "Marshall Islands" OR Mauritania OR Mauritius OR "Agalega Islands" OR Mexico OR Micronesia OR "Middle East" OR Moldova OR Moldovia OR Moldovian OR Mongolia OR Montenegro OR Morocco OR Ifni OR Mozambique OR Myanmar OR Myanma OR Burma OR Namibia OR Nepal OR "Netherlands Antilles" OR "New Caledonia" OR Nicaragua OR Niger OR Nigeria OR "Northern Mariana Islands" OR Oman OR Muscat OR Pakistan OR Palau OR Palestine OR Panama OR Paraguay OR Peru OR Philippines OR Philipines OR Phillipines OR Phillippines OR Poland OR Portugal OR "Puerto Rico" Romania OR Rumania OR Roumania OR |

Russia OR Russian OR Rwanda OR Ruanda OR "Saint Kitts" OR "St Kitts" OR Nevis OR "Saint Lucia" OR "St Lucia" OR "Saint Vincent" OR "St Vincent" OR Grenadines OR Samoa OR "Samoan Islands" OR "Navigator Island" OR "Navigator Islands" OR "Sao Tome" OR "Saudi Arabia" OR Senegal OR Serbia OR Montenegro OR "Sierra Leone" OR Slovenia OR "Sri Lanka" OR Ceylon OR "Solomon Islands" OR Somalia OR Sudan OR "South Sudan" OR Suriname OR Surinam OR Swaziland OR Syria OR Tajikistan OR Tadzhikistan OR Tadjikistan OR Tadzhih OR Tanzania OR Thailand OR Togo OR "Togolese Republic" OR Tonga OR Trinidad OR Tobago OR Tunisia OR Turkey OR Turkmenistan OR Turkmen OR Uganda OR Ukraine OR Uruguay OR USSR OR "Soviet Union" OR "Union of Soviet Socialist Republics" OR Uzbekistan OR Uzbek OR Vanuatu OR "New Hebrides" OR Vietnam OR "Viet Nam" OR "West Bank" OR Yemen OR Yugoslavia OR Zambia OR Zimbabwe OR Rhodesia OR "developing country" OR "developing countries" OR "developing nation" OR "developing nations" OR "developing population" OR "developing populations" OR "developing world" OR "less developed country" OR "less developed countries" OR "less developed nation" OR "less developed nations" OR "less developed population" OR "less developed populations" OR "less developed world" OR "lesser developed country" OR "lesser developed countries" OR "lesser developed nation" OR "lesser developed nations" OR "lesser developed population" OR "lesser developed populations" OR "lesser developed world" OR "under developed country" OR "under developed countries" OR "under developed nation" OR "under developed nations" OR "under developed population" OR "under developed populations" OR "under developed world" OR "underdeveloped country" OR "underdeveloped countries" OR "underdeveloped nation" OR "underdeveloped nations" OR "underdeveloped population" OR "underdeveloped populations" OR "underdeveloped world" OR "middle income country" OR "middle income countries" OR "middle income nation" OR "middle income nations" OR "middle income population" OR "middle income populations" OR "low income country" OR "low income countries" OR "low income nation" OR "low income nations" OR "low income population" OR "low income populations" OR "lower income country" OR "lower income countries" OR "lower income nation" OR "lower income nations" OR "lower income population" OR "lower income populations" OR "underserved country" OR "underserved countries" OR "underserved nation" OR "underserved nations" OR "underserved population" OR "underserved populations" OR "underserved world" OR "under served country" OR "under served countries" OR "under served nation" OR "under served nations" OR "under served population" OR "under served populations" OR "under served world" OR "deprived country" OR "deprived countries" OR "deprived nation" OR "deprived nations" OR "deprived population" OR "deprived populations" OR "deprived world" OR "poor country" OR "poor countries" OR "poor nation" OR "poor nations" OR "poor population" OR "poor populations" OR "poor world" OR "poorer country" OR "poorer countries" OR "poorer nation" OR "poorer nations" OR "poorer population" OR "poorer populations" OR "poorer world" OR "developing economy" OR "developing economies" OR "less developed economy" OR "less developed economies" OR "lesser developed economy" OR "lesser developed economies" OR "under developed economy" OR "under developed economies" OR "underdeveloped

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|    | economy" OR "underdeveloped economies" OR "middle income economy" OR "middle income economies" OR "low income economy" OR "low income economies" OR "lower income economy" OR "lower income economies" OR "low gdp" OR "low gnp" OR "low gross domestic" OR "low gross national" OR "lower gdp" OR "lower gnp" OR "lower gross domestic" OR "lower gross national" OR lmic OR lmics OR "third world" OR "lami country" OR "lami countries" OR "transitional country" OR "transitional countries" |
| #5 | Search #1 AND #2 AND #3 AND #4   |

**10) Business Source Premier  
(Via EBSCOhost Research Databases )**

| Search number        | Search  |
|----------------------|---|
| #1<br>[Program]      | TI, AB (saving* OR micro-saving* OR "micro saving*" OR microsaving* OR ROSCA* OR stokvel* OR ASCA OR VSLA OR "village bank*" OR "saving group*" OR (financial N2 literacy) OR (financial N2 education) OR (economic N2 literacy) OR (economic N2 education) OR (financial N2 skills) OR (economic N2 skills) OR (financial N2 training) OR (economic N2 training) OR (financial N2 knowledge) OR (economic N2 knowledge) OR "financial inclusion" OR banking OR budgeting OR "money manag*" OR earmarking OR (saving N2 account*) OR "bank account*" OR "youth account*" OR "lock box" OR "piggy bank" OR "cash box " OR "saving* box" OR "safe deposit box" OR "safe-deposit box")   |
| #2<br>[Study Design] | TI, AB ("randomized control* trial" OR "randomised control* trial" OR randomised OR randomized OR RCT OR randomly OR trial OR experiment* OR "control group" OR "comparison group")   |
| #3<br>[Country]      | TX(Africa OR Asia OR Caribbean OR "West Indies" OR "South America" OR "Latin America" OR "Central America" OR Afghanistan OR Albania OR Algeria OR Angola OR Antigua OR Barbuda OR Armenia OR Armenian OR Aruba OR Azerbaijan OR Bahrain OR Bangladesh OR Barbados OR Benin OR Byelarus OR Byelorussian OR Belarus OR Belorussian OR Belorussia OR Belize OR Bhutan OR Bolivia OR Bosnia OR Herzegovina OR Hercegovina OR Botswana OR Brasil OR Brazil OR Bulgaria OR "Burkina Faso" OR "Burkina Fasso" OR "Upper Volta" OR Burundi OR Urundi OR Cambodia OR "Khmer Republic" OR Kampuchea OR Cameroon OR Cameroons OR Cameron OR Camerons OR "Cape Verde" OR "Central African Republic" OR Chad OR Chile OR China OR Colombia OR Comoros OR "Comoro Islands" OR Comores OR Mayotte OR Congo OR Zaire OR "Costa Rica" OR "Cote d'Ivoire" OR "Ivory Coast" OR Croatia OR Cuba OR Cyprus OR Czechoslovakia OR "Czech Republic" OR Slovakia OR "Slovak Republic" Djibouti OR "French Somaliland" OR Dominica OR "Dominican Republic" OR "East Timor" OR "East Timur" OR "Timor Leste" OR Ecuador OR Egypt OR "United Arab Republic" OR "El Salvador" OR Eritrea OR Estonia OR Ethiopia OR Fiji OR Gabon OR "Gabonese Republic" OR Gambia OR Gaza OR Georgia OR Georgian OR Ghana OR "Gold Coast" OR Greece OR Grenada OR Guatemala OR Guinea OR Guam OR Guiana OR Guyana OR Haiti OR Honduras OR |

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| #4 | Search S1 AND S2 AND S3 AND (S1 AND S2o AND S3) Published Date: 19900101-20161231 on 2016-03-03 07:13 AM   |

### 3. Programme Implementation Assessment Tool

|                                 |   |
|---------------------------------|---|
| <b>Programme Content</b>        | <ul style="list-style-type: none"> <li>• Is a manual/detailed curriculum of the intervention available?</li> <li>• Are different components of the intervention described in detail?</li> </ul>   |
| <b>Programme Delivery</b>       | <ul style="list-style-type: none"> <li>• Is there information on how programme facilitators were trained and monitored?</li> <li>• Is there information on whether the programme facilitators followed the original manual?</li> <li>• Is there reporting of unforeseen circumstances during programme delivery?</li> <li>• Was the original manual adapted to the specific target population (e.g. cultural adaptation)</li> </ul> |
| <b>Programme Dosage</b>         | <ul style="list-style-type: none"> <li>• How long was each session of the programme?</li> <li>• How frequent were sessions?</li> <li>• How long did the whole programme last for?</li> </ul>  |
| <b>Participants Attendance</b>  | <ul style="list-style-type: none"> <li>• Is there information on the number of participants attending each session?</li> <li>• Is there information on dropout from the programme?</li> </ul>   |
| <b>Participants Engagement/</b> | <ul style="list-style-type: none"> <li>• Is there information on how participants received the programme, how</li> </ul>  |

**Responsiveness**

well they engaged with it, and how acceptable it was for the target population?

**Implementation/Fidelity Rating:**

- Unclear if information is lacking
- Fidelity high if good reporting and no indication of severe deviations from the protocol/manual and low participation/acceptability
- Fidelity low if core components of the programme are not delivered according to the protocol and if attendance/acceptability/exposure is low

**Sources:**

James Bell Associates 2009

([http://www.jbassoc.com/ReportsPublications/Evaluation%20Brief%20-%20Measuring%20Implementation%20Fidelity Octob%E2%80%A6.pdf](http://www.jbassoc.com/ReportsPublications/Evaluation%20Brief%20-%20Measuring%20Implementation%20Fidelity%20Octob%E2%80%A6.pdf)); Durlak & DuPre, 2008.

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**REVIEW AUTHORS**

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**Lead review author:** The lead author is the person who develops and co-ordinates the review team, discusses and assigns roles for individual members of the review team, liaises with the editorial base and takes responsibility for the on-going updates of the review.

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## **ROLES AND RESPONSIBILITIES**

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Please give brief description of content and methodological expertise within the review team. The recommended optimal review team composition includes at least one person on the review team who has content expertise, at least one person who has methodological expertise and at least one person who has statistical expertise. It is also recommended to have one person with information retrieval expertise.

- Content: Janina Steinert, Juliane Zenker, Ute Flipiak
- Systematic review methods: all authors
- Statistical analysis: Janina Steinert & Ani Movsisyan & Yulia Shenderovich
- Information retrieval: Janina Steinert & Ani Movsisyan & Juliane Zenker & Ute Flipiak

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## **SOURCES OF SUPPORT**

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However, the abovementioned sources of funding are not specific to this systematic review project.

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## **DECLARATIONS OF INTEREST**

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JS and YS are involved in an ongoing trial in this area. However, all eligible trials will be evaluated objectively, consistent with the review protocol.

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## **PRELIMINARY TIMEFRAME**

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February 2017

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## **PLANS FOR UPDATING THE REVIEW**

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Reviews should include in the protocol specifications for how the review, once completed, will be updated. This should include, at a minimum, information on who will be responsible and the frequency with which updates can be expected.

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## **AUTHOR DECLARATION**

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### **Authors' responsibilities**

By completing this form, you accept responsibility for preparing, maintaining and updating the review in accordance with Campbell Collaboration policy. The Campbell Collaboration will provide as much support as possible to assist with the preparation of the review.

A draft review must be submitted to the relevant Coordinating Group within two years of protocol publication. If drafts are not submitted before the agreed deadlines, or if we are unable to contact you for an extended period, the relevant Coordinating Group has the right to de-register the title or transfer the title to alternative authors. The Coordinating Group also has the right to de-register or transfer the title if it does not meet the standards of the Coordinating Group and/or the Campbell Collaboration.

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**Form completed by: Janina Isabel Steinert**

**Date: 18 May 2016**