Adolescent Economic Empowerment in a Kenyan Urban Rural Context

Amanda Lane Moll
Georgia State University

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The Dissertation Advisory Committee and the student’s Department Chairperson, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty.

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PROFESSIONAL EXPERIENCE:

2007-present           Senior Advisor for Adolescent Programming (also: Knowledge & Learning Advisor, Senior Project Coordinator, Grants and Knowledge Manager, Program Associate, and Curriculum Intern)

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PRESENTATIONS AND PUBLICATIONS:


This research study examined the ways in which adolescent economic empowerment is constructed amongst adolescents, their households, and teachers in urban and rural Kenyan contexts. Adolescents and youth make up the world’s largest population, yet they are systematically un- and under-employed. The relationship between educational opportunities and wage-earning and economic opportunities is strong, yet often disconnected. Adolescent economic empowerment is defined as the building of skills, capabilities, and capital so young people can make their own choices in life through access to and control over resources and opportunities, in relation to the people, norms, and structures that shape their lives. Utilizing quantitative and qualitative data secondary data, this study examined the issue of adolescent economic empowerment amongst urban and rural, in-school and out-of-school, and girls and boys in a Kenyan context.

With regards to financial knowledge and skills, key findings include the dissociation by adolescents of financial calculations and the interpretation of those calculations regarding
financial concepts such as profit and loss. While having savings resulted in higher adolescent savings scores, differentiating between savings in terms of liquid versus non-liquid assets is unclear. Opportunities to save are restricted for some by beliefs that adolescents should not earn money. At the same time, access and use of monetary and non-monetary resources were valued as enablers in the empowerment process. The application of knowledge, resources and skill regarding adolescents’ financial decision making leaves room for stronger connections between market demand and skills development for long-term financial viability; yet, this did not stop many from engaging in income-generating activities. Across the study, gender, geographic location, and schooling status often resulted in differences amongst respondents.

Recommendations include the need to consider economic empowerment knowledge, resources and skills as they interact with educational and schooling curricula and opportunities. There is also room for continued exploration into the spiral and cyclical patterns of empowerment as individuals grow. Better understanding of the knowledge, skills, access, and resources that adolescents need and value could provide insight into the type of structures and access needed to enhance their agency and decision-making, and might act as a lever to improved global development.

INDEX WORDS: Adolescent empowerment, adolescent economic empowerment, Kenya, education, financial literacy, financial resources, financial decision making, agency, gender, capabilities theory.
ADOLESCENT ECONOMIC EMPOWERMENT IN A KENYAN URBAN RURAL CONTEXT

by

AMANDA MOLL

A Dissertation

Presented in Partial Fulfillment of Requirements for the

Degree of

Doctor of Philosophy

in

Research, Measurement, & Statistics

in

Education Policy Studies

in

the College of Education and Human Development

Georgia State University

Atlanta, GA
2018
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My journey through this doctorate program and dissertation research has been both challenging and rewarding. I am thankful for the ongoing inspiration, backing, and grace provided by my family, friends, colleagues, and committee members. In reverse order, thank you to my committee for your time, critical perspective, and dedication to a solid research study. Thank you to my colleagues at CARE USA and CARE Kenya for not only supporting this research, but teaching me so much more than I ever learned in a classroom or from a book. Thank you to my friends who have provided reassurance and an open ear, as well as a few diversions. Finally, thank you to my family who has always encouraged me, supported me, and been there for me in this and every endeavor and project I have undertaken.
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LIST OF ACRONYMS

CBO  Community-Based Organization
CSO  Civil Society Organization
DFID Department for International Development
DHS  Demographic & Health Survey
FBO  Faith Based Organization
FGD  Focus Group Discussion
FGM  Female Genital Mutilation
GDP  Gross Domestic Product
GNP  Gross National Product
GBV  Gender Based Violence
HIV/AIDS Human Immunodeficiency Virus/ Acquired Immune Deficiency Syndrome
ICT  Information & Communication Technology
IGA  Income Generation Activity
ILO  International Labour Organization
INGO International Non-Governmental Organization
KCPE Kenyan Certificate of Primary Education
KII  Key Informant Interview
NGO  Non-Governmental Organization
OOS  Out-of-school
SDG  Sustainable Development Goal
UIS UNESCO Institute for Statistics
UN  United Nations
UNESCO United Nations Educational, Scientific, & Cultural Organization
UNFPA United Nations Population Fund
UNGEI United Nations Girls’ Education Initiative
UNICEF United Nations Children’s Fund
USAID United States Agency for International Development
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CHAPTER ONE: The Problem

Problem Statement

“There are too many competing priorities to take time out for ‘learning’.”
“Taking time to learn now does not pay off in my future.”
“There are no jobs, anyway, why change the way things are done, it won’t make any difference?”
“There are no resources for learning or development.”
“The parents do not make their children go to school.”

These are examples of statements I heard while talking with children, young people, parents, and teachers across multiple communities in developing countries. Perceptions such as these influence the current and future opportunities of children and young people. Opportunity costs for learning and/or activities perceived as new/different often mean time away from tasks such as housework or work for pay. This competition with economic constraints, social expectations, and perceived and actual relevance of learning too often result in limited opportunities for learning, exploration, and development. What I learned through these experiences from adolescents and community members around the world influenced my world view, positionality and became the focus of my dissertation research.

Positionality & Subjectivity

According to Freire (1970), “Authentic reflection considers neither abstract man nor the world without people, but people in their relations with the world. In these relations consciousness and world are simultaneous: consciousness neither precedes the world nor follows it” (p. 81). Freire’s writings on reflections and positionality influence my approaches to research and analysis. Over the past 10 years, I worked as an education and development professional
within a large international nongovernmental organization (INGO), CARE. In this role, I experienced a variety of programs that employ community-based approaches to education and development and learned there is not a universally appropriate standard. While a uniform approach that promises a silver bullet sounds appealing, I learned the importance of listening to the needs of each unique community.

Thus, the stories and suggestions that adolescents and community members shared with me about their skills, desires, and experiences inspired this research. Two adolescents in Mali taught me that literacy and numeracy skills allow them to facilitate daily communications and financial decision making for their families, and gave them the needed confidence to develop business relationships. A group of parents in India shared with me how they struggle with the decision to educate their children. They asked how they can learn about vocational training programs that will provide jobs for their children. A group of youth in Zimbabwe shared with me how issues of power and gender influence their decision making, community engagement, and their confidence to engage in economic ventures. The combination of lessons those individuals imparted led me to question the relevance of education and skills development in meeting the needs of adolescents in developing contexts. What does the construct “adolescent economic empowerment” mean to adolescents, their households, and teachers in urban and rural contexts in Kenya? While I have not spent time in the communities from where the data come, I have worked amongst similar communities in other countries that are considered marginalized.

My own history and positionality with regards not only to the individuals included in this study but also in relation to the field of work in general, influence my motivations and

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1 I define adolescent economic empowerment as the building of skills, capabilities, and capital so young people can make their own choices in life through access to and control over resources and opportunities, in relation to the people, norms, and structures that shape their lives. It is defined in this paper as a sub-dimension of empowerment theory, which is defined in this paper as a process that broadens and enables an individual to make informed choices, reach his/her potential, and realize his/her rights.
perspectives. In order to study perspectives regarding adolescent economic empowerment in this Kenyan context, it is important to recognize that authors, who are not from sub-Saharan Africa, have written a large proportion of the material about education in sub-Saharan African. The large majority of writers, including myself, who have explored this and similar issues, are from northern or western states that did not undergo the process of colonization and decolonization in the same ways that sub-Saharan African countries, including Kenya, did. Spivak (1988) cautions us about trying to make rash claims about a group that we are not part of:

Yet the assumption and construction of a consciousness or human subject sustains such work and will, in the long run, cohere with the work of imperialist subject-constitution, mingling epistemic violence with the advancement of learning and civilization. And the subaltern women will be as mute as ever. (p. 295)

In other words, we run the risk of continuing to impose imperialist subjectivity on our research subjects, in this case, primary school girls in sub-Saharan Africa, if we are not actively aware of our positionality, and that of those whose work we are including in the study. Utilizing these tenets of post-colonial theoretical perspectives allows me to consider the sources of information and perspectives for the work (largely external to this piece of research and analysis), and also reminds me, as a researcher, that unchecked claims risk perpetuating colonial legacies (Fournillier, 2009).

With this in mind, I continue to reflect upon my positionality as it relates to this work. As aforementioned, I have worked in international educational development for CARE USA for the past ten years, something which has greatly influenced my worldview and positionality as it relates to this work. The simple act of choosing the issue of adolescent economic empowerment is done through a conscious process of valuing inquiry into the issue: I think that adolescent
economic empowerment is a critical process and encompassing skillset, which necessitates better understanding, especially from the perspectives of those with whom we work.

**Background to the study**

Today the world is seeing its largest generation of young people\(^2\) ever (UNFPA, 2014a), and developing countries are home to 89% of the world’s youth (UNFPA, 2014b). Too many are out of school; according to a 2017 UNESCO and UNESCO Institute for Statistics (UIS) report, there are currently 61.4 million primary-school-aged children out-of-school, 61.9 million out of lower secondary school, and 141 million out of upper secondary school (UNESCO, 2017). These same numbers show us that 130.9 million are female and 133.4 are male, with more females out-of-school at the primary school age, and then more males out-of-school when advancing to lower and upper secondary.

Why do the numbers of out-of-school children and young people matter, and what problems does it create? Educating the children and youth of the world, especially girls, is one of the most effective tools we have for long-term family and community (Winthrop & McGivney, 2015) development. According to Women’s Learning Partnership for Rights, Development, and Peace, (2015), for every year beyond fourth grade that a girl remains in school, her future wages rise 20 percent. In addition, farmers with just four years of education are nine percent more productive than their neighbors with none (Food and Agriculture Organization of the United Nations, 2005). In families where women have an elementary school education, there are 15 percent fewer child deaths (UNICEF, 2010). In a study of 175 countries, Gakidou et al, (2010) found that increases in women’s education levels accounted for more than

---

\(^2\) In this paper, I use the UN’s definitions of adolescence as ages 10 – 19; youth as ages 15 – 24, and young people as ages 10 – 24. Children, according to the UN Convention on the Rights of the Child, refers to anyone under the age of 18.
half of reductions in child mortality under the age of five. We might, therefore, assume that education provides access to economic livelihoods and is a key component in more equitable, healthful communities.

However, it is also important to note that schooling for the sake of schooling, or education for the sake of education\(^3\), do not automatically produce these types of benefits. While millions of children benefitted from enrollment in schools, many do not meet basic proficiency levels for both literacy and numeracy competencies (Winthrop and McGivney, 2015). Not only are baseline levels for skills such as literacy and numeracy lower than expected, such as was found in the rigorously evaluated Girls’ Education Challenge Innovation Window projects (Coffey International Development, 2015), but gaining those skills takes time (Girls’ Education Challenge, 2016).

Millions of children and young people are missing out on educational opportunities, or are not gaining critical and basic skills. At the same time, global unemployment rates, specifically for youth (defined as ages 15-24), are on the rise and sit at 9.5% in developing countries (ILO, 2016). This data does not fully capture the state of economic opportunities and realities for youth, as many are working, but receive a wage that leaves them below the poverty line, which is currently defined by the World Bank as earning $1.90 USD a day or less (World Bank, 2015). Facing high levels of unemployment, or working poverty-level employment, it would seem the opportunity to learn new knowledge and skills would be an attractive path forward. However, too many children and young people face issues of limited access to learning opportunities, and/or poor quality learning and/or training opportunities (UNESCO 2016),

\(^3\) In this paper, I use the term ‘education’ to refer to the attainment of ethno-relative and foundational knowledge and skills. While ‘education’ is often used simultaneously with ‘schooling’, I am separating the terms. Education may be gained through schooling experiences, but the two are not synonymous.
rendering many of them without momentum, support, or inspiration for a self-determined path forward.

As children grow, they move through unique and changing periods in their life that offer different opportunities and also come with different challenges (Making Cents International, 2014b). Addressing the skills, educational, and economic barriers that affect overall development and poverty is key during the adolescent age range. According to Soto, Knoote, and Palk (2015), adolescents who have fallen into the cycles of poverty (defined by the high prominence of characteristics such as early marriage, early age of first pregnancy, high exposure rates to sexually transmitted infections), are also economically vulnerable. Building educational skills (cognitive and non-cognitive) and incorporating skills related to economic empowerment is therefore critical to equipping young people, especially girls, with the resources they need to succeed. This study therefore examined this issue from the perspectives of the individuals who responded to the surveys and participated in the focus group interviews that are part of the secondary data used.

**Study Context: The Republic of Kenya**

In a study looking at youth entrepreneurship in Africa, Pellowski-Wiger, Chapman, Baxter, and DeJaeghere (2015) address the significance of context: “Youth operate in a social context shaped by cultural views of relationships, gender roles, and orientation toward the present and future. These aspects of the social context create both opportunities for and constraints on entrepreneurial behavior” (p. 8). Given the significance of context, culture, and history, this section focuses on understanding the localized influences which influence the research study.

**Colonialism**
“Current youth problems, both in Kenya and in Africa as a whole, can be traced from the colonial period, a time during which traditional value systems that had previously served young people and their communities well were weakened” (Mutuku, 2011, p. 3)

As a study delimitation, this research study is not designed to explore the impact of colonialism on education or adolescent empowerment in Kenya, and therefore, colonialism theory is not one of the lenses through which this study is shaped. However, it is helpful to address the history of education and the prioritization of skills, including recognition of the role that colonialism played in influencing this agenda.

During the period of colonization, educational programs were set up in most colonies, but designed “by colonists and their collaborators to keep Africans and African descendants in the West in subservient positions culturally, politically, and economically” (Marah, 1987, p. 463). Although the Berlin Treaty opened up European involvement in Africa in 1885, missionaries began their work in Kenya approximately fifty years before the United Kingdom formally colonized the country (Sheffield, 1973). Newly created missionary schools were often removed from reality, decentralized, halfhearted, and with unclear intents (Willinsky, 1998; Marah, 1987). Some of these British schools tried to incorporate local customs, with varying effects:

The diversity in British Africa ranged from educational policies that imposed the English model and all its components on the African to policies that attempted to develop an educational program based on the African’s own environment and on his own way of life. This lack of uniformity in British educational policy led to a great deal of controversy (D’Souza, 1975, p. 249).

Although the British government was very influential in other aspects of the colonization process, it was largely the Church of England that worked in changing local and traditional education. In Kenya, much of the local and traditional education focused on practical knowledge,
such as home and farm work, and in personal reflections and the correct behavior to be used with specific people; built into this was a focus on building knowledge and skills needed to pass from one initiation to another (Sheffield, 1973). The prioritization of ‘bush school’ as a traditional training, lifeskills, and tradition-building experience for adolescents and youth was commonly practiced across communities in Africa, including Kenya (Murray, 1967). This included training on specific skills and occupations, such as “wood-carvers, tanners, blacksmiths, hunters, beekeepers, or medicine men” (Sheffield, 1973, p. 2).

Not only was the disconnect between colonial/mission-based education and traditional education a problem in effectively and consistently providing a relevant and high-quality learning experience for children, but many colonial methods of ‘spreading education’ were ineffective because they were not representative of nor tailored to the individual communities desires and needs (Baal, 1968; Lewis, 1968). Effectiveness and appropriateness aside, the norms established during the colonial period extend far beyond independence, which for Kenya, was gained in 1963. Values that were imparted by the colonial powers are likely to transcend the locus of power when a state transfers from colonial rule to independence; for example, Kenya’s schooling structure follows the British model.

**Education & Development in Kenya Today**

Africa is often referred to as the world’s youngest continent with regards to the age of its population, and high proportion of young people (Garcia & Fares, 2008). Kenya is no exception with individuals 14 years and younger composing 42% of the country’s population (UNESCO Institute of Statistics, 2017). At the primary school level, UNESCO Institute of Statistics (UIS)\(^4\)

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\(^4\) Global education data is officially tracked by the UNESCO Institute for Statistics (UIS) with other global databases, such as the one maintained by the World Bank, drawing from this repository. As such, they are the global standard for global-level education statistics (Sperling, Winthrop, & Kwauk, 2016).
data indicated a net enrollment rate\(^5\) of nearly 85%, coupled with a gross enrollment ratio\(^6\) of slightly over 116% (UNESCO Institute of Statistics, 2017), suggesting a high number of out-of-age-range (likely overage) children in school. UNICEF (2017) data suggests a high survival rate with 96% of pupils who start grade 1 reaching grade 5. These rates drop at the secondary school level, with a net enrollment rate just over 50% and a gross enrollment rate just over 60% (UNESCO Institute of Statistics, 2017). This drop from primary to secondary indicates a high dropout rate and may also reflect the fact that although 96% of students are reported to have reached grade 5 (UNICEF, 2017), which is in the middle of upper primary school\(^7\). This statistic is a product of misleading data due to automatic progression policies (Republic of Kenya, 2015), coupled with the fact that many of the students who have been automatically progressing from one grade to the next during primary school never sit for their Kenya Certificate of Primary Education exam to complete grade 8, and be eligible to enter secondary school. Kenyan DHS data suggests approximately a quarter of urban and rural women complete primary school education (Republic of Kenya, Kenya National Bureau of Statistics, 2015). When looking at these statistics, it may be easy to focus on their discrepancies. However, when examined together, they consistently tell a story that although high numbers of children may enroll in primary school, and may progress through grades 1 to 8, many enroll late, few are actively staying in school, and the number reaching secondary school is significantly smaller than those who begin at the primary school level. At the primary school level, there is a gender parity

\(^{5}\) Net enrollment rates are measured by dividing the number of children enrolled in school whose age matches the age range officially corresponding to the schooling levels, divided by the population of the same age group.

\(^{6}\) Gross enrollment ratios are measured by dividing the total number of children enrolled in school, regardless of their age, and dividing it by the population of children whose age corresponds to the official ages for the given grades. Gross enrollment ratios may, therefore, be more than 100%.

\(^{7}\) They Kenyan schooling system is a 4-4-4 system, with lower primary school constituting grades 1-4, upper primary school constituting grades 5-8, and secondary school constituting grades 9-12. Students must take and pass the Kenya Certificate of Primary Education at the end of grade 8 in order to be eligible for grade 9.
index\textsuperscript{8} of 1.04, while at the secondary level it is 0.97 (UNFPA, 2016), indicating that while there are more females enrolled in school than males at the primary school level, this reverses at the secondary school level, suggesting potential gendered barriers to higher levels of education for adolescents.

While students may be enrolled in primary school, 2015 UWEZO\textsuperscript{9} results, published in 2016, indicate they are not learning. The 2016 survey was comprehensively conducted in 157/158 districts in Kenya, covering 69,183 households and 130,653 primary school aged children from across 4,529 schools. Its findings indicate learning levels are low. Included are interesting trends with regards to overall learning levels, as well as trends with regards to geographic location, demographic influences, and gender. For example, only three out of 10 Grade 3 students can successfully complete Grade 2 work; by Grade 8, 8\% of students still cannot do grade 2 work successfully. This seems to indicate that students are not demonstrating learning on-par with national standards for their grade, and there are cohorts of students who are habitually behind. When disaggregating learning outcome results by geographic location, urban students have higher learning outcomes than students in rural areas. When looking at the gendered disaggregation of learning outcomes, girls scored statistically significant higher learning outcomes ($p < 0.001$) than boys in all three subjects (math, Kiswahili, and English) at both grade 3 and grade 8 levels.

When the UWEZO assessment data is compared with results from the Kenya Certificate of Primary Education (KCPE), the picture is the same: low learning levels. Table 1 presents Kenya

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\textsuperscript{8} Gender parity index rates are calculated by dividing the female gross enrollment ratio by the male gross enrollment ratio.

\textsuperscript{9} UWEZO, which means ‘capability’ in Kiswahili, is a validated learning assessment, with origins in Eastern Africa. It is a household-based learning assessment survey, focused on assessing literacy and numeracy levels of in-school and out-of-school children. It randomly samples children, assessing their learning outcomes, based on grade 2 national standards, in math, Kiswahili, and English.
National Examinations Council data on the percent scores by subject, for pupils who took the exams:

Table 1: KCPE 2016 Assessment Data

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<th>Female</th>
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<th>Exam subject</th>
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</tr>
<tr>
<td>Social studies</td>
<td>57.38</td>
</tr>
<tr>
<td>Religious education</td>
<td>70.99</td>
</tr>
</tbody>
</table>


Data in Table 1 indicate consistently low learning percentage scores, across multiple subjects, going beyond the core subjects of math, English, and Kiswahili.

Additional statistics provide insight into the beliefs and norms driving local cultures, many in a gendered way that disproportionately affect females. For example, when it comes to adolescent sexual and reproductive health, 23% of women between the age of 20-24 gave birth before the age of 18, and 23% in the same age group were married or in a union before the age of 18 (UNICEF, 2017). As it relates to employment, 25% of children between the ages of 5-14 are engaged in child labor (UNICEF, 2017). Women’s education levels help to explain differences in employment rates: 43% of women with no education versus 60%+ of women with varying degrees of education are employed. Patterns are similar with men, although, interestingly, men with the highest level of education were less likely to be employed than men with no education (Republic of Kenya, Kenya National Bureau of Statistics, 2015).
Purpose Statement and Research Questions

Better understanding the knowledge, skills, access, and resources that the adolescents in these contexts need and value, could provide insight into the type of structures and access needed not only to enhance their agency and decision-making processes but also as might act as a lever to improved global development. The purpose of this mixed methods (Plano, Clark & Ivankova, 2016) study is to examine, from the perspectives of adolescents, households, and teachers their conceptualization of adolescent economic empowerment within two separate contexts in Kenya using a secondary data analysis. The following combination of mixed methods research questions frame the study:

1. According to adolescents, households, and teachers, what knowledge, skills, access, and resources are valued and prioritized for adolescents in urban and rural settings of Kenya?
2. What influences Kenyan adolescents’ knowledge, attitudes, and practices related to economic empowerment skills?
3. What are adolescents, their households, and teachers in urban and rural contexts in Kenya perceptions of adolescent economic empowerment?

Significance of the Study

This study addressed multiple gaps in existing research. Existing literature regarding the operationalization of empowerment theory has largely focused on its application and relevance in adult women; a smaller set of studies have looked at youth empowerment. The issue and conceptualization of adolescent empowerment have yet to be fully defined and explored, based on the review of the literature I conducted. Not only is the concept of adolescent empowerment still evolving, but existing studies, focusing on the construct of ‘adolescent economic empowerment’ have not yet been identified. As a result, the construct, including its linkages
with education and capabilities theory, has yet to be fully explored and clearly defined as a sub-dimension of empowerment frameworks. Not only is the construct largely unexplored, but studies regarding adolescent economic empowerment have not been found to disaggregate between urban and rural settings, or explore any contextual differences in how it is defined and/or operationalized\(^\text{10}\). These gaps in defining and operationalizing the term thus result in limited existing guidance about how it can or should be measured; something that is further expanded upon in Chapters Two and Three. By conducting a mixed methods study, the findings will add value to the cadre of what Nastasi and Hitchcock (2016) have conceptualized as ‘evidence-based practices’ and research findings.

The selection of Kenyan adolescents as the focus of this study is deliberate. The Government of Kenya, as well as multiple international organizations and donors, have invested heavily in curriculum design and development (see Chapter Three for more information)\(^\text{11}\). As a hub for business, economics, and culture in eastern African, Kenya’s geopolitical presence as well as existing infrastructure (tangible and intangible) results in a strategic choice for future cascading of change. The dearth of studies on adolescent economic empowerment in general, and also about education and schooling concepts, provides a significant opportunity for the applied relevance of the study.

\(^{10}\) This is built upon the theory that because: (1) education is theorized to be a necessary but not sufficient condition for empowerment (Hanmar & Klugman, 2016; Monkman, 2011; Warner, Malhotra, & McGonagle, 2012), and because (2) education beyond a basic level may produce enhanced empowerment results (Hanmar & Klugman, 2016; Monkman, 2011; Warner, Malhotra, & McGonagle, 2012) and because (3) education levels have been shown to be statistically significantly different across urban and rural populations in Kenya (UWEZO, 2016), as a result: there is an expectation that empowerment processes and influences may be different across urban and rural populations.

\(^{11}\) Given education’s role in empowerment processes, looking at investments in curriculum is appropriate in an empowerment-based study.
Overview of the Study

This research paper is organized into five chapters. This first chapter provided the overview and purpose of the study, clearly specifying the research questions guiding the data analysis, as well as the significance of the study. This first chapter also included a reflection on my own positionality in the study.

Chapter Two focuses on a literature review, including an inquiry into a series of specific issues. It looks at empowerment theory broadly, as well as its relationship with capabilities theory; these theoretical perspectives provide a foundation for the exploration of adolescent empowerment as a sub-dimension of empowerment theory. Specifically, within the study of adolescent empowerment, the chapter will include a focus on the dimensions of adolescent empowerment, the linkages with education, and then it will specifically define adolescent economic empowerment as a sub-dimension of adolescent empowerment theory.

Chapter Three outlines the research methodology, methods, and specifics of the research study. This research study focuses on utilizing a mixed methods research methodology to provide a secondary data analysis using data collected by CARE Kenya in a baseline evaluation study for a project focused on adolescent education and empowerment, of which adolescent economic empowerment is one component. This chapter provides the methodological framework used in this analysis, as well as details regarding the original data collection study, and the connection between mixed methods methodology and empowerment theory. The relevance for this in the case of Kenya will also be explored.

Chapter Four provides the results of the analyses conducted. Due to the convergent parallel analysis design employed as part of the mixed methods methodology guiding the research, this chapter is broken up into three sub-sections. The first sub-section explores
findings from the qualitative analysis; the second sub-section focuses on findings from the quantitative analysis, and the third sub-section analytically weaves the results from the first two sub-sections as part of a mixed methods analysis.

Chapter Five wraps up the research study through a brief discussion regarding the conclusions, the implications of findings, and suggestions for further research.
CHAPTER TWO: Review of the Literature

The purpose of this mixed methods study is to examine, from the perspectives of adolescents, households, and teachers their conceptualization of adolescent economic empowerment within two specific contexts in Kenya using a secondary data analysis. This chapter therefore provides an overview of existing scholarship on the issues of empowerment, capabilities, and their application to adolescents, specifically adolescents in Kenya. Empowerment theory, and its connections to capabilities theory – especially as it relates to developing contexts, such as Kenya – is an overarching lens with which to analyze the context of adolescent economic empowerment. As adolescence is a unique age period encompassing key life transitions, as well as cognitive and developmental advancements (Steinberg, 2015), better understanding the nuances of adolescent empowerment means exploring its relation to education, as well as key skills such as economic empowerment.

Empowerment Theory

The data analyzed in this research study come from a CARE Kenya project designed with a goal of adolescent empowerment. Although the analysis in this report is a secondary analysis of data from this project, building upon the project’s empowerment-based theoretical framework maximizes the use of available data. This paper’s analysis goes further than earlier analysis in examining respondents’ conceptions of adolescent economic empowerment. This section explores what is empowerment theory, and its relevance to the exploration of adolescent perspectives and beliefs regarding key economic empowerment skills.

I begin the literature review with a discussion of the central tenets of empowerment theory that framed the study. Several scholars (e.g., Kabeer, 1999; Mosedale, 2005; Malhotra, Schuler, & Boender, 2002) advocate that in its core being, empowerment theory focuses on the
process of empowerment at the individual level. Specifically, in this study, I focus on exploring
the combination of central tenets of empowerment theory which, when combined, produce a
singular construct of empowerment. Monkman (2011) uses six tenets, which are supported
widely (see below), in her discussion of empowerment. The following review of empowerment
components build from Monkman’s original six tenets (labeled E1 to E6), and add a seventh
tenet (E7) that I have included based on research. The recognition of empowerment as a
multidimensional construct is common across the literature (Malhotra & Schuler, 2005) and it
influences the ways in which it is measured. Chapter 3 of this study provides a more detailed
discussion on why the multidimensionality of empowerment finds a good fit in the use of mixed
methods research methodologies. There is also an assumption and/or precondition of
disempowerment before someone can go through an empowering process (Malhotra, Schuler, &
Boender, 2002).

The first empowerment tenet (E1) is that education in itself is not empowerment
(Monkman, 2011; Murphy-Graham, 2008; Stromquist, 2002). The simple act of going to school
does not automatically provide an individual with the knowledge or skillset needed to make
empowered and informed choices. However, this does not mean the role of education as a
component of an empowerment process should be dismissed. On the contrary, it should be seen
suggest that education enhances resources and agency, which are critical foundations for
empowerment at the individual level. Murphy-Graham (2008) also notes that “education can act
as a catalyst of empowerment if it increases women’s knowledge and understanding self-
confidence and awareness of gender equality” (p. 31).
The second tenet (E2) is that empowerment is a non-linear process (CARE USA, 2010; Kabeer, 1999; Malhotra, Schuler & Boender, 2002; Monkman, 2011; Mosedale, 2005; Perkins & Zimmerman, 1995; Stromquist, 1995). This tenet is significant because although empowerment is a process, it may look differently for different people, and it may or may not be linear in shape, direction, and fortitude. An individual may progress and regress with regards to agency-enabled informed decision-making in their lives. This concept is further explored in the section below on adolescent economic empowerment, as it relates to perspectives and measurement of empowerment across childhood to adolescence to youth to adult periods.

Thirdly (E3), context matters (Baily, no date, as cited in Monkman, 2011, CARE USA, 2010; Malhotra, Schuler & Boender, 2002; Monkman, 2011; Mosedale 2005). The role of context largely affects: the supporting and restricting frameworks in which an individual lives; the enabling environment related to the domains of empowerment an individual may explore; and the opportunities within which to exercise skills and rights. In this dissertation study, the contextual constructs of Kenyan culture is explored, as are urban/rural contextual differences and their relation to adolescent economic empowerment.

Fourth (E4), collective engagement is important to empowerment processes (CARE USA, 2010; Hanmar & Klugman, 2016; Monkman, 2011; Perkins & Zimmerman, 1995; Stromquist, 1995). Collective engagement can be thought of as the process of multiple people or groups working together toward a common goal. Even though empowerment is largely conceptualized and measured as an individualistic concept, there is a recognized significance and focus paid to the role of collective engagement in empowerment processes. This may come in a number of different forms from the exercising of power/voice/decision making as a collective
group (Kabeer, 1999) to the role of men and boys in the empowerment process of women and girls (CARE, 2010; Murphy-Graham, 2008).

Fifth (E5), and related to collective engagement (E4), is the tenet that issues of power and gender are important, and the engagement of men and boys in women and girls' empowerment is important (CARE USA, 2010; Monkman, 2011, Murphy-Graham, 2008; Stromquist, 2015). As important to empowerment frameworks as a focus on gendered approaches, which are inclusive of the traditional power-up and power-down groups, is the importance to have space, freedom, and support to explore, practice, and exercise things such as new knowledge, access, and rights.

The sixth tenet (E6) is that education beyond primary school is needed (Hanmar & Klugman, 2016; Monkman, 2011; Warner, Malhotra, & McGonagle, 2012). While this may seem contradictory to E1, I view these as complimentary to one another: education is a necessary but not sufficient prerequisite for individual-level empowerment. Chapter One of this research study provided a series of global statistics regarding the impact of increased education levels; in applying the lens of ‘education as a necessary but not sufficient’ prerequisite for individual-level empowerment, we can gain further insight. For example, take the statistic from the Food and Agriculture Organization of the United Nations (2005) that “for every year beyond fourth grade that a girl remains in school, her wages rise 20 percent”. In this instance, having increased knowledge and skills likely enables individual girls and women to potentially access higher-level formal and informal work, or even work at all, and potentially to negotiate higher wages. This is in-line with the empowerment literature, which suggests that education beyond a basic level may produce enhanced empowerment results (Hanmar & Klugman, 2016; Monkman, 2011; Warner, Malhotra, & McGonagle, 2012).
Finally, the seventh point I include (E7), which goes beyond Monkman’s original six tenets of empowerment, is that individual agency is critical to empowerment processes (Hanmer and Klugman, 2016; Klugman et. al., 2014; Malhotra, Schuler, & Boender, 2002). While the term ‘agency’ may be common in the empowerment literature, its definition is sometimes assumed. In this paper, I draw from Kabeer’s (1999) definition of agency as:

… the ability to define one’s goals and act upon them. Agency is more than observable action; it also encompasses the meaning, motivation and purpose which individuals bring to their activity, their sense of agency, or the power within… it can be exercised by individuals as well as by collectives. (p. 438)

According to Hanmer and Klugman (2016), Sen’s (1985) original definition of agency is the foundation not only for Kabeer’s 1999 oft cited definition of the term (above), but also general understanding of the term. There is an assumption that agency assumes the ability to take action, not necessarily whether an individual chooses to do so, or it leads to positive outcomes (Hanmer & Klugman, 2016, p. 237). Gammage, Kabeer, and van der Meulen Rodgers (2016) explore the proliferation of both agency and voice in empowerment research and literature, and how the absence of both often breeds disempowerment. At the same time, DeJaeghere, McCleary, and Josic’s (2016) edited work specifically focuses on the ways in which youth have exercised agency, including barriers and implications. If we accept the assumption that empowerment has to be claimed by an individual (Mosedale, 2005), building agency is a critical condition for individuals to claim and exercise empowerment. Furthermore, within development settings, such as Kenyan contexts, empowerment theory may be used to explore both gender-based studies (Parpart, Rai, & Staudt, 2002), and education-based studies (e.g.,
Based on the seven core empowerment tenets presented here, empowerment is a multi-faceted construct containing many nuanced elements that guide its definition and application. In this study, I build upon these seven tenets of empowerment to construct my definition of empowerment. I define empowerment as a process that broadens and enables an individual to make informed choices, reach his/her potential, and realize his/her rights. Within this definition, I recognize and apply E1 to E7.

*Empowerment and Capabilities Theory*

Poverty is not entirely about a lack of money, but also relates to a dearth of skills, knowledge, and capabilities, all of which mire an individual’s attempts at personal advancement and development. Sen (1985, 1999) has written considerably about capabilities and their relationship with poverty, asserting that “… poverty must be seen as the deprivation of basic capabilities rather than merely as lowness of incomes, which is the standard criterion of identification of poverty” (p. 87). If we accept this theory that poverty is not solely tied to a lack of money, but it is also related to a lack of skills, knowledge, and capabilities, it supports the notion that knowledge is viewed as emancipatory as well as a catalyst that enables individuals to realize their rights and exercise various skills and qualities gained through empowering activities\(^\text{12}\), growth, and development. Utilizing Sen’s (1999) capabilities theory provided a foundational linkage between resources, knowledge, education, and empowerment at an individual level. Nikoi (2016), referencing work from DeJaeghere & Baxter (2014), and Walker

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\(^{12}\) Empowering activities may be thought of as activities where individuals are able to build and exercise their confidence, engagement, and practice new skills. An example of this is documented in Strack, Magill, and McDonah’s 2004 article about adolescent use of photovoice as an empowering activity.
(2012), goes one step further to suggest that “capabilities are thus the building blocks that inform an individual’s actions and the ultimate functioning with which they engage” (p. 63).

Nussbaum (2000) suggests the concept of capabilities is about making room for choice, and also provides an expanded perspective regarding capabilities through her listing of ten key capabilities: life; bodily health; bodily integrity; senses, imagination and thought; emotions; practical reason; affiliation; other species; play; and control over one’s environment. The skills needed to attain these key capabilities can be enabled through empowering processes.

Empowering processes, actions, decisions, and opportunities are what Sen (1999) refers to as the ‘taking of freedoms’, with the expansion of capabilities as what individuals need in order to have the “basic building blocks” needed to “live the life they value” (p. 18). This expansion of capabilities couples neatly with empowerment theory’s end goal of being able to make informed choices to reach a person's potential and realize their rights. Capabilities theory adds that individuals may reach their full potential with a set of critical capabilities, while recognizing the relationship between capabilities and skills as an emancipatory process out of poverty. These may be risked by a set of “unfreedoms”, as Sen (1999) calls them: famines, under-nutrition, lack of access to healthcare, lack of clean water, functional education, gainful employment, economic and social justice, being denied civil rights, a harsh political system, economic security, and the lack of democratic rights and liberties (Sen, 1999). In essence, these “unfreedoms” correlate with the foci of development defined not only by Sen but also supported by developmental economists such as Sachs (2005) and Easterly (2006).

A final consideration when exploring the relationship between capabilities theory, skills development, empowerment theory, and poverty, is the role of gender. The inequalities of poverty, and even Sen’s (1999) “unfreedoms”, often have a gendered differential effect on men,
women, boys, and girls. According to Parra and Holden (2014), “the incidence and acuteness of poverty is harshest for women and girls. Poverty-reduction goals can therefore only be achieved if in large part they address women and their economic empowerment” (p. 5). A conclusion may be that empowerment and capabilities theory-based studies need to take into account the differential pre-determined effects of specific groups based on things like gender. This research study therefore examined differences in perceptions of adolescent empowerment and capabilities based on gender, geographic location, and schooling status (in-school versus out-of-school)\textsuperscript{13} using secondary data.

**Adolescent Empowerment**

Most academics and theorists view the concept of empowerment as a process (Kabeer, 1999; Malhotra, Schuler, & Boender, 2002; Mosedale, 2005). As such, it begs the question: [how] does it change during a lifecycle? There are key transitions that individuals go through at different stages of life that may affect the relevant and age-appropriate skills to learn, as well as change the spaces and opportunities for decision making and exercising rights. An UNFPA report (2016) focuses on how the age of 10, when entering adolescence, is a key turning point in a girls’ life, specifically regarding her future, opportunities, decisions, and expectations. Because this study specifically focuses on the adolescent age range (10-19), it is important to disaggregate the age assumptions of empowerment theory. This section is focused on exploring

\textsuperscript{13} Gender is explored not only because it is a key consideration in empowerment theory (CARE USA, 2010; Monkman, 2011, Murphy-Graham, 2008; Stromquist, 2015), but also because educational attainment and learning outcome levels, which relate to both empowerment theory and capabilities theory, are different in Kenya for girls and boys (UWEZO, 2016). Geographic location is disaggregated and explored because educational outcomes are statistically significantly different for urban and rural populations in Kenya (UWEZO, 2016), and schooling status has been shown to result in different employment status amongst women in Kenya (Republic of Kenya, Kenya National Bureau of Statistics, 2015).
the relationship between adolescent and adult empowerment, as well as what lifecycle and transition means for empowerment.

So, what does adolescent empowerment look like? While the definition of adolescent empowerment may not differ from the broad definition of empowerment, there is reason to believe that its operationalization needs to be specifically tailored to be age and context-appropriate. Chinman and Linney (1998) suggest that adolescent empowerment can be seen as “active participation, awareness of the surrounding world, and identification of strengths” (p. 395). They go further to suggest that,

The empowerment process, as it has been previously conceptualized, overlaps with adolescent identity development in such a way that becoming empowered may also have a positive effect on developmental outcomes. Identity formation, like empowerment, is not a passive experience, but the result of action. (p. 396)

More has been written about empowerment at the youth age range (15-24) than at the adolescent age range (10-19). Due to the overlap in ages, I include some of the references regarding youth empowerment, to help fill some of the gaps not yet covered in adolescent-specific literature. The ‘Positive Youth Development’ program out of the Youth Power Consortium, based on a meta-review of 105 documents, defines four key domains as critical for youth development: assets, agency, contribution, and an enabling environment. Their definition of youth extends beyond the UN definition of 15-24 and goes from 10-29, which is why I include it. The overlap of these key domains with empowerment literature at the adult and/or adolescent/youth levels is notable, as is the overall goal of healthy, productive, and engaged youth.

The focus of adolescent and youth empowerment frameworks on the inclusion of agency as a key actionable skill is notable in the literature (DeJaeghere, McCleary, & Josic, 2016;
McCleary, 2016; Murphy-Graham & Lloyd, 2016; Nikoi, 2016; Shah, 2016). Within this literature, the importance of creating safe spaces, such as age-appropriate extra-curricular activities within which adolescence and young people can learn and practice new skills and knowledge, building confidence needed to succeed in and out of school, is also highlighted as important for this age group (Kirk, 2012; Marcus & Page, 2016; Moll, Kintz & Janoch, 2015).

With this background on some specific considerations regarding what adolescent economic empowerment, as a sub-dimension of broad empowerment theory, Figure 1 proposes a conceptual framework regarding adolescent empowerment, as well as an idea about what role economic empowerment, as a sub-component of adolescent empowerment, plays.

Adolescent Economic Empowerment

“...Wealth is not the good we are seeking; for it is [merely] useful, [choice worthy only] for some other end” (Aristotle, trans. 1999, Book 1, Chapter 5, §8)
“The role of income and wealth ... has to be integrated into a broader and fuller picture of success and deprivation” (Sen, 1999, p. 20)

When discussing issues of economic empowerment, a misnomer rests in the perception that the end goal is financial wealth. However, as it has been conceptualized, its goal is very different. Golla et al. (2011) theorized that women’s economic empowerment includes access to advance economically in markets, and to have power and agency over how money is made and influences decisions. Kabeer (2012) suggests that women’s economic empowerment includes a focus on labor markets and enterprise development. Examining the quotes at the beginning of this section, the focus of economics and wealth may lay, most importantly, with what they enable, or what their deprivation denies. For example, the denial of transaction opportunities, such as in local markets, can be seen as a source of unfreedoms, as conceptualized by Sen (1999), and a deprivation of capabilities.

Borrowing from Stromquist’s empowerment framework (2002), which includes economics and the ability to generate income as one of her four dimensions of empowerment, I include economic empowerment is a sub-dimension of empowerment theory. Accepting that empowerment is a process (Kabeer, 1999; Malhotra, Schuler, & Boender, 2002; Mosedale, 2005), economic empowerment is one of the pathways that can be developed in order to reach desired personal and development goals (e.g., Stromquist, in Monkman, 2011; Duflo, 2012; Mosedale, 2005).

Although I recognize the potential to explore adolescent economic empowerment from a neoliberal lens, given the focus on economic domains such as savings and finance relate to free-market concepts, in this study I choose to use the lens of empowerment theory and capabilities theory, to better understand what the concept is, from the perspective of adolescents, households,
and teachers in urban and rural Kenya. This is filling a niche that has not yet been researched, to my knowledge.

“Education and employment are the measures of economic resources most often available for macro-level analysis” (Kabeer, 2012, p. 5)

“... the relationship between income and capability would be strongly affected by the age of the person (e.g. by the specific needs of the old and the very young), by gender and social roles ... by location ... by epidemiological atmosphere ... and by other variations over which a person may have no – or only limited – control” (Sen, 1999, p. 88)

“... a significant proportion of youth, especially in developing countries, is unable to enrol in education (e.g. due to the economic necessity to work and to supplement their household incomes), thereby running the risk of remaining trapped in poverty through lack of access to better jobs” (ILO, 2016, p. 3).

Building from the above perspectives of Kabeer (2012) and Sen (1999), as well as the ILO’s statistic regarding youth, poverty, and their risks, there is reason to consider tailoring economic empowerment to the adolescent age range and ask: hat is adolescent economic empowerment?

It is important, before beginning this discussion, to recognize that adolescent economic empowerment is uniquely different from adult economic empowerment. Revisiting Golla et al.’s (2011) theorization that women’s economic empowerment includes economically advancing via markets, and exercising power and agency over how money is made, it is clear this conceptualization is not necessarily appropriate for adolescents. Adolescent-appropriate access, actions, and decision making spheres of influence are different from adults. We know that adolescent girls are more economically vulnerable than women or boys their same age due to their lack of financial capital, limited opportunities to learn (formally through school or
informally through exposure), and often the lack of supportive environments and structures that can aid their economic advancement (Fewer, Ramos, & Dunning, 2013).

However, we can learn and draw from definitions of women’s economic empowerment. Parra and Holden (2014) suggest that a woman is economically empowered when she can make decisions and act on them to make economic decisions. Further, “while economic empowerment for adolescent girls should include both economic advancement and girls’ ability to make economic decisions, the extent to which girls should or can achieve these goals will vary by their age and social-economic contexts” (Parra and Holden, 2014, p. 4). Within this, they warn that because girls often engage in economic activities, specifically within the formal or informal labor force, to support their families, girls’ financial independence should not be isolated from their contextual “social fabric” and put the burden on them in a way that separates them from this reality (Parra & Holden, 2014, p. 4).

So, while adolescent economic empowerment may be different from adult economic empowerment, what does this actually look like? Fewer, Ramos, & Dunning (2013) suggest (Table 2) that there are six key factors that contribute to adolescent economic empowerment: financial capital (e.g., cash, savings, access to credit, and other financial assets), human capital (e.g., education, health, self-esteem, and communication skills), social capital (e.g., social networks, friends, mentors, and supportive family members), physical capital (e.g., ID card, household goods, land, housing, and transport), social norms (e.g., early marriage, childbearing, influence of age, gender, and ethnicity), and institutions (e.g., political and legal rights, market structure, and the education system).

For the purpose of this paper, I define economic empowerment for adolescents as the building of knowledge, skills, negotiated access, and resources so they can make their own
choices in life through access and control over resources and opportunities, in relation to the people, norms, and structures that shape their lives. Within this definition, I propose that adolescent economic empowerment is comprised of five specific sets of knowledge, skills, access, and resources. This set of components draw from, but go beyond the six factors referenced by Fewer, Ramos, and Dunning (2013), by cross-referencing additional research and literature. The following sub-sections introduce these five sub-components of adolescent economic empowerment: (AEE1) savings habits, (AEE2) resources, (AEE3) financial literacy, (AEE4) financial decision making, and (AEE5) engagement opportunities, and reference supporting literature.

**Savings Habits**

The inclusion of savings habits (AEE1) as a component of adolescent economic empowerment includes both knowledge and practice regarding savings (note: savings may relate to monetary and non-monetary assets). Knowledge and applied behaviors on good savings habits, for amounts however large or small the amount, is an indicator of applied and informed decision making (AEE4). There is an in-built assumption that the informed financial decision making is linked to increased prioritization of educational expenses, and a higher likelihood for engagement in entrepreneurial ventures (Golla et al., 2011; Youth Employment Network, 2013; Ssewamala, Ismayilova, McKay, Sperbber, Bannon, & Alicea, 2010; Fewer, Ramos, & Dunning, 2013). Savings habits relate to the skills component of my definition of adolescent economic empowerment.

**Resources (monetary and non-monetary)**

The prioritization of resources (AEE2), as a key component of adolescent economic empowerment, includes both monetary and non-monetary resources. I define monetary
resources as cash, or other liquid resources, and non-monetary resources as things such as hard-to-quickly-liquidate resources and non-monetary capital (human capital capabilities; social capital connections and supportive relation). Both monetary and non-monetary resources provide an enabling element which support adolescents to practice and exercise skills such as savings and financial decision making, as well as support them in endeavors such as further education and/or training. These resources may also provide a financial alternative, for girls especially, to marriage. Non-monetary resources are significant to adolescent economic empowerment in that they, too, compose a critical element of the enabling environment which may enable or prohibit adolescents from exercising key skills, opportunities, and rights. This may come through in-person resources, technology-based resources, tangible/intangible resources. Non-monetary resources, such as certain ICT devices, may contribute to enhanced economic empowerment processes because they can provide access to information not otherwise available, such as market prices for key goods, weather/political forecasts influencing the viability and marketability of goods and trading conditions, etc. This added information via ICT resources can enable individuals to make informed choices. This encapsulates the resources component of my definition of adolescent economic empowerment.

Financial literacy

Financial literacy (AEE3) is an increasingly familiar term used when discussing economic empowerment (e.g., Fewer, Ramos, & Dunning, 2013; Pellowski-Wiger, Chapman, Baxter and DeJaeghere, 2015; UNICEF, 2012). Some, such as Baird & Ozler (2016) consider it a basic lifeskill. UNICEF (2012), draws from Hogarth’s (2006) conceptualization to suggest financial capability and financial literacy mean three things:
[1] Being knowledgeable, educated and informed on the issues of managing money and assets, banking, investments, credit, insurance and taxes;

[2] understanding the basic concepts underlying the management of money and assets (e.g., the time value of money in investments and the pooling of risks in insurance); and

[3] using that knowledge and understanding to plan, implement and evaluate financial decisions. (p. 4)

As referenced in a UNICEF (2012) report, PISA gives further guidance about what specific skills are included in the concept of financial literacy:

Financial literacy skills should include basic skills in mathematics, such as calculating a percentage, the capacity to read and interpret advertising and contractual texts, as well as managing the emotional and psychological factors that influence financial decision-making (as referenced in UNICEF, 2012, p. 8-9).

Using these as foundations, I created a combined conceptualization of financial literacy which includes: issues of money management, investments, banking institutions practices, credit, interest, calculating percentages, profits and losses, and interpreting ads and contractual texts.

The significance of building this key knowledge is that it enables smart financial decision making, influencing savings habits (Singh and Schneiders, 2016), has been linked to helping individuals and households out of poverty (Singh and Schneiders, 2016). Financial literacy relates to the knowledge component of my definition of adolescent economic empowerment.

**Financial Decision Making**

Financial decision making (AEE4) relates to any decisions made regarding finances. This may connect with decisions about savings habits (AEE1), spending prioritizations, and any other economic-related decisions (drawing from Golla et al., 2011; Parra and Holden, 2014).
This operationalization of decision making is significant because it is an exercise in informed decision making, which is one of the resultant targeted end goals of adolescent economic empowerment. Financial decision making relates to the skills component of my definition of adolescent economic empowerment.

**Engagement in activities**

Engagement in activities (AEE5) amongst adolescents includes things such as income-generation activities (IGAs), vocational endeavors, etc. Adolescents’ ability to access and take advantage of key structures and spaces, such as IGAs, and vocational training programs gives them not only access to human capital resources, but also provides an outlet for applying new knowledge and practicing key skills related to decision making and control over resources and opportunities. These types of engagements relate to the access component of my definition of adolescent economic empowerment.

These five components of adolescent economic empowerment, as a specific applied skillset, when compounded with the other components of my proposed adolescent empowerment framework, Figure 2, provide a holistic picture of the relationship between adolescent economic empowerment and adolescent empowerment. The empowerment framework in Figure 2 also includes additional components of the adolescent empowerment framework, which are: education/learning opportunities, an enabling environment, individual and collective agency, and the role of power and gender. The following sub-sections address the foundation for each of these components in the framework.

**Education/learning opportunities**

There are multiple points of intersection between adolescent economic empowerment and education that need to be explored. A large portion of the existing literature focuses on how
education can facilitate and lead to positive economic outcomes (Chant & Jones, 2005; Child Youth Finance International, 2013; Moeller, 2014; Sen, 1999; Sperling, Winthrop, & Kwauk, 2016). If we accept Sen’s (1999) claim that poverty is more than just a lack of money, but it relates to a lack of capabilities, it is logical to explore the ways in which capabilities and skills can be developed in a way that positively impacts an individual’s ability to make informed decisions and access the resources needed for enhanced development. Furthermore, when talking especially about the adolescent age range, it is also logical to examine the ways in which education influences a person’s daily life and options.

Chant and Jones (2005) and The Girl Project (referenced in Moeller, 2014) make the case for the significance of education and economic empowerment. In Chant and Jones’ study (2005), which took place with girls in The Gambia and Ghana, improved literacy and the ability to read/write English (the official language of instruction in both countries) were seen as a critical skill for advancement. This same study recognized that ‘know how’ was limiting and needed to be balanced this with ‘know who’ and access to financial capital for start-up costs. The Girl Project results indicated that although the girls graduated from the vocational training program and were able to conduct many of the clerical tasks needed for employment, they still lacked many skills that would have been learned through a formal education (Moeller, 2014). This suggests that while vocational skills are important for employment, they are enhanced and provide more robust outcomes when combined with traditional education skills. According to UNESCO (2012),

In countries where many young people have never had the chance to go to school or have dropped out before completing primary school, skills development strategies need to
focus first on providing all young people with the most basic literacy and numeracy skills through second chance programmes (p. 182).

Therefore, we can assume from their perspective that education provides a core foundation for future economic development and empowerment in individuals.

However, there is not a neat and linear relationship between education and economic empowerment. A strength in exploring both education and economic empowerment for young people is that both are critically interwoven in a holistic approach for development and empowerment. While education provides a foundation for economic empowerment, economic empowerment also illustrates the need for basic education skills. The results of both approaches overlap and are often strengthened when combined. I conceptualize that outcomes related to education and economic empowerment, while generally reported independently, are often interrelated. Therefore, I am mapping these outcomes together, as can be seen in Figure 2. This type of mapping has not, in my research, been created to-date, yet the findings support it.
Poverty is both the deprivation of basic capabilities as well as lack of resources.

By empowering individuals, they can build their chosen development path out of poverty.

**Pathways to empowerment**

**Economic Empowerment**
- Control of assets
- Access to loans and capital

**Education**
- Delayed early marriage
- Positive employment opportunities
- Increased individual and national economic standards (e.g. GDP, personal earnings)
- Increased economic growth & productivity
- Increased confidence, ASRH indicators, communication skills
- Increased income, opportunities, market engagement, and savings

**Outputs & Outcomes**

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**Enabling environment**

An enabling environment through relational and normative support, specifically the role of people, structures, and norms, can be enabling or constricting for any individual, especially adolescents. It is important for adolescent empowerment. In Sperling, Winthrop, and Kwauk’s (2016) review of what works in education, especially for girls, they recognized the role of communities, including parents, teachers, and other notables, as a significant enabler for girls’ education and rights. Especially as minors, adolescents are highly susceptible to the thoughts, beliefs, wishes, and control of their parents and others; they are also less likely to be civically engaged in policies that affect them, such as re-entry policies for young mothers to return to school after giving birth.

**Individual agency**

As discussed earlier, the role of individual-level agency is a central component of most empowerment frameworks (DeJaeghere, Josic, & McCleary, 2016; McCleary, 2016; Nikoi, 2016; Murphy-Graham and Lloyd, 2016; Shah, 2016). An individual’s ability to set goals and make informed decisions is often seen as the application and operationalization of an empowerment process. The spaces available to, and appropriate for an adolescent to exercise and practice their agency in a safe way is different from adults, and provides a critical foundation for continued empowered behaviors.

**Power and gender**

Because empowerment theory is inherently gendered in nature (CARE USA 2010; Monkman 2011; Murphy-Graham 2008; Stromquist 2015), the same goesholds when examining adolescents. Adolescents, especially girls, are more susceptible to many of the factors of poverty
and disempowerment (e.g., Chant & Jones, 2005; Parra and Holden, 2014; Ssewamala, Ismayilova, McKay, Sperbber, Bannon, & Alicea, 2010).

Combined, these nine components create a cohesive conceptual mapping of an adolescent economic empowerment framework.

**Adolescent Economic Empowerment Programming in Kenya**

The information in this section represents the type of programming in Kenya that has been publically documented and reviewed. It is not comprehensive nor representative of all programming efforts in Kenya, as research conducted as part of this study did not produce a database or comprehensive national registry. However, it provides a representation of projects and efforts which aim to address and improve at least one element of economic empowerment (drawing from the six components of adolescent economic empowerment which comprise my framework). Projects/initiatives have been supported domestically, by the Kenyan government, as well as by the World Bank, and INGOs and organizations such as the International Rescue Committee, CARE, and MasterCard Foundation (CARE USA, 2017; DeJaeghere, Josic, & McCleary, 2016; Hope Sr., 2012; World Bank, 2016; Youth Enterprise Development Fund, 2017). These projects focus on issues ranging from youth-based loan programs, to microfinance loans for registered youth groups, to the building of employability skills for youth, to building financial literacy skills and access to banking options for adolescents and youth, to supporting micro-franchise enterprise options.

In reviewing this list, two observations may be made. The first is that all programs focused on the youth age range, rather than the adolescent age range, critically eliminating those between the ages of 10-14. The second is that there was only one study that examined

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14 Youth here follows the age range of 15-30, per the Kenyan National Youth Policy
perspectives of empowerment from the perspectives of youth (again, missing the 10-14 age range). These gaps are ones that this research study is designed to fill, through the inclusion of younger ages.

Overall, this chapter demonstrated the need to examine adolescent empowerment as uniquely different from adult empowerment, and explore adolescent economic empowerment, as a sub-dimension worthy of exploration. Using the lenses of empowerment theory and capabilities theory, this study focused on the sub-dimension of economic empowerment, adolescent economic empowerment and its relationship to education. Additionally, the role of context, power, and gender were all shown to be critical to understanding empowerment processes at both the adult and adolescent levels, although in different ways based on age-appropriate conditions. Based on its inter-related nature, this chapter, provided a valuable backdrop for exploring if and how adolescents, their households, and teachers in Kenya view, defined, and perceive the constructs and dimensions of adolescent economic empowerment.
CHAPTER THREE: Methodology

This chapter outlines the study design and methodology used in this research study. It also explores the appropriateness of the methodology to the specific research questions and data.

**Conceptual Framework**

The following section addresses the conceptual framework and approaches guiding this research study. Figure 3 illustrates this connection with the study theoretical framework, as well as data source and analysis methodological approaches.

**Figure 3: Methodological Framework**

<table>
<thead>
<tr>
<th>Theoretical Perspective</th>
<th>Conceptual Framework:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Empowerment Theory</td>
<td>- Pragmatism with elements social constructivism</td>
</tr>
<tr>
<td>- Capabilities Approach</td>
<td></td>
</tr>
</tbody>
</table>

**Data Collection**

- Quantitative surveys
- Qualitative focus group discussions & key informant interviews

**Research Questions:**

1. According to adolescents, households, and teachers, what knowledge, skills, access, and resources are valued and prioritized for adolescents in urban and rural settings of Kenya?
2. What influences Kenyan adolescents' knowledge, attitudes, and practices related to economic empowerment skills?
3. What are adolescents, their households, and teachers in urban and rural contexts in Kenya perceptions of adolescent economic empowerment?

**Research methods/Analysis:**

- Secondary analysis
- Mixed methods using a convergent parallel design

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**Philosophical Approaches**

Guiding this work is the philosophical approach of pragmatism based on this study’s focus on the practical applicability of findings. This approach is a good fit because the real-life implications and applicability of findings guide my choice to conduct this research. As Johnson
& Onwuegbuzie (2004) and Tashakkori & Teddlie (2003) noted in their works, pragmatism is a natural fit for mixed method studies. The research was driven by what Tashakkori and Teddlie (2003) call “dictatorship of the research question” (p. 21): being guided by the significance of the research over a single methodological or theoretical approach. The use of pragmatism is a good fit for mixed-method studies such as this one because the work is driven by what make sense with the data rather than competing epistemologies. I also bring in elements of social constructionism, which assumes that social processes are what sustain and advance knowledge; recognizing the role of context and history (Berger & Luckmann, 1966; Hibberd, 2005).

I approached the analysis and interpretation of data from as open stance a stance as possible (e.g., through the use of iterative and open coding, to allow for new relationships and findings from the data to emerge). However, pre-assigned codes were used deductively, based on my nine theorized dimensions of adolescent economic empowerment. Emergent-coding processes were also used to allow for un-foreseen/un-theorized themes of significance and/or relationships between codes. This process is in-line with Charmaz and Belgrave’s (2012) guidance on open coding.

Study Design

“What science is, is evident from the following, if we must speak exactly and not be guided by [mere] similarities. For we all supposed that what we know scientifically does not even admit of being otherwise; and whenever what admits of being otherwise escapes observation, we do not notice whether it is or is not [and hence we do not know about it]. Hence, what is known scientifically is by necessity.” Aristotle, trans. 1999, Book VI, Chapter 3, §2
In this research study, I conducted a secondary analysis of data collected as part of a baseline study of the research consulting group Nous, as part of a contract for CARE Kenya. As part of a project focused on adolescent education and empowerment to be implemented by CARE Kenya and partners, a baseline study was conducted in 2016. The purpose of the CARE conducted baseline was to better understand the knowledge, attitudes, and practices of key respondents, with regards to a series of pre-determined project indicators. CARE USA granted me written permission to use of these datasets for the purpose of conducting a secondary analysis. This written permission is located in Appendix F. My research study, presented in this paper, adds to the earlier work by further defining and exploring individuals’ perceptions of adolescent economic empowerment.

The survey instruments and interview guides used for data collection, from which the data sets in this research study are derived, relate to a broader research study on adolescent education and empowerment in Kenya. They include additional constructs, such as a focus on adolescent sexual and reproductive health, female genital mutilation (FGM), and early marriage. This dataset was used because it contains data related to the proposed constructs of adolescent economic empowerment, and allowed for the desired disaggregations across groups and sites in the analysis.

The use of secondary/existing quantitative data is relatively common in research studies. There is the common use of census data, DHS data, as well as countless publicly available quantitative databases found online (Cheng & Phillips, 2014; Nastasi & Hitchcock, 2016). The use of secondary/existing qualitative data often occurs through methods such as document analysis. Long-Sutehall, Sque, & Addington-Hall (2010) discuss how secondary analysis of qualitative data can be useful in studying hard to reach populations. Given my limitations in not
only being able to physically access these populations due to financial and time constraints related to international travel, but also my lack of experience building relationships with the populations included in the study, this use of existing secondary qualitative data was a good option. The secondary analysis of qualitative data in this paper follows Heaton’s (2008) model of supplementary analysis, which she defines as, “a more in-depth analysis of an emergent issue or aspect of the data, that was not addressed or was only partially addressed in the primary study” (p. 39). It also follows the nine-step process for secondary analysis of qualitative data outlined by Cohen, Manion, and Morrison (2017).

**Participants**

The datasets in this research study included multiple respondent groups: 1) urban in-school adolescent girls; 2) urban out-of-school adolescent girls; 3) urban in-school adolescent boys; 4) urban out-of-school adolescent boys; 5) rural in-school adolescent girls; 6) rural out-of-school adolescent girls; 7) rural in-school adolescent boys; 8) rural out-of-school adolescent boys; 9) parents of the adolescent respondents; and 10) principals and/or teachers of schools. Below are the sampling frames and sizes for each of these groups. After the adolescents were sampled for the study, their corresponding households were surveyed; if the adolescent was the head of their household, they filled out this survey using an abridged set of questions, as outlined through the skip patterns in the survey tools.

The qualitative key informant interviews and focus group discussions took place in Kiswahili and were recorded using digital recording devices. They were led by enumerators trained by the Nous Consulting Group from Nairobi. These audio files were then fully transcribed and then translated into English. Each key informant interview was administered as
a one-on-one interview, while the focus group discussions contained between eight and 13 participants.

Table 2: Quantitative datasets used for analysis

<table>
<thead>
<tr>
<th>Project Site</th>
<th>Strata</th>
<th>Gender</th>
<th>Sample Size Achieved</th>
<th>Sample Size Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban site</td>
<td>In-school (10-14 years)</td>
<td>Girls</td>
<td>158</td>
<td>158</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boys</td>
<td>132</td>
<td>132</td>
</tr>
<tr>
<td></td>
<td>Out of School (OOS)</td>
<td>Girls</td>
<td>186</td>
<td>186</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boys</td>
<td>68</td>
<td>68</td>
</tr>
<tr>
<td>Rural site</td>
<td>In-school (10-14 years)</td>
<td>Girls</td>
<td>141</td>
<td>141</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boys</td>
<td>106</td>
<td>106</td>
</tr>
<tr>
<td></td>
<td>Out of School (OOS)</td>
<td>Girls</td>
<td>175</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boys</td>
<td>141</td>
<td>141</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td>1,007</td>
<td>1,007</td>
</tr>
</tbody>
</table>

Table 3: Qualitative datasets used for analysis

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Sample Size Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principal/Teachers in Schools (see survey tool in Appendix C)</td>
<td>3 Key informant interviews (KII)</td>
</tr>
<tr>
<td>Community (women &amp; Men) (see survey tool in Appendix B)</td>
<td>2 Focus group discussions (FGDs)</td>
</tr>
<tr>
<td>Adolescent Boys and Girls (see survey tool in Appendix A)</td>
<td>4 FGDs</td>
</tr>
</tbody>
</table>

During each data collection administration, individuals had the option to opt-out at any point in the process. The research followed CARE’s guiding frameworks and policies for ethical research: The CARE USA Suggested guidance for interviewing children, The CARE USA
Stories and Images Consent Policy, CARE’s Ethical Guidelines for Programming and Research, CARE USA’s Guidelines for Involving Children in Advocacy and PR, CARE’s guidance on Ethical and effective discussions of trauma, and CARE’s Do No Harm Framework. I was not part of the data collection process.

Instrument Development

CARE Kenya, Nous, CARE USA [including myself through my job at CARE USA], collaborated to create the study tools in response to the specific research needs in Kenya. Adolescents and their households (parents and/or guardians) participated in the quantitative survey data collection, conducted on a one-on-one basis between a trained enumerator and the individual. The enumerator entered the respondent’s responses electronically in KOBO Collect via tablet and/or smart phone. Focus group discussions and key informant interviews occurred with adolescents, parents/adult community members, and teachers or principals at schools. Digital audio recording devices recorded these while enumerators also kept notes. See Appendices A - E for the full tools used with each of these groups. Additional focus group discussions and key informant interviews were conducted with other stakeholders to inform research questions beyond the scope of this study.

Study Limitations and Delimitations

As with any research study, there are certain limitations and boundaries on the work. Below are the known limitations and delimitations, or boundaries, of this research study.

Study Limitations

Within this research study, I identified six core study limitations. The first of which addresses the use of secondary data versus first-hand primary data collection. While I was part of the team that designed the survey tools and questionnaires used to collect the data, I was not
present during the data collection. This means that I am dependent on the data collection notes embedded in the transcripts regarding things such as nonverbal responses.

The second limitation is that of conducting exploratory qualitative data collection. While the enumerators leading the focus group discussions received training in how to ask probing questions, the number and type of probing questions is limited. The lack of follow-up or probing questions affects the depth of analysis conducted. To address this limitation, I will include recommendations on noted gaps for future research in Chapter Five.

Third, there are limitations regarding nuanced meanings due to survey and data translations. Both qualitative and quantitative data collection was conducted in Kiswahili, a language I do not speak. The translation process of data collection tools from English to Kiswahili includes an element of interpretation regarding meaning rather than straight word-for-word translation. Similarly, qualitative FGD transcripts were translated from Kiswahili to English. To address this limitation, back-translations of the data collection tools occurred, and spot checks took place on areas of concern with a native Kiswahili speaker.

Fourth, there are limitations in cross-cultural research. I do not have an insider’s understanding of the context from which the respondents come. In recognition of this limitation, I addressed confirmability through a review process with a Kenyan national, who also works in international development at a different INGO other than CARE, of my interpretations and findings.

Fifth, although the data was collected across two distinct geographic areas in Kenya, the results from these two areas cannot be used to generalize to the rest of the country. Instead, results and findings instead are limited to the specific population groups from whom the data was collected. Not only are findings limited to the population groups from whom data was collected,
but they are also limited as relevant and applicable during the time and conditions under which they were collected; for example, they may not be applicable during differing economic and/or political influences/limitations.

Finally, the sixth limitation in this study is that of the self-reporting nature of the instruments used. Qualitative data collection utilized focus group discussions and key informant interviews, and quantitative surveys utilized some self-reporting (versus externally validated) questions regarding demographic markers as well as certain questions on self-perceptions. It may be assumed that self-reporting data is different from externally assessed and/or validated data; the directionality and/or impact of this is unknown without comparison data available.

**Study Delimitations**

In addition to the in-built study limitations, largely based on the use of secondary data from a culture other than my own, there are specific study delimitations, or boundaries, that I identified in this study. By drawing attention to them now in absentia, I recognize their significance in broader research agendas, while limiting the bounds of this specific research study.

The first is regarding empowerment theory. This study is not designed to provide a macro analysis of all aspects of empowerment theory. There are many perspectives and sub-dimensions which deserve their own research studies and their absence is not an indication of lesser importance. This study is designed to specifically explore adolescent economic empowerment, as it relates to adolescents in the two contexts in Kenya covered by this research study. The specific focus on this sub-set of empowerment and capabilities theory, as it relates to the study population, is intentional to not only bring clarity to the construct of the term in itself, but to also meaningfully measure it.
Secondly, a delimitation of this study is that, while recognizing the colonial past of the country and therefore the research population, this study is not designed to provide a complete historiography and historical analysis of education in Kenya. The impact of colonialism and de-colonialism on Kenya, the Kenyan educational system, and current day politics cannot be underestimated. Kenya was both a British protectorate from 1895 to 1920 and a formal colony from 1920 to 1963. The influence of colonialism on adolescents’ opportunities and perspectives can (and should) be an entire research study in itself; by delimiting this study to explore the current conceptualization of adolescent economic empowerment in the study population, it provides an in-depth foundation for future comparative and/or historical analysis regarding how and why perspectives on adolescent economic empowerment may have changed over time.

Thirdly, focusing on the issue of adolescent economic empowerment naturally begets questions regarding the role of neoliberalism and neoliberal policies and practices. Neoliberalism and its influence on policies, funding, and beliefs is vast, especially in developing countries (Saad and Johnston, 2005; Harris and Seid, 2000). However, this research study is not designed to be a study of neoliberal policies and its influence on adolescent economic empowerment in Kenya, and is outside the boundaries. If this study’s research questions explored influences on funding for programs and/or curricula changes, as they relate to adolescent economic empowerment (or any other sub-component of education and/or empowerment theory for adolescents), it would be a central theoretical frame. However, given this study’s focus on the perspectives of adolescents, their households, and teachers about adolescent economic empowerment constructs, its focus draws strength in building a clear and supportive narrative on the empowerment-related constructs and influences on adolescent economic empowerment. Drawing from Sen’s (1999) focus on poverty going beyond mere
finances, the same could be said of adolescent economic empowerment: it goes beyond neoliberal policies and perspectives, in how it is conceptualized by individuals.

**Methodology**

“Evaluators who are more concerned with pragmatics than with competing epistemologies have brought multi- and mixed-method evaluations into common practice”

*(McConney, Rudd, and Ayres, 2002, p. 121)*

This study utilized a mixed methods inquiry. Although possibly a misnomer, a mixed methods approach is actually a methodological approach to research and analysis (Creswell, 2015; Ivankova, 2015). Creswell’s (2015) definition of mixed methods guides this work; he defines it as:

An approach to research in the social, behavioral, and health sciences in which the investigator gathers both quantitative (close-ended) and qualitative (open-ended) data, integrates the two, and then draws interpretation based on the combined strengths of both sets of data to understand research problems. (p. 2)

In general, by utilizing multiple methodologies in research designs as well as analysis, especially when applied through multi-layer and/or iterative processes, critical insights can be gained that may otherwise go unexplored and/or validated. These critical insights are especially relevant when exploring both education and empowerment constructs, which are multi-faceted and multi-layered.

By addressing the ways in which the research should take place, a mixed methods methodology guides researchers through considerations of: strands, or components of study (which include: how to pose

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**Figure 4: Multi-stage mixed-methods framework**

<table>
<thead>
<tr>
<th>Stage 1: Study conceptualization utilizing an exploratory framework, building from Denzin’s (2006) four types of triangulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 2: Analyzing data, focusing on convergence</td>
</tr>
<tr>
<td>Stage 3: Inferential Stage paying attention to Fetters’ (2013) three types of fit</td>
</tr>
</tbody>
</table>

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*Strand structure: Convergent design & analysis
Focus on data triangulation and integration*
research questions, how to collect data, and how to interpret results), sequence and timing across stages and strands, priority and weighting, and how results are integrated or mixed (Ivankova, 2015). This section outlines the specific methodologies employed in this study, manifested through multiple research dimensions.

The first mixed methods research dimension utilized was the use of multiple research questions, in-line with Plano Clark and Ivankova’s (2016) guidance. A growing body of literature supports the benefits of combining qualitative and quantitative data and approaches in a single study. Using Teddlie & Tashakkori’s terminology, as referenced by Denzin (2010), there are many benefits to this methodological bilingualism. According Moran-Ellis et al. (2006), for complex research questions,

Kelle (2001) makes a strong case for this, arguing that for those empirical questions about phenomena, which operate at both macro and micro levels, one method alone cannot offer a sufficient basis for sociological explanation (p. 48).

The combination of approaches and analysis helps researchers to think outside the box regarding not only research questions but also what questions we ask and how, as well as our analysis approaches (Mason, 2006).

This research design utilized a multi-stage mixed methods framework (See Figure 3). It is multi-stage due to its inclusion of three or more stages (Fetters, Curry, & Creswell, 2013). Three stages, within a single strand guided my research. The concept of strands in designing a conceptual framework is unique to mixed methods. According to Ivankova, 2015,

A strand is a component of a mixed methods study that encompasses the basic process of conducting quantitative or qualitative research. In other words, it is a phase of a mixed methods study that includes three stages- the conceptualization stage (posing the study
question), the experimental phase (collecting and analyzing the data), and the inferential stage. (p. 18)

Specifically, the analysis intentionally integrated and inter-meshed both the research design and data analysis. This focus on integration aligns with Moran-Ellis et al.’s suggestion that “the greatest level of integration as integrated methods, in which the inter-meshing occurs from conceptualization onwards to the final reporting of the research” (2006, p. 51). Because empowerment in general, and also adolescent economic empowerment, is a multi-dimensional process, rather than a binomial result, the use of multiple data points, types, and perspectives through mixed methods, enabled a complete snapshot of how it is constructed by adolescents, their households, and teachers in Kenya. Because the data utilized in this research study came from a baseline evaluation survey conducted for a CARE Kenya project, this analysis provides the first data point in a 5-year longitudinal study. Over the five year period, there will be potential to triangulate and compare these findings with other data points, comprehensively providing a clearer picture of the empowerment process, what factors affect it, and how adolescents’ empowerment journey changes (or does not) over time.

**Procedures**

The primary research was led and contracted by CARE Kenya staff leading the Girls’ Empowerment Project. They hired the Nous research group, based in Nairobi, Kenya, to conduct the research design and data collection. They managed the training of enumerators, data collection, and the entry and cleaning processes. The US-based JBS International aided Nous in the training and data management (e.g., data cleaning, merging of databases, tracking data collection progress, etc.) stages.
A mapping of the qualitative research question onto data available for analysis is located in Appendix G. The qualitative analysis utilized a thematic analysis, to help answer the qualitative research question (Aronson, 1994; Vaismoradi, Turunen, Bondas, 2013). As mentioned earlier, qualitative coding used pre-assigned codes and emergent codes. In this study, the thematic analysis follows the steps laid out by Vaismoradi, Turunen, and Bondas (2013). The researcher: (i) becomes familiar with the data; there is preparation for analysis, through the selection of unit of analysis and other decision points; (ii) generates initial codes; (iii) searches for themes; (iv) reviews themes; (v) defines and names themes; and (vi) produces a report. Coding happened in iteration, recognizing that new codes emerged during the process, borrowing from the content analysis process (Vaismoradi, Turunen, and Bondas, 2013).

The pre-selected codes reflected theorized skills, resources, knowledge, and spaces for access mentioned in the literature on adolescent economic empowerment, as well as broader empowerment theory. By disaggregating the data and looking at convergent and divergent responses across respondent type (gender/age), and locale, it was possible to distill various perceptions of what is valued. Dedoose was used for the digital coding and sorting, as the first stage of analysis, followed by a thematic analysis of the sorted and coded transcripts.

I also drew from an analytic induction approach during the analysis process, drawing from Johnson’s (2004) conceptualization of the term as “… a set of methodological procedures which attempt to systematically generate theory grounded in observation of the empirical world” (p. 165). The use of analytic induction was appropriate because of the interconnected nature

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15 This was done through the pre-selection of which units of analysis were to be included in the qualitative analysis. As referenced earlier, the data used in this study came from a larger dataset collected by CARE Kenya. During this stage of the thematic analysis, all qualitative transcripts were reviewed, and the decision was made to omit qualitative transcripts which did not relate to the research questions of this analysis, such as key informant interviews with community health workers, which discuss adolescent sexual and reproductive health rather than adolescent economic empowerment.
behind theory building and the development of the survey instruments and analysis framework (Johnson, 2004).

An important aspect of the process was the mapping of the quantitative research question onto data available for analysis (See Appendix H). In conducting the analysis, some variables were both independent and dependent, depending on the specific relationship tested (see Appendix G and H). For example, in one analysis the relationship between gender and levels of financial literacy was tested, while in another, the relationship between financial literacy and savings habits was tested. Likewise, in one analysis the relationship between parent savings beliefs and their adolescent’s savings habits was tested, while in another analysis adolescents’ savings beliefs was explored in relation to their savings habits. Throughout these analyses, I explored associations across variables to understand adolescent economic empowerment skills, and what affects adolescents’ knowledge, attitudes, and practices toward them.

Difference in means testing utilized Independent Samples T-Testing as one step to assess differences across respondent groups. In accordance with conventional standards, significance was defined at the 0.05 level across these results and all p-tests in other tests. When Levene’s test of the t-test indicated unequal variances between the two groups, the degrees of freedom used in the t-test was adjusted by using the Welch-Satterthwaite method instead of using the pooled estimate in determining the error (Park, 2009). Independent Samples T-Testing was used when assessing differences in sub-group respondents within a single statistical test; for example, to understand the differences between sub-group YLI scores. In many of the statistical tests run in this study, results indicated non-normality across the multiple respondent groups and so subsequent difference in means testing utilize Mann Whitney U non-parametric tests (Minium, Clarke, and Coladacri, 1998). To continue from the earlier example, when YLI scores are
analyzed for differences based on other characteristics, such as if adolescents reported saving money over the past 12 months, the difference in scores is assessed using the Mann Whitney U test. The results of these tests are presented in Chapter Four. Reliability testing on five separate indices utilized Cronbach’s Alpha testing to determine internal consistency, with a target of 0.7 or higher as acceptable scores for inclusion in this study (Muijs, 2011). Due to the non-parametric nature of the data across respondent groups, correlational analyses use Spearman’s rho tests (Minium, Clarke, and Coladarci, 1998), and goodness of fit testing utilize Pearson’s Chi-Squared analyses. Adolescent and household quantitative surveys were already linked in a single database before I received them in an anonymous state for this research study, allowing the analysis to explore the relationships between adolescent and household responses.

During the analytical stage of intermeshing of results, as part of the mixed methods, the findings of my earlier quantitative and qualitative research questions were triangulated. One of the purposes of this mixing in analysis is for enhanced triangulation on multiple levels. Drawing on Denzin’s suggested categorizations (2006), this research study triangulated findings across three levels: data triangulation, methodological triangulation, and theory triangulation. Data triangulation occurred through the use of multiple sources of data: data collected in this study, compared with national-level statistics and previous studies on adolescents in Kenya, which is included in the literature review. Methodological triangulation occurred through the use of multiple methods for data collection: quantitative and qualitative. Finally, theory triangulation happened through the use of multiple theoretical perspectives: empowerment theory inter-meshed with capabilities theory.

The written analysis employed a process of narrative weaving, integrating findings on a "theme-by-theme or concept-by-concept basis” (Fetters et al., 2013, p. 2142). During this
process, not only did I look for research findings stemming from the data, but I also assessed the types of ‘data fit’ through the integration process. ‘Fit’ was assessed in line with Fetters et al. (2013) three types of fit for data integration: confirmation, expansion, and discordance. In this study, the analysis and interpretation stages included an awareness and response to how the data “fit” together. By engaging in a complex and multi-stage research design and analysis, it allowed for better understanding of the nuanced complexities of economic empowerment for young people in developing settings, specifically Kenya, and may inform future project measurement, design, and implementation.

The analytical weaving followed the process presented in Figure 5.
The analysis allowed for multiple single-method and single-respondent-type analyses, as well as multiple mixing opportunities for analysis. Because data collection occurred in parallel processes, I conducted the analysis in a convergent parallel process (Creswell & Plano Clark 2011), as outlined in Figure 6. At each step of the convergent parallel process, constant
comparative methods (Roulston, 2014) were used to interrogate the significance of the findings, as well as the types of fit (Fetters, 2013). During these processes, abductive reasoning was applied, recognizing that there are multiple theoretical perspectives and/or explanations for phenomenon emerging in the data (Roulston, 2014).

Methodological fit with the data

*Methodology & Theory Mapping*

Much of the existing scholarship on empowerment is theoretical versus data-based (Duflo, 2012; Gammage, Kabeer, & Rodgers, 2016; Hanmar & Klugman, 2016; Kabeer, 1999, 2015, and 2016; Malhotra, Schuler, & Boender, 2002; Monkman, 2011; Mosedale, 2005; Stromquist, 2002). An inherent challenge in drawing upon existing data-based empowerment studies is that much of the current literature on measurement for empowerment-based approaches and theoretical designs is either entirely theoretical, or so nuanced and specific, it is hard to find common ground for generalization. Malhotra et al. (2002) suggest that each definition and
construction of empowerment must be measured and calibrated differently; additionally, they suggest the multi-dimensionality of empowerment requires care in constructing measurement variables.

The construct of agency frequently appears in empowerment definitions. Its measurement relies on the combination of proxies such as education levels, choices made about health, knowledge, etc. However, Hanmer and Klugman (2016) rightly note that measures of agency are often hard to use because the data generated is outcome-related (e.g., level of educational attainment), but it does not necessarily tell us about freedom in choice. For example, I can be forced to visit a health clinic, indicating increased health standards, but the lack of choice does not equate those health measures to an empowered process. This use of quantitative indices and proxy indicators lend themselves neatly to quantitative methods of research design and analysis. From the other side, many studies (e.g., DeJaeghere & Lee, 2011; Malhotra, Schuler, & Boender, 2002; Stromquist, 2002; Warner, Malhotra, & McGonagle, 2012) have shown qualitative methodological approaches resulting in insightful studies regarding the process and results of empowerment. Malhotra & Schuler (2005) note how both quantitative and qualitative methods have been used to measure empowerment.

Because empowerment is a multi-dimensional construct and complex, it requires a nuanced exploration into a multitude of factors including, but not limited to, issues of gender, power, and relationships across multiple constructs. This complexity means going beyond sometimes basic output and outcome indicators from a single dimension, and instead looking at the web of information knit together about the process and impacts they influence. Moran-Ellis et al. (2006) note the flexibility that the use of mixed methods approaches provide when one source alone cannot offer sufficient sociological explanations of complex phenomena. Because
empowerment is a multidimensional process, proxies are often used in measurement (Ackerly, 1995; Kishor, 2000), and context needs to be taken into account (e.g., about the contextual opportunities and situationally appropriate outlets for decision making, control, and choice). Therefore, it can be surmised that the use of mixed methods provides multiple inputs to account for these multiple points. When conducting longitudinal studies, especially those that span more than one age/stage-of-life periods, the use of mixed methods aids in adapting the research instruments so they respond to the changing context and person, as well as capture change as a non-linear process. Baird & Ozler (2016) suggest that the selection of empowerment indicators also changes throughout the lifecycle, as some are more appropriate at specific points in time than others.

There are risks in simplifying the measurement of empowerment. Take, for example, an RCT conducted on empowering adolescent girls in Uganda, which included a zero to one hundred gender empowerment index (Bandiera et al., 2012). Although responses on the scale from zero to one hundred are self-reported answers to questions, it is hard to deduce empowerment to a single numerical score. Instead, I would suggest it is easier to assess the multiple sub-components and proxies to understand a person or a group’s journey of empowerment. This would enable the researcher to understand the ways in which the respondent(s) can exercise agency, make informed decisions, work with others, etc. to reach his/her potential and realize his/her rights.

Taking the central components of empowerment theory (presented earlier in Chapter 2 and labeled as E1 to E7), it is important to explore how they influence the data analysis process. Because of the role of education beyond primary schooling and formal schooling is theorized to
be important to empowerment (E1, E6), I explored perspectives about relevant skills\(^\text{16}\), and capabilities. This relationship between adolescent economic empowerment and education may also be found below in Figure 2. Sen’s (1999) finding that because income and capabilities are affected by age, gender, location, and other issues, it was important to disaggregate by these variables, especially when assessing relevant skills.

In exploring the non-linear nature of empowerment (E2), I looked at a web of relations amongst constructs, research questions, and varying methods of inquiry/tools and analysis. The third tenet of empowerment (E3) prioritizes the role of context. To incorporate this, I disaggregated data and looked at differences in responses between urban/rural sites, as well as in-school and out-of-school status. This process is supported by Nastasi & Hitchcock’s (2016) emphasis on multiple disaggregations to support the nuances of context.

Because the role of others matters (E4, E5), I looked at the perspectives and potential influence of households/parents, and teachers, as well as issues of power and gender in conducting the analysis. This came through the incorporation of multiple respondent groups (adolescents, their households, and teachers), as well as looking at the reported role of others in both qualitative and quantitative responses in the data. Finally, because individual agency\(^\text{17}\) and decision making (E7) are determined important in empowerment frameworks, I looked at perceptions of leadership abilities.

**Methodology & context mapping**

\(^{16}\) The data collection tools operationalize "economic empowerment skills" as:
- Financial literacy and decision making
- Participation in income generation activities
- Participation in youth savings groups
- Use of ICT
- Savings beliefs
- Savings and spending habits

\(^{17}\) Agency may be thought of as the self-imposed confidence and freedom for an individual to pursue “whatever goals or values he or she regards as important” (Hanmer and Klugman, 2016, p. 237)
Revisiting the statistics presented in the context section in Chapter One, we know that both girls and boys experience the educational system differently in Kenya. In primary school, more girls are enrolled than boys, with the trend reversing in secondary school, potentially indicating gendered barriers to education at each level (UNESCO Institute of Statistics, 2017). When it comes to learning outcomes, girls score significantly higher scores on key math, Kiswahili, and English exams (UWEZO, 2016). With regards to geographic location, while primary school completion levels may not significantly differ from urban to rural areas (Republic of Kenya, Kenya National Bureau of Statistics, 2015), urban students score higher on UWEZO exams than rural students (UWEZO, 2016). Finally, there is a link between education and employment levels. Employment status in adults differs based on educational attainment levels: women with higher levels of education are more likely to be employed than women with no education, while men with the highest level of education were less likely to be employed than men with no education (Republic of Kenya, Kenya National Bureau of Statistics, 2015). Statistics such as these, as well as the theoretical framework provided in Chapter Two, support the disaggregation of analysis in this research study by factors such as gender, schooling status, and geographic location of the respondent.

Data Quality & Testing

Data Trustworthiness

Throughout the analysis, I employed and referenced a reflexivity (Morrow, 2005) approach to address trustworthiness. During the analysis interpretation process, I included a stage to confirm from a cultural-legitimacy perspective (Scott, 2014), the contextual interpretations of findings and appropriateness with a Kenyan national, who works also works in international development for a different INGO than I do. Nastasi & Hitchcock (2016) prioritize
the role of ‘context’ as important in the stages of research design, analysis; therefore, this stage of cultural-legitimacy checks played an important role in this mixed methods study. Nastasi and Hitchcock (2016) also note that the approach of triangulation across multiple sources as a technique that enhances trustworthiness in mixed methods research studies.

**Data Validity**

During the inquiry of a largely un-tested construct, like adolescent economic empowerment, establishing reliability and credibility is important. In this research study, issues of quantitative data validity were addressed through reliability testing utilizing Cronbach’s Alpha. The quantitative surveys contain sub-sections of questions that, when combined together, create an index. For example, an index of questions on perceptions of leadership abilities are found in the adolescent survey, section G. The Likert-scale questions in these sections together become pre-defined indices; for these items, reliability testing was conducted.

While the detailed analysis findings are presented in Chapter Four, it is worth noting at this stage that three indices (the YLI, Adolescent Savings Scale, and the Financial Literacy Calculation Scale) were tested and found to exhibit acceptable to strong internal consistency and reliability. Dissonance and non-normality across the multiple sub-groups result in the need to use non-parametric tests, and informed the ability of the quantitative data to infer generalizations, therefore addressing threats to external validity. As it relates to issues of internal validity, descriptive statistics were run to assess differences in adolescents related to age. As it turns out, the out-of-school adolescents were, as a whole, older than the in-school adolescents. Therefore, conclusions based on differences in schooling status may also be reflective of general maturation differences across the two populations based on age. The age profiles of the two groups can be seen in Figure 7.
With regards to external validity, it is important to note that findings stemming from the populations in this study are not assumed to be valid for other populations. This is not only due to the unique characteristics of these populations with regard to geography and cultural practices, but also due to the need, in the empowerment literature, to measure and calibrate differently in each study (Malhotra et al., 2002).

**Instrument Testing**

The information in this sub-section is designed to explore the index-based tools utilized as part of the analyses conducted, to better understand in what ways these tools contribute to the research study.

**Youth Leadership Index**

**Index description**
The Youth Leadership Index, or YLI, is a 4-point Likert-style survey with 21 questions, created by CARE and designed for adolescents to self-assess leadership competencies related to voice, decision making, confidence, organization, and vision. The maximum possible score is 84, resulting from a respondent choosing all of the highest scores, a 4, across each of the 21 questions. Scores on the YLI indicate self-perceptions of leadership abilities, with higher scores indicating higher self-perceptions.

Index descriptive data

As an aggregate group, adolescents in this research study produced a mean score of 54.93, with a standard deviation of 13.55. The results for all adolescents combined into one group were normally distributed with a skewness of -0.183 and kurtosis of -0.286. Reliability testing on the YLI indicates high internal consistency; when all adolescents are grouped together, the 21 item scale produced a cronbach’s alpha score of 0.906. The high reliability was also found when sub-dividing adolescents by geographic location and gender, with scores ranging from 0.873 to 0.918, as can be seen in Appendix M.

When looking further at how sub-groups responded on the YLI in comparison with one another, as can be seen in Table 4, there were several significant differences amongst sub-groups. When schooling status (in-school versus out-of-school) was taken into account across all adolescents, there were no significant differences between how in-school versus out-of-school students responded. However, further sub-group analyses indicated that rural, in-school girls had scores significantly higher than rural, out-of-school girls; \( t(285.48) = 2.64; p = 0.009. \)
Additionally, urban, in-school boys had scores significantly higher than urban, out-of-school boys; $t(285.48) = 3.224; p = 0.009^{18}$.

**Table 4: Mean YLI Scores by respondent group**

<table>
<thead>
<tr>
<th>All adolescents: 54.93</th>
<th>All girls: 52.87</th>
<th>All rural: 55.87</th>
<th>All in-school: 55.53</th>
<th>Rural girls</th>
<th>In-school: 56.71</th>
<th>Out-of-school: 52.57</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Urban girls</td>
<td>In-school: 50.21</td>
<td>Out-of-school: 52.09</td>
</tr>
<tr>
<td>All boys: 57.50</td>
<td>All urban: 53.73</td>
<td>All out-of-school: 54.24</td>
<td>Rural boys</td>
<td>In-school: 56.71</td>
<td>Out-of-school: 58.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Urban boys</td>
<td>In-school: 59.30</td>
<td>Out-of-school: 53.19</td>
</tr>
</tbody>
</table>

When adolescents were grouped by geography, rural students scored significantly higher than urban students; $t(1005) = 2.49, p = 0.013$. Further sub-group analyses indicated that out-of-school rural boys scored significantly higher than out-of-school urban boys; $t(198) = 3.224, p = 0.001$, and rural out-of-school boys scored significantly higher than urban out-of-school boys; $t(207) = 2.644, p = 0.009$.

When examined at as a single group, boys had significantly higher YLI scores than girls with a mean of 57.5 versus girls at 52.87; $t(1005) = 5.40; p < 0.001$. Further sub-group analyses indicated that in-school urban boys scored significantly higher than in-school urban girls; $t(288) = 6.12; p < 0.001$, and out-of-school rural boys scored significantly higher than out-of-school rural girls; $t(314) = 3.244; p = 0.001$.

**Index normality across sub-groups**

When analyzing the data based on the three main divisions across adolescents (gender, schooling status, and geographic location), skewness scores ranged from -0.614 to 0.325, with

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$^{18}$ Levene’s test indicated unequal variances between the two sub-groups ($F = 72.79, p < 0.001$) so the degrees of freedom were adjusted from 314 to 285.48.
kurtosis scores ranging from -1.125 to 2.932. As can be seen in Appendix I, mean scores across groups demonstrate a wide range, from 50.21 to 56.71 (recall that the aggregate mean score across all adolescents is 54.93), accompanied by a wide range of standard deviation amounts from 10.03 to 17.54. Given these inconsistencies based on how each of the eight groups responded, and the non-matching resulting frequency graphs across groups, it is concluded that the normality of the data across respondent sub-groups is questionable, and therefore nonparametric analyses were used in this study when analyzing the YLI in comparison to other statistics.

**Conclusions about the use of the index**

Overall, the YLI scores show us there is room for growth with regards to improvements in self-perceptions of leadership abilities, as the mean score of 54.93 out of 84 does not indicate a ceiling effect. As the data came from a baseline study, this means the index may be used for longitudinal research with these same respondents to understand if and how these self-perceptions change over time, in relation to intervention activities. The explanatory utility of these scores, as they relate to other factors, are explored in some of the quantitative hypotheses tested in the study, and presented later.

**Adolescent Savings Scale**

**Index description**

Although not originally designed by CARE as a scale, I have combined a series of 10 questions for analysis as a single scale in this research study. Asked as a set of thirteen questions regarding savings habits in the adolescent survey tool, the total set of questions produced a cronbach’s alpha score of 0.713. When exploring the individual item correlation scores in comparison to the entire scale, it was determined that if three of the questions were dropped from
the scale, it would perform more strongly as a cohesive scale. Items E18, E20, and E24 all produced low or negative item-total correlations (0.089, 0.085, and -0.023). When these three items were deleted from the scale, it produced a cronbach alpha score of 0.807. This set of ten items is scaled in this research study as a single scaled score. Each of the ten questions ask respondents questions regarding savings practices, beliefs and/or habits, with a four-point Likert-style response option list, including: agree strongly, agree somewhat, disagree somewhat, and disagree strongly; when combined together, the ten items have a maximum score of 40 representing they strongly agree to statements about savings habits, practices, and/or beliefs.

**Index descriptive data**

As can be seen in Table 5, when all adolescent respondents are combined together, the mean score on the Adolescent Savings Scale is 24.08, with a variance of 48.38 and a standard deviation of 6.96. When looking at how sub-groups responded on the Adolescent Savings Scale in comparison with one another, there were several significant differences amongst sub-groups. When looking at differences based on geographic location, as a whole, urban adolescents scored higher than rural adolescents; \( t(1005) = -8.51, \ p < 0.001 \). Further, in-school, urban boys scored higher than in-school rural boys; \( t(236) = -11.305, \ p < 0.001 \), and in-school rural girls scored higher than in-school urban girls; \( t(296.996) = 3.254, \ p = 0.001^{19} \). Out-of-school urban girls scored higher than out-of-school rural girls; \( t(187.44) = -6.761; \ p < 0.001^{20} \).

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\(^{19}\) Levene’s test indicated unequal variances between the two sub-groups (\( F = 4.076, \ p = 0.004 \)) so the degrees of freedom were adjusted from 297 to 296.996.

\(^{20}\) Levene’s test indicated unequal variances between the two sub-groups (\( F = 4.007, \ p = 0.046 \)) so the degrees of freedom were adjusted from 259 to 187.44.
Table 5: Adolescent Savings Scale Mean Scores:

<table>
<thead>
<tr>
<th></th>
<th>All adolescents: 24.08</th>
<th>All girls: 23.75</th>
<th>All rural: 22.48</th>
<th>All in-school: 25.54</th>
<th>Rural girls</th>
<th>In-school: 25.91</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Urban boys:</td>
<td>Urban boys:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>In-school: 23.54</td>
<td>In-school: 21.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Out-of-school:</td>
<td>Out-of-school:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>26.22</td>
<td>21.55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

When exploring the data for issues related to gender, it was determined that in-school rural girls scored higher than in-school rural boys; t(245) = -5.592; p < 0.001, and in-school urban boys scored higher than in-school urban girls; t(288) = 9.349, p < 0.001. Also, out-of-school urban girls scored higher than out-of-school urban boys; t(152) = -3.121, p = 0.002.

Finally, scores based on schooling status (e.g., in-school versus out-of-school), indicated that on a whole, in-school adolescents scored significantly higher than out-of-school adolescents; t(1005) = 7.28, p < 0.001. When looking at sub-groups, rural in-school girls scored higher than rural out-of-school girls; t(314) = 7.066, p < 0.001. In favor of urban settings, urban in-school boys scored higher than rural out-of-school boys; t(198) = 7.894, p < 0.001, while urban out-of-school girls scored higher than urban in-school girls; t(242) = -3.164, p = 0.002.

**Index normality across sub-groups**

When analyzing the data based on the three main divisions (gender, schooling status, and geographic location), creating eight respondent groups, there was wide variability in the mean scores (from 20.99 to 30.67), standard deviation amounts (31.85 to 46.38), along with skewness scores ranging from -0.750 to 0.494 and kurtosis scores ranging from -0.773 to 5.480, to suggest that the normality of the data across respondent sub-groups is questionable, and therefore nonparametric analyses were used in this study. These differences can be seen in Appendix J.
Conclusions about the use of the index

Overall, the Adolescent Savings Scale Index scores indicate room for growth with regards to improvements in responses regarding savings beliefs and habits, as the mean score of 31.81 out of 40 does not indicate a ceiling effect. The relation of these scores as they relate to other factors are explored in some of the quantitative hypotheses tested in the study, and presented later.

Financial Literacy Scale

Index description

Although not originally designed by CARE to act as a scale, in this study I combined multiple questions regarding financial literacy. Originally, this included scaling together questions F2 to F5f, however it only produced a cronbach’s alpha score of 0.786, indicating acceptable internal consistency. After reviewing the item-total correlation data, it appeared as if the questions fell into two categories: those that have moderate correlations (ranging between 0.514 to 0.689) and those that had very low or negative correlations (ranging between -0.214 and 0.256). When reviewing the questions corresponding to these two categories, a pattern emerged regarding the type of question in each group (see Appendix N). In the first group, questions were asked regarding mathematical calculations related to financial literacy concepts; the second group contains questions regarding savings, interest, profit/loss, and other broader financial literacy concepts. When the questions were separated into two scales, the first scale on mathematical calculations produced a cronbach’s alpha of 0.903, while the second scale on interpreting the results produced a cronbach’s alpha of 0.431 indicating low consistency in responses across items, despite containing items of related concepts. The decision was made to only pursue using the first scale regarding financial literacy calculations in this research study.
This new scale, the Financial Literacy Calculation Scale, contains 9 questions all requiring adolescents to calculate topics including: profit, gross profit, net profit, rate of return, calculating interest, and percentage profit. Original response values coded incorrect answers = 2 and correct answers = 1. I re-coded these values so that incorrect answers = 1 and correct answers = 2. This change in values allows a highest possible score of 18 to indicate higher demonstration of financial literacy skills. A score of 9 indicates the respondent attempted all items but got them all wrong, and a score of 0 indicates the respondent refused to answer all 9 items.

Interestingly, the items that demonstrated low internal consistency, those related to non-calculation financial literacy, require respondents to apply and understand the significance of questions in the first group focused on calculations. In other words, while adolescents demonstrated consistency in their mathematical calculations, they were unable to translate that consistency to the interpretation of results. This seems to indicate that while adolescents may be able to consistently calculate math problems, albeit at a low level (the overall mean is 6.31 out of a total score of 18), they are not able to interpret these results in terms of the financial meaning behind the calculations. When interpreting these results as they relate to the overall adolescent economic empowerment status of adolescents in this study, it means that there is a potential disconnect for adolescents between financial literacy knowledge and the skill to make sound financial decisions.

**Index descriptive data**

When all adolescents were analyzed as a single group the mean Financial Literacy Calculation Score is 6.31 with scores ranging from 0 to 18, demonstrating low abilities to correctly calculate mathematical questions related to financial concepts.
Table 6: Mean Financial Literacy Calculation Scores

<table>
<thead>
<tr>
<th></th>
<th>All adolescents: 6.31</th>
<th>All girls: 5.61</th>
<th>All rural: 6.27</th>
<th>All in-school: 6.74</th>
<th>Rural girls</th>
<th>In-school: 7.94</th>
<th>Out-of-school: 4.19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>t(1005) = 2.7, p = 0.007</td>
<td>Rural girls</td>
<td>Urban girls</td>
<td>In-school: 4.53</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>All urban: 6.36</td>
<td>All out-of-school: 5.82</td>
<td>Rural boys</td>
<td>In-school: 7.74</td>
<td>Out-of-school: 6.09</td>
</tr>
<tr>
<td></td>
<td>All boys: 7.2</td>
<td></td>
<td></td>
<td>t(1005) = 4.707, p &lt; 0.001</td>
<td>Urban boys</td>
<td>In-school: 7.32</td>
<td>Out-of-school: 8.43</td>
</tr>
</tbody>
</table>

When breaking down the groups by gender, boys scored significantly higher than girls; t(1005) = 4.707, p < 0.001. Sub-groups show that the same holds when looking at three of the four groups: urban, in-school boys scored higher than urban in-school girls (t(288) = 5.638, p < 0.001); rural, out-of-school boys scored significantly higher than rural out-of-school girls (t(314) = 2.713, p = 0.007), and urban, out-of-school boys scored significantly higher than urban, out-of-school girls (t(152) = 2.14, p = 0.034). The only group for which there was not a significant difference based on gender was rural, in-school students.

Location (urban versus rural), at a macro level did not produce significantly different results, however, when looking at sub-groups, there were significant differences. Rural, in-school girls scored significantly higher than urban in-school girls (t(297) = 6.397, p < 0.001); urban, out-of-school boys cored significantly higher than rural, out-of-school boys (t(207) = -2.586, p = 0.01), and urban, out-of-school girls scored significantly higher than rural, out-of-school girls (t(259) = -3.302, p = 0.001).

Finally, financial literacy calculation scores produced significantly different results for in-school adolescents versus out-of-school adolescents (t(1005) = 2.7, p = 0.007). When further examined, in-school, rural boys scored significantly higher than their out-of-school counterparts.
(t(245) = 2.13, p = 0.034. The same held true for rural girls: in-school rural girls scored higher than out-of-school rural girls (t(314) = 6.177, p < 0.001). Interestingly, when looking at urban groups, the opposite trend holds true with out-of-school urban girls scoring significantly higher than in-school urban girls (t(242) = -3.306, p = 0.001).

**Index normality across sub-groups**

The overall skewness of the financial literacy calculation score scale is 0.396 and kurtosis is -0.915. When scores are broken down across the eight adolescent respondent groups, patterns of non-normality emerge regarding inconsistencies in mean (ranging from 4.19 to 8.43), skew (ranging from -2.42 to 1.06), and kurtosis (ranging from -1.13 to 0.49) (See Appendix K). Therefore, normality of the data across respondent sub-groups is questionable, and so nonparametric analyses were used in this study.

**Conclusions about the use of the index**

Overall, the Financial Literacy Calculation scores show us there is room for growth, as the mean score of 6.31 out of 18 does not indicate a ceiling effect. The relation of these scores as they relate to other factors are explored in some of the quantitative hypotheses tested in the study, and presented later.
CHAPTER FOUR: Results

Guiding this research is a set of three research questions: one qualitative, one quantitative, and one mixed methods. To streamline the readability of the paper, and in-line with the convergent methodology referenced in Chapter Three, this chapter will follow the same structure, with one section for each research question, saving the mixed methods research question for last so that it builds upon the research findings of the quantitative and qualitative inquiries.

Qualitative Findings

*Qualitative research question: According to adolescents, households, and teachers, what skills, access, knowledge, and resources are valued and prioritized for adolescents in urban and rural settings of Kenya?*

As outlined in Chapter Three, the qualitative analysis followed the thematic analysis process suggested by Vaismoradi et al. (2013). The findings presented below are written in a parallel structure to the question structure; in other words, the sub-sections follow the individual adolescent economic empowerment components in the research question: skills, access, knowledge, and resources. Additional sub-sections that correspond to the adolescent empowerment framework, regarding the enabling environment and issues of gender, agency, and power, are included. Because the data analysis explored differences across gender (male/female), geographic location (urban/rural), respondent type (adolescent/household/teachers), and schooling status of adolescents (in-school and out-of-school), the perspectives of fourteen exclusive groups of individuals were analyzed. Data on the teachers’ gender were not available in the datasets used in this study; therefore, teacher responses are not disaggregated by gender in the analysis. In the findings presented below, unless the
findings specify one of the fourteen respondent groups, it means there were no identified
differences in the types or frequencies of responses by group on that specific topic.

**Skills**

In my conceptualization of adolescent economic empowerment, I broke ‘skills’ down into the components of 1) financial decision making and 2) savings habits. This breakdown of different types of skills guided the framework for analysis and interpretation. Responses regarding issues of financial decision making and savings habits were coded using a master code of ‘skills’.

When asked about savings habits, adolescents often reported they actively save money. However, not all adolescents reported actively saving; some rural adolescents stated they are not saving; parents confirmed this lack of saving. Some parents and adolescents both noted that because adolescents do not have jobs, they are not saving. Regardless of whether or not they were actively saving, adolescents often made the link between savings and: 1) the ability to buy things, and 2) financial security. The practicality of savings can be seen across their responses about why they save. Their responses show thought regarding how they would invest their money (e.g., loaning money to others and charging interest- although this was not a trend), and where to put the money: predominantly into groups, home banks, and/or M-Pesa.21

Urban respondents were more likely than rural respondents to talk about the importance of savings. In discussions, OOS *urban* girls, OOS *urban* boys, *urban* teachers, and *rural* dads discussed the importance of learning about savings. Perceptions about the importance of savings may be related to a difference in opinion about what constitutes savings. While savings may be most commonly referred to in financial terms, e.g., saving liquid assets such as money, it may

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21 M-Pesa is a mobile banking platform commonly used in Kenya and Tanzania for electronic money savings and money transactions, as well as a platform for financing.
also include savings in more fixed assets, such as land and/or livestock. However, while some rural respondents, (at least one respondent in each of the following groups: rural in-school girls, rural OOS boys, rural moms, and rural dads) talked freely about owning and prioritizing livestock, they did not seem to connect the concepts of livestock as an asset, and savings through investment in livestock. For example, one rural out-of-school adolescent boy shared “We the Maasai rarely save. We keep money for buying livestock.” (Adolescent_Rural_Boys_OOS_FGD). This is one example of where the use of secondary data resulted in a study limitation, as I was not able to further understand the differences the participants perceived savings, assets, and investments. This may be related to differences in indigenous perceptions of savings that are unique to the tribal group included in the study’s rural population, and requires further exploration to understand.

When examining responses regarding adolescent spending habits, and therefore their spending prioritizations, four main categories emerged. First, respondents mentioned spending on specific items such as clothes (which all groups of adolescents mentioned), bikes, phones, and “personal needs”. Second, they mentioned schooling related costs (e.g., school fees, school supplies, and one out-of-school urban boy mentioned paying fees for a tailoring course he is taking). Third: helping parents and/or others by giving and/or loaning their money. Finally, fourth: livestock (which was mentioned by all parents, but only by rural in-school girls). These financial decisions regarding spending prioritizations suggest that adolescents and parents (there were no relevant teacher responses on this issue), generally prioritize practical investments. Of these practical investments, excluding livestock and the tailoring course, most prioritized options were short-term/immediate-need in nature. This focus on short-term priorities is not a surprise, given statements about the general (in)ability to save and the local environment as barriers.
Adolescent savings skills were mentioned, by both adolescents and parents, to be affected by: 1) not having money (sometimes linked to the lack of jobs held by adolescents, and/or the poor conditions in their communities), and 2) not having knowledge of how to save. Respondents suggested these limitations sometimes resulted in uninformed or short-term spending decisions. Take for example the following two focus group discussion excerpts from both boys and girls.

**Question:** For those that don’t save, why don’t you save?

**Response:** I am not able to save because every time I have money I spend it on goodies. (Adolescent Urban Boys In-school FGD)

**Question:** Okay, do you save? If you get like 50 ksh [shillings] is there anything you put aside to save?

**Response:** Yes we do save, but at some point, we remove all of it and use because we do not have that knowledge. (Adolescent Urban Girl Out-Of-School FGD)

A third category of skills emerged in the qualitative data: vocational skills. While vocational skills have a relationship with the adolescent economic empowerment components of ‘access’ and ‘engagement in activities’, beliefs regarding the values and prioritization of vocational skills are also here. The majority of adolescent responses about what skills they value, or what makes a person successful, focused on trades such as engineering, pilot, drivers, doctors, police, and the army; these are all vocations and specific skills for which adolescents could, in theory, train. Many adolescents suggested the link between having good skills and their potential future employment. For example:

**Moderator:** Okay, what skills are most useful to learn for your future?

**Respondent 6:** Hairdressing.
M: Why are these skills needed?

R6: Because it’s one of the business [sic] where you can never lack customers.

M: Okay, someone else?

R10: Tailoring because you can get profit from making someone’s dress.

M: Okay R5?

R5: Computer skills because even if you are learned without computer skills it is useless. This is because most works need these skills. In fact most workers desire the knowledge of computers.

M: Okay R4?

R4: Carpentry.

M: Why?

R4: Because the products are basic, needs which the people acquire every time.

M: Okay R8?

R8: Life skills because of the challenges we face in life and with these skills you can make it.

M: Okay, is there anyone who wants to add something?

R11: Skills of barber because people cut their hair frequently so you will never lack customers.

M: Okay R11?

R11: I would say tailoring because maybe you wanted to become a doctor, but due to lack of school fees you never manage. (Adolescent Urban Girl OOS FGD)

While adolescents may be making the connection between skills, jobs, and finances, their responses also show limited depth in financial decision making. Take for example the quote
above about the desirability of having hairdressing skills: “… it’s one of the business [sic] where you can never lack customers”. Although it may be true that there is a steady stream of customers needing a hairdresser, the statement and logic pattern fails to 1) take into account supply-and-demand considerations, or 2) be representative of an informed local labor market analysis. A rural teacher confirmed this failure in informed decision making:

**Moderator:** What challenges do they face these girls in their jobs even the boys with motor bikes?

**Response:** Like the motor bikes are now too many, some might lack customers.

**M:** Anything else?

**R:** Like the security of the riders because sometimes they might pick up a customer especially at night and on the way this customer robs them of all the money they have made during the day.

**M:** What about those that wash clothes or go to salons?

**R:** That one depends on the employer sometimes they have less work; and, the ones that go to salons sometimes they have few clients like two, or they work there and the owner claims she is teaching them and at the end of the day she is the one to benefit and she does not even give the girls a certificate to go and open their own salons; to show that they have the essential qualification. (Teacher_Rural_KII_2)

The teacher’s comment provides an important counter narrative to the adolescent statements that working in a salon is a solid employment opportunity. This indicates adolescent skills regarding informed employment decisions may have room for continued growth.

Finally, as it relates to skills, adolescents, parents, and teachers all mentioned ‘home crafts’ and ‘arts and crafts’ as valued for adolescents to learn and practice. Respondents
described home crafts as tailoring, hairdressing, carpentry, and cooking; skills seen as means to earning money. However, respondents shared that formal training on these areas is currently absent from schooling. A rural teacher and an urban father both mentioned that these used to be part of the curriculum and taught in schools, but no longer are included. This type of disconnect between valued skills and official schooling curricula may affect the perception of educational/schooling relevance as it relates to future wages/employment.

Access

In this study, access was conceptualized and operationalized as: access to and engagement in spaces and activities. Most commonly, this manifested itself in relation to income generation activities, or IGAs. Engagement in IGAs may be an access point for economic empowerment and an outlet for 1) applying knowledge and 2) practicing many of the relevant skills. The goal of this engagement in IGAs largely focused around the gain of tangible resources. Adolescents, parents, and teachers all mentioned adolescent engagement in a wide variety of IGAs, with the most frequent being piecemeal work or casual labor. In this context, piecemeal work often referred to activities such as: garbage collection, collecting scrap metal and/or plastic, collecting bones for making glue, selling small items, washing clothes or carrying water for a fee, sand harvesting, and brickmaking; the last two just in rural sites. These opportunities are most often short-term and requiring little specialized skill, making them appealing to the age range and skills of adolescents. I should make a distinction here that just because an adolescent has the capability to engage in a specific IGA, it does not mean the task is age appropriate or developmentally safe. This determination requires a look at whether the task poses physical and/or mental harm, thus affecting adolescents’ development.
All rural adolescent respondent groups, an urban dad, and a rural teacher mentioned engagement in raising livestock, suggesting the activity occurs more often in rural settings than urban ones. Although not geographically-influenced, one IGA that was gendered in its reference was that of *boda bodas*, the driving of motor bikes as a taxi service. Boys mentioned it as a way to earn money, while one teacher referenced the acquisition of a motor bike as a factor that influenced boys dropping out of school. Another teacher mentioned the risk of *boda bodas* on girls: “Those girls who don’t like struggling and getting tired get the boda boda men and exchange sex for as little as 100sh wherein the process they get pregnant, and that becomes a challenge” (Teacher_Urban_KII_4).

In addition to the types of income generation activities mentioned above, respondents made reference to a number of less formalized income generation activities. According to the data in this study, urban adolescents, and one rural adolescent, mentioned that they often engage in stealing and selling goods, gambling, begging for money, buying/selling and/or transporting drugs and/or alcohol, prostitution, and setting up illegal power connections known as *sambazas*.

While all respondent groups broadly discussed adolescent engagement in IGAs, it does not imply that access to these spaces/opportunities comes automatically or with approval. Some teachers and parents mentioned that adolescents should not be engaged in IGAs while they are still in school. Poverty also was mentioned as limiting access writ large. The fact that some adolescents do not have identification cards also restricts their access to certain business options. Adolescents are also at risk of being taken advantage of, such as the earlier example from a teacher regarding salon owners taking advantage of adolescent workers. As is further explored later in this chapter, while adult decision making is predominantly gendered with regards to the
spaces available for adults to make decisions\textsuperscript{22}, similar gendered access restrictions were not mentioned with regards to IGA engagement, other than a statement that being a ‘sand broker’ was only for boys/men.

**Knowledge**

This sub-section includes findings regarding not only financial literacy, but also ICT literacy, as it relates to the obtainment of information and knowledge, and the influence of overall education and learning. In my conceptualization of adolescent economic empowerment, the influences of education and learning fall outside the economic empowerment component, and instead constitute a separate construct within the broader adolescent empowerment framework. Although a separate construct within the broader framework, there is an overlap between education/learning and 1) the adolescent economic empowerment component of financial literacy, and 2) construct of environment which affects economic empowerment.

As it relates to financial literacy\textsuperscript{23}, respondents across all three groups (adolescents, parents, and teachers) regarded knowledge about savings as important. They either had or wanted knowledge about savings because of a perception that it is needed for future financial decision making. Linked to this was a prioritization of math skills and related business skills. When asked which subject in school is useful, an adolescent out-of-school urban girl, responded “Math because if you have a shop you need to know how to calculate otherwise you will be getting loss in business” (Adolescent_Urban_Girl_OOS_FGD). Some of the specific math skills

\textsuperscript{22} There are widespread beliefs represented in the data that while there may be some areas for joint decision making by both men and women, more often than not, decision making and access to decision making spaces is governed by gender. Women are often limited to domestic decision making, while men dominate all external and/or important decisions.

\textsuperscript{23} Recall the definition I am using in this paper of financial literacy, as presented in Chapter Two, as including: issues of money management, investments, banking institutions practices, credit, interest, calculating percentages, profits and losses, and interpreting ads and contractual texts.
mentioned by respondents include the ability to calculate simple interest, and how to calculate profits and/or losses:

Moderator: Okay. (Interruption from XXXX) is there way in which adolescents get their income. It can either be legal or illegal.

Respondent 8: Some borrow from a neighbor and then go buy vegetables and they sell. In the evening the keep the profit and refund the money they had borrowed.

(HH_Urban_Female_FGD)

Although a seemingly simple response, it illustrates the value placed on: investing funds in a specific item, identifying a price at which they can sell the goods to turn a profit, refunding the loan principle amount to the lender, and keeping any profits.

How to calculate interest was also mentioned by multiple respondents as something learned and/or something they regularly practice through micro loans they make to other individuals using their savings:

Moderator: Have you ever received lessons on how to save money?

Respondent 8: We’ve been taught by the math teacher on simple interest topic (profit)

M: And is there anything else you’ve been taught on saving money? Have you learned something?

R6: Yes

M: What?

R6: Meaning of trade and batter[barter] trade. It’s what you’ve been taught, and told how it’s done? What is batter trade?

M: Batter [barter] trade is... someone else help her, do you know?

R3: No (Adolescent_Rural_Girl_IS_FGD)

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24 As part of the deidentification of data, the person’s name and/or title was removed from the transcript.
This excerpt provides an interesting observation about knowledge, and the depth of understanding. It shows that while adolescents may have been taught about specific topics and subjects, and can say that they have learned certain types of information, it does not mean they are knowledgeable. While one girl in the excerpt above had heard of trade and barter systems, she could not articulate what it was. We may therefore assume that while respondents in this study mention the prioritization of specific knowledge or skills, these choices may lack a full understanding of what it is that those items truly mean or correlate.

We may also see this lack of understanding when exploring the responses that students and teachers gave when asked if the topic of savings was taught in school. A content analysis of responses indicated that half of the students replied yes, and half replied no to a question about whether ‘savings’ is taught in school. Interestingly, all of the students who replied ‘yes’ were from rural communities. At the same time, all teachers replied that they do not teach ‘savings’ because it is not part of the curriculum, and because they, themselves, do not have the knowledge or financial literacy training to be able to teach it. So, while students may think they are learning principles of savings and/or financial literacy, the data suggest there is room to improve through its addition to the curriculum and teacher training, as well as clarity on what qualifies as lessons on savings. One teacher from an urban area provided a suggestion around how to address some of the related challenges in the community:

“They can go to school and create awareness to the students. Talk to class eight students and educate them about savings. So that they know how to save and start small business because we know most of them don’t go to secondary school. So with the help of the teachers and parents you can know those who will not proceed to secondary school education and train them on savings and doing business” (Teacher_Urban_KII_3).
This teacher makes the connection between economic empowerment (through a focus on savings and access to businesses) and educational progression and persistence by referencing the fact that many students drop out between grades 8 and 9.

If it is questionable, due to the disagreement between teachers and students, if students learn financial literacy and savings in school, it is helpful to explore where adolescents report getting information. When adolescents were asked where they get information about savings, their responses fell into four categories: 1) school/teachers, 2) TV/radio/posters in a bank (i.e. through absorption from a third party), 3) direct contact with a friend or family member, or 4) a theoretical helpful source (e.g., a “knowledgeable person”, “the President”, a “good Samaritan”). When asked a separate question about where they get information in general, not limited to information on savings, adolescents’ responses fell into three main categories: 1) ICT (radio, Facebook, TV, phones), 2) people, and 3) the news (newspaper and magazines). This difference in the ways in which different types of information is obtained provides interesting insights into adolescents’ networks of information and support. While ICT seems to provide access to information in general, it is not seen as a source of information on savings. Meanwhile, the inclusion of theoretical helpful sources to access information regarding savings may indicate that adolescents are unsure or unpracticed in learning about savings.

Further exploration of adolescent use of ICT provides insightful information about the source of information and knowledge available to adolescents. Beginning first with the expansion of radio and TV, ICT ownership and use continue to spread and change through the proliferation of mobile phones, broadband internet connections, and pilot programs to bring computers and other electronic devices into schools. In this study, both adolescents and teachers suggested ICT is a valued resource, yet their knowledge on it is limited. While respondents

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25 This is the transition point between upper primary school (grades 5 to 8) and secondary school (forms 1 to 4)
know and can list many types of devices/sources of information, few mention actually using them. For example, computers and internet were rarely mentioned as resources used by respondents. Knowledge about phones is common, but actual use faces limitations due to access restrictions and challenges with illiteracy. Respondents most commonly referenced the use of radio and TV as an electronic information source. As is further explored in the “resources” section of analysis in this chapter, knowledge and use of ICT to gain new knowledge is limited by the lack of access. This can be seen through a number of examples where the lack of access and resources limit and restrict potential new knowledge. Schools rarely have computer resources, meaning that access to information online that goes beyond written resources is limited; teachers do not have training on ICT devices and knowledge about how to use them; there is often a lack of informed individuals in the community who can help adolescents with how to navigate technology; and a lack of funds prevents ownership as well as access to online or digital information because data cards and/or purchased usage time at a cyber café are sometimes unaffordable.

One of the primal components of this study is looking at the role of education as it relates to adolescent economic empowerment. As a source of knowledge and information, it seems fitting to insert the findings on the influence of education in this sub-section. As expected based on the earlier analyses in this chapter, all respondent groups recognized the importance of education. All students, except out-of-school boys, mentioned that school is a key to future success. Some sub-respondent groups responded in unique ways. In-school girls and boys, as well as moms, linked education to the prospect of good jobs. Some students (urban in-school girls, and rural in-school boys) mention that education helps overcome poverty, while others note that it helps you “to improve your abilities”.
When asked what school-related subjects they valued the most, responses fell into a few categories: science (prioritized by all adolescent respondent groups + some moms) and math (prioritized by all adolescent respondent groups, urban moms, and rural dads) came out as the most frequently mentioned issues. Also included were: computer/ICT skills (listed by three of the four adolescent girl groups; and rural moms)\(^{26}\); languages (namely Kiswahili, English, and mother tongue/local language) and literacy; home sciences (cooking, tailoring, and hairdressing; arts and crafts (carpentry and tailoring); banking/money/business skills; health/HIV; and extracurricular (dance, music, and football).

The responses presented so far in this sub-section have focused on interest in education, learning, and accessing information; however, respondents also provided insights into the barriers to education- mostly related to formal schooling. These include barriers related to: gendered issues, a lack of positive influences, economic issues, learning environment, and external factors. Each of these themes include many related barriers (see Appendix L).

**Resources**

Respondents spoke about resources in terms of their source, time permanence, use, type, and limitations. In its simplest form, respondents spoke about the source of monetary resources originating through both legal and illegal, or less formal, means (see earlier discussion in the sub-section on ‘access’ for a full mapping). Most of the resources mapped by adolescents are financial in nature, and limited and non-permanent or reliable. This trend may not be surprising, given the likelihood that adolescents often have limited access to resources of more substantial value and/or permanence (e.g., land, livestock), and/or the contextual constraints limiting

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\(^{26}\) The lack of overwhelming mention of ICT/computer skills may be influenced by a number of factors: there is no precedent, therefore there is limited demand; it is not seen as a relevant topic to learn due to limited access to ICT devices; and/or it is unrealistic to spend time on when compared to other subjects that are seen to more directly and/or quickly influence income and skills.
resources at large in the communities included in this study. It is worth further exploration to understand if respondents’ beliefs that education is paramount to success is related to a belief that education will take them beyond the current set of available resources.

ICT as a resource was a specific issue of inquiry in the focus group discussions with adolescents. While all groups of adolescents could speak to the many types of ICT available (e.g., tablets, phones, TV, radio, computers, internet- to use email and Facebook), limits emerged regarding the use of ICT. Most adolescents who reported using ICT said they use it as a resource for communications, with some mentioning using it for entertainment (e.g., positively for music and negatively for porn), to get news/information, and to study. Adolescents were more likely to mention they got news from people, radio, and/or newspaper than from phones or computers.

According to respondents, challenges with access to and/or the use of computers are related to: illiteracy, nobody around to help, parents not allowing access, no money to buy devices or to access cyber cafes, and/or no electricity to charge or use devices. As a result of the lack of money to buy devices, some urban adolescents said that if they want to access a device, they must steal one. It is therefore not a surprise many teachers mentioned the need for security on-site at schools if ICT was present. Despite the challenges, teachers see the value and potential of ICT as a resource, even expressing a desire to pilot its use in their classrooms. One rural teacher talked about how s/he uses ICT in teaching as an aid, but not a replacement for broader pedagogical and methodological approaches:

*Moderator:* How do you teach the adolescents?

*Respondent:* Like if I have mathematics I just take the whole class there [computer lab] to teach, but the computer does not take the role of the teacher. The pupils use it just to view the teaching aids, but the teacher is there because there
are some very complicated things, so they just view the teaching aids.

(Teacher_Rural_KII_2)

As mentioned earlier, adolescents reported having mentors and role models that they valued for support in their lives. The majority of examples adolescents gave were either of known mentors (e.g., parents, teachers, neighbor, etc.), or unknown role models (e.g., District Officers, knowledgeable people, the President, women in leadership positions, etc.). The power of role models as a resource influencing adolescents is something worth further exploration. It may follow that having positive role models and mentors can help overcome the barrier of peer pressure mentioned earlier; this idea has been supported by an urban dad but warrants further exploration:

Moderator: What are some of the reasons why adolescents girls and boys are absent from schools in this community?

Respondent 3: Lack of role models in the community. Adolescents have not [sic] role models, and this affects how well they are motivated to study and build a life for themselves. (HH_Urban_Men_FGD)

The power of mentors and role models also extends to the influence of parents as a resource influencing their children. This relationship is further explored in the upcoming sub-section on ‘enabling environment.’

Consistently, all categories of respondents referenced challenges regarding limited resources. Responses about resource limitations were not categorically different based on geographic location, gender, schooling status, or respondent type. Instead, there were consistent themes in the types of restrictions and their impacts. For example, the overall lack of money available was suggested to affect student dropout, hunger, as well as individual’s inability to
save. Teachers mentioned the lack of teaching resources, parental support, and lack of training opportunities and knowledge on specific subjects (namely ICT and savings/financial literacy) as restrictive to their ideal teaching environment and effectiveness. The reported overall lack of ICT resources commonly related to the lack of money with which to buy devices and/or time in cyber cafes, as well as the lack of electricity and Wi-Fi.

**Enabling Environment**

The third component of my adolescent empowerment framework is the influence of relations and norms shaping a person’s environment, or the enabling environment. The data indicated multiple themes regarding what affects the environment in the communities, including safety, drugs & alcohol, the role of mentors, and the schooling environment. Tangentially, the influence of gender norms is introduced and further explored in the next sub-section.

All respondent groups discussed safety challenges. Adolescents gave many examples about places in their community that were unsafe. These included instances of physical violence such as robbery and murder, and/or sexual violence in the forms of rape, FGM, and overall Gender Based Violence (GBV). In-school girls and out-of-school boys, as well as teachers most commonly referenced robbery as a type of violence in their community. Conversely, rural and out-of-school girls were more likely to say that they felt safe/there are no unsafe areas. It is unclear if this difference is based on perceptions of violence, or on the frequency and extent of violence. Adolescents shared few specific examples, so it is unclear if they felt uncomfortable speaking about specifics with the enumerator, and/or if there are only a few widely publicized cases of violence that have permeated the community and discourse. However, it is clear that perceptions of safety, or the lack thereof, widely abound in these communities, and may affect the choices, decisions, and access available to adolescents. The issue of safety is not limited to
human-related violence; rural girls mentioned feeling unsafe during their journey to/from home to school due to wild animals.

Respondents recognized the effects of drugs and alcohol on the environment in which adolescents live and learn. Some of the effects are uniquely gendered in their impacts and others are power-related. All groups identified it as a problem. Regarding the gendered impacts of drugs and alcohol, girls, boys, and dads all made the link between the use of the substances and boys dropping out of school. Girls, moms, and teachers all acknowledged the linkage between drug and alcohol use and crime- specifically sexual assault on girls. From a power-related impact, teachers mentioned the influence of parents’ use/involvement in the sales of drugs and alcohol as influencing the choices and activities of their children in an undesirable manner:

Investigator: Okay what is the overall perception about the quality of education the students receive in this community?

Respondent: It’s relatively good, these children are trying despite of the challenges they face. So we can’t say it’s bad although there are so many factors that can make students not to learn properly

I: Like which ones?

R: One is congestion in classrooms meaning that we have all sorts of people from different backgrounds and not reading from the same scripture. Children see a lot of things that can disrupt their learning. Also having parents who do not have regular sources of Income. Some of those parents do sell alcohol and when their children come back home help them do that business. Parents know very well that this affects their children, but they have no option. They know that students don’t do homework, but they have to do that business because what puts food on the
Despite of all these challenges we have children who are doing well and even going to national schools although they are not many. (Teacher_Urban_KII)

**Investigator:**  Okay any other changes [that you would suggest making]?

**Respondent:**  Open a rehabilitation center for the condition the children are leaving [living] in is not suitable for them. Some parents are drank [sic] and they live in a small room thus subjecting their children in things that can make them to drop out of school. For example they have sexual relations in the presence of their children which give them the urge of trying it out. Some sleeps in double ducker [decker] beds where the children sleeps up and the parents down so the children hears all that is going on during the night. Surely will these children be normal the following morning. So I usually call the parents sometimes and inform them of what their children are going through, some take it as offensive while others appreciate and change. (Teacher_Urban_KII_4)

As introduced earlier, parents, mentors, and role models all influence adolescents, by shaping their environments. Not only has parents’ use of drugs and alcohol been mentioned as something that affects their children, but parents, mentors, and role models all were recognized to influence students’ motivation to study, as well as other life choices. When adolescents mentioned why they look up to the people who inspire them, their responses fell into two categories: they look up to people encourage them, and they look up to people based on their wealth/status in the community (i.e. they look up to wealthy and/or notable people in the community). On this specific question, nobody said they learn from the person who inspires
them, so although they mention learning skills from various individuals (see earlier sections on skills and resources), it does not automatically follow that they are inspired by the same people.

All respondent groups discussed schooling environments, commonly in reference to the influence they have on student’ learning. Students and dads talked about teacher strictness as a demotivating factor influencing dropout. Students also mentioned poor academic performance as demotivating to students, again, influencing dropout. These issues may be related to the challenges that dads and teachers mentioned regarding too few teachers/ too high of a teacher to student ratio, the need for more/better school supplies, and teachers’ note that they need additional training. Dads also mentioned that the lack of food, not enough security, and meager schooling environments, especially during times of drought, can influence student dropout. Teachers mentioned that sometimes teacher motivation in public schools is less than in private schools, since teachers do not have a contract with parents, and therefore have less accountability. A rural teacher shared that the presence of toilets (for girls), the feeling of safety and security, and overall school cleanliness affect schooling quality. All of these issues, taken together, color the environment in which adolescents make their schooling, learning, and earning decisions, as well as shape the relationships they have with each other, elders, and partners.

As is further explored in the next sub-section, issues of gender affect girls and boys differently. As already discussed, safety issues were mentioned more as they relate to barriers girls face, while the influences of drugs and alcohol were more likely to be a negative influence on boys. The decision making patterns and traditional/cultural norms guiding life in these communities affect girls and boys differently.
Agency, Gender, and Power

As discussed earlier, the cross-cutting components of empowerment include: individual agency, gender, and power. These were theorized to be across all other elements of empowerment as influencing factors (see Figure 1), and the results of the data in this study seem to confirm their relevance in my framework.

The role of individual agency for/amongst adolescents arose through respondent perspectives regarding leadership opportunities for adolescents. For the most part, adolescents believed that both girls and boys could be leaders, although, some mentioned that if it a decision had to be made, men and boys would most often be the decision makers and they are more likely engaged in leadership positions:

Moderator: and you, what do you think. How can girls like you become leaders?

Respondent 3: Education

M: Is the chance for men alone or it’s for everyone?

All: everyone

M: Can a woman become a chief?

R2: Women can be leaders like chiefs

M: Are there female chiefs here?

All: Yes

M: Can a woman become an MP [Member of Parliament]?

R4: they can

M: Can they defeat men and become MP’s?

R4: Yes

M: How?
R4: When they are elected

M: Can a woman be voted for here?

All: Yes

M: And do men have a chance of leadership here (Silence). Say you and a boy stood for election who’d win?

R8: The most hardworking

M: Say both of you are hardworking, who’d be elected?

R6: the boy

M: Why the boy?

R3: when the father says they’ll elect the boy and the mother says they’ll elect the girl, the father will refuse the mother to vote for the girl.

M: Ok, men will refuse to elect her

All: Yes

M: Are boys and girls involved in making key decision in the community? Who decides, men or women?

All: Men

M: they’re the ones with the responsibility to make decisions?

All: Yes

M: What can they decide about?

R8: Votes?

M: No we’ve changed to development issues

R8: Making roads

M: Do they engage women
R8: They'll be involved

M: But mostly who'll it be?

R8: Men

M: Boys and girls?

R8: Boys will

M: And what about if it's in school who'll decide?

All: Men

M: Why not a woman to decide?

R3: both will decide

R1: A man is the head of the house

M: Even out here men decide? Why not all of them?

R7: They all decide these days

M: Say a borehole is to be constructed, who'll be in the committee?

R4: Men and boys

M: And women?

R4: They'll be there

M: Who'll be the majority?

R7: Men (Adolescent_Rural_Girl_IS_FGD)

One girl mentioned that because girls can be “backbiting” it means they cannot be leaders. Inschool urban girls recognized that leadership is a growth process: you can start at school or local levels and grow to higher levels. Many responses from girls and boys seem to indicate beliefs that individual agency/decision making/leadership is affected by gender norms and education levels. Take one girl’s example that sometimes even if qualifications are the same, boys/men
will be the leaders, and there are limited opportunities for girls and women to be leaders. This is a trend that largely cuts across the gender and power analyses in this report: there are strong traditional gendered beliefs that decision making is ultimately something that sits with men and boys; although, some respondents recognized this can, should, and may be beginning to change with education and provisions made for [more] equal representation. An example of cultured gender beliefs regarding leadership arose during one focus group discussion with rural males: “For us Maasai, we do not like to be led by women, even if there is that urge it’s impossible because even there is that saying that ‘Neck has never gone beyond the head’, so husband is always ahead then wife behind” (HH_Rural_Male_FGD).

Some of the barriers to individual agency mentioned by respondents include: the influence of peer pressure\textsuperscript{27} to drop out (affecting individualized decision making), poor performance and/or unscrupulous behavior in school as a demotivating factor, marriage/pregnancy and/or sexual exploitation as limiting decision making and future options available, and the lack of choices for perceived engagement/leadership because of gender and/or power. As it relates to gender, respondents recognized that girls are limited in decision making and/or spaces. Some of the power-related barriers to agency include recognition that adolescents cannot engage in some spaces because of their status as a minor/unknowledgeable person. Powered barriers were also mentioned as they relate to an adolescent’s educational status. Perceptions were shared, especially by adolescents, that when educated, you can be engaged in the community, act as a leader, and save money; but if not educated, these things may not be valid, thus limiting individualized decision making and agency.

\textsuperscript{27} This was the second most frequently mentioned barrier among all student groups, ¾ parent groups, and urban teachers. Peer pressure to drop-out or engage in activities that would lead to dropout is high; this may relate to low self-esteem mentioned by an urban, out-of-school girl.
Quantitative Findings

Quantitative research question: What influences Kenyan adolescents’ knowledge, attitudes, and practices related to economic empowerment skills?

Appendix H in this research study outlines the fourteen hypotheses guiding the analysis of the quantitative portion of the study. The results of the hypothesis testing is presented below, in parallel format to the research question. In other words, the sub-sections address the five components of economic empowerment: savings habits, resources, financial literacy, financial decision making, and engagement in activities. I also include an additional component related to education and schooling, which is relevant to the mixed-methods hypothesis. When statistical tests of significance produce statistically significant results ($p < 0.05$), they are written-up as “significant” differences.

Savings Habits

In the past 12 months, 35.5% of adolescents reported having saved any money. Of the 354 students who provided their approximate savings amounts, the average amount saved by adolescents was 2,790 shillings (approximately $27.05 USD), with a median of 500 shillings (approximately $4.85 USD). The lowest amount provided was 15 shillings (approximately $0.15 USD), and the highest was 50,000 shillings (approximately $485 USD). The total amounts saved vary widely, based on a skew of 4.18 in the results, suggesting that median amounts saved should be used when looking at group characteristics versus mean amounts. This indicates that while some adolescents reporting saving large sums of money, the majority who report saving have saved a more modest amount.

When adolescent scores were disaggregated based on schooling status, geographic location, and gender (as can be seen in Table 7), there were no significant differences in savings
amounts solely based on schooling status. However, there were differences based on gender and geographic groupings of adolescents. When geographic-related differences in scores were examined, urban in-school boys had significantly higher proportion of adolescents who reported saving than rural in-school boys; t(231.67) = 2.93; p = 0.004. Gender disaggregations of the data resulted in three interesting findings. The first is that urban in-school boys had significantly higher proportion of adolescents who reported saving than urban in-school girls; t(274.15) = -2.25, p = 0.025. Second, rural out-of-school boys had significantly higher proportion of adolescents who reported saving than rural out-of-school girls; t(281.77) = -2.887, p = 0.004. And third, urban out-of-school boys had significantly higher proportion of adolescents who reported saving than urban out-of-school girls; t(140.22) = -2.6, p = 0.01. One take-away from this analysis is that of the moderate number of adolescents who have saved any money in the past 12 months, boys seem to be saving in higher proportions than girls in all sub-groups except rural in-school boys versus girls.

When exploring adolescent savings rates, it is also important to understand parental support for adolescent savings. As a whole group, there was no significant relationship between whether or not parents indicated they would support their adolescents saving money in a bank account and the amount of money saved by adolescents; t(247) = 0.632, p = 0.528. This was also true for all sub-groups.

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28 Levene's test indicated unequal variances between the two sub-groups (F = 23.89, p < 0.001) so the degrees of freedom were adjusted from 236 to 231.67.
29 Levene's test indicated unequal variances between the two sub-groups (F = 11.76, p = 0.001) so the degrees of freedom were adjusted from 288 to 274.15.
30 Levene's test indicated unequal variances between the two sub-groups (F = 28.93, p < 0.001) so the degrees of freedom were adjusted from 314 to 281.77.
31 Levene's test indicated unequal variances between the two sub-groups (F = 6.42, p = 0.012) so the degrees of freedom were adjusted from 152 to 140.22.
Similarly, there was no relationship between whether or not parents indicated they would support their adolescents saving money in a bank account and whether or not adolescents reported saving money in the past 12 months; $X(2) = 0.23, p = 0.89$. We can therefore conclude that parental support for savings through formalized banking mechanisms does not have an influence on whether or not adolescents save money, and/or how much money they have saved.

Table 7: Percentage of adolescents who reported saving any money in the past 12 months

<table>
<thead>
<tr>
<th></th>
<th>All adolescents: 35.5%</th>
<th>All girls: 29.8%</th>
<th>All rural: 30.4%</th>
<th>All in-school: 35.4%</th>
<th>Rural girls</th>
<th>In-school: 27%</th>
<th>Out-of-school: 25.1%</th>
<th>Urban girls</th>
<th>In-school: 35.4%</th>
<th>Out-of-school: 33.7%</th>
<th>Rural boys</th>
<th>In-school: 30.2%</th>
<th>Out-of-school: 40.4%</th>
<th>Urban boys</th>
<th>In-school: 48.5%</th>
<th>Out-of-school: 54.4%</th>
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<tr>
<td>All boys: 42.5%</td>
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<tr>
<td>$t(920.979) = -4.157$, $p &lt; 0.001^a$</td>
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<tr>
<td>All urban: 41.9%</td>
<td>$t(91) = 8.354$, $p &lt; 0.001^b$</td>
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<tr>
<td>All out-of-school: 35.5%</td>
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</table>

The final variable tested was to understand if adolescents who reported saving money in the past 12 months had significantly higher YLI scores than adolescents who did not report saving money over the past 12 months. As can be referenced in Appendix O, adolescents who reported saving money in the past 12 months had significantly higher YLI scores than those who did not report saving. It can therefore be concluded that having access to resources through savings may be an enabling factor for enhancing self-perceptions of leadership abilities, or that higher YLI scores

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32 a. Levene’s test indicated unequal variances ($F = 56.657$, $p < 0.001$), so the degrees of freedom were adjusted from 1004 to 920.979.

b. Levene’s test indicated unequal variances ($F = 47.609$, $p < 0.001$), so the degrees of freedom were adjusted from 1004 to 918.354.
equip adolescents with skills needed to save; the directionality is not clear and would require further research.

**Resources**

The ‘resources’ component of my economic empowerment framework includes both monetary and non-monetary resources. First I sought to understand if there is a relationship between adolescent access to money (as a monetary resource) and their savings habits, financial literacy, savings beliefs, and/or participation in income generation activities. There is an overlap between the information regarding actual savings, as reported in the ‘savings habits’ section above, and the resources they have available. This section will not repeat the data about savings amounts and savings habits, but instead explore any relationships between resources, which may include savings, and what they enable or are linked with.

When examining the relationship between whether or not adolescents saved in the past 12 months and their Financial Literacy Calculation scores, there was a significant relationship; adolescents who had saved in the past 12 months had significantly higher Financial Literacy Calculation Scores ($U = 104,729$, $p = 0.001$, $r = -0.08$). It is unclear if having higher calculation abilities (as measured through the financial literacy calculation score) make you more predisposed to join savings groups, or if group membership provide the critical spaces to learn and practice these calculation skills. The directionality is not clear at this stage and would require further data and exploration. When broken down by sub-group, only rural in-school boys demonstrated significantly higher Financial Literacy Calculation Scores when they had saved in the last 12 months ($U = 879.5$, $p = 0.035$, $r = -0.20$).

Not only are adolescent financial literacy calculation scores positively related to whether or not they have saved any money in the last 12 months, but their scores on the Adolescent
Savings Scale are also positively related. Adolescents who have saved in the past 12 months, and therefore presumably have available resources, scored significantly higher on the Adolescent Savings Scale than those who did not save in the past 12 months ($U = 105,979$, $p = 0.025$, $r = -0.07$). When broken down by sub-group, two groups also demonstrated significantly higher scores on the Adolescent Savings Scale if they reported saving money in the past 12 months: rural in-school boys ($U = 552.5$, $p = 0.001$, $r = -0.42$) and urban out-of-school girls ($U = 598$, $p = 0.036$, $r = -0.23$). Again, which cause and effect causality relationships cannot be determined regarding if one causes the other (i.e. does having higher beliefs and practices about savings make you more likely to save, or does saving make you more likely to change your beliefs and practices), the relationship seems logical.

One non-monetary resource that adolescents have access to is the use of ICT devices. The research survey included questions to understand adolescent access to and use habits of technology devices. Adolescents were asked first if an ICT device was owned at their household (Figure 8); if they responded yes, they were then asked the frequency with which they access the device. For example, only students who said that their household owned a mobile phone provided data regarding how frequently they use it.
Figure 8: Percentage of students who responded positively that ICT devices are owned at their home

- **Mobile Phone**: 93.45% Yes, 6.55% No
- **Computer**: 95.23% Yes, 4.77% No
Table 8 below maps overall ICT device ownership and use statistics:

<table>
<thead>
<tr>
<th>ICT Device</th>
<th>Percentage of students who responded positively that the device is owned at their home</th>
<th>Frequency with which adolescent respondents, who confirmed the device is owned at their home, noted they access the device</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile phones</td>
<td>93%</td>
<td>72.6% use it every day or some days in the week</td>
</tr>
<tr>
<td>Computer</td>
<td>4.8%</td>
<td>73% use it every day or some days in the week</td>
</tr>
<tr>
<td>Radio</td>
<td>65.6%</td>
<td>92.3% use it every day or some days in the week</td>
</tr>
<tr>
<td>TV</td>
<td>45.6%</td>
<td>92.3% use it every day or some days in the week</td>
</tr>
</tbody>
</table>

In order to be able to conduct sub-group analyses regarding ownership and use of these devices, data regarding how frequently the device is used was converted from a 4-point Likert scale (1 = every day, 2 = some days in the week, 3 = almost never, 4 = never) to a binomial scale where original responses coded 1 and 2 were combined into one variable coded 1, and responses originally coded 3 and 4 were combined into a second variable coded 2. As a result, group difference in device ownership and use could be determined, as seen in Appendix P.

One of the conclusions that can be drawn from this is that ICT device ownership at a household is not a sufficient proxy indicator for whether or not adolescents are actually using ICT devices. For the most part, mobile phone ownership is highest across the four device options, although use of radios and TVs is highest. This may indicate that communal devices that can be utilized by more than one person at a time, such as radios and TVs, have higher use rates by adolescents than single-user devices such as phones and computers, indicating that adolescents may have limited personal access to those devices.
Financial Literacy

One finding regarding adolescent financial literacy came during the testing of the set of questions regarding financial literacy. As reported earlier, adolescents do not systematically respond to questions regarding financial literacy calculation and financial literacy interpretation. Their responses to financial literacy calculation questions coherently act as an index, while interpretation questions do not. This section explores the relationships between adolescent Financial Literacy Calculation Scores and other measures, to understand if there is a relationship.

When it comes to understanding if there is a relationship in Financial Literacy Calculation Scores amongst students who reported learning about saving, a Mann-Whitney U test was run. As can be seen in Table 9, not only did adolescents as a whole score higher Financial Literacy Calculation Scores when they reported learning about savings, but this held true for some sub-groups, as well.

Table 9: Financial Literacy Calculation Scores were significantly higher for adolescents who reported learning about saving

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Financial Literacy Calculation Score</th>
<th>Statistical Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adolescents who reported learning about savings</td>
<td>Adolescents who reported not learning about savings</td>
</tr>
<tr>
<td>All adolescents</td>
<td>7.52</td>
<td>5.66</td>
</tr>
<tr>
<td>Rural out-of-school boys</td>
<td>8.27</td>
<td>4.82</td>
</tr>
<tr>
<td>Rural out-of-school girls</td>
<td>6.08</td>
<td>3.22</td>
</tr>
<tr>
<td>Urban out-of-school boys</td>
<td>10.64</td>
<td>6.88</td>
</tr>
</tbody>
</table>

This seems to indicate that, especially for out-of-school adolescents, they are likely to draw up on what they may have learned – in school or out-of-school, and apply it at higher rates than in-school adolescents.
Now that we know Financial Literacy Calculation Scores are higher for adolescents who reported saving over the past 12 months, and for students who reported learning about saving, it is helpful to understand if other factors also result in higher scores. For example, does adolescent access to ICT affect their Financial Literacy Calculation Score? This analysis looked at whether adolescents identified home ownership of the four ICT devices (mobile phones, computers, radio, and TV) and analyzing whether adolescents with that ownership scored differently on the Financial Literacy Calculation Scores than adolescents without ICT ownership. When all adolescents were analyzed as one group, ownership of three out of the four devices resulted in significantly higher Financial Literacy Calculation Scores: mobile phones, radios, and televisions (see Appendix Q). The overall household computer ownership rate is lower than ownership of the other three devices, which may influence a lack of higher scores amongst adolescents. Additionally, multiple sub-groups of adolescents also demonstrated significantly higher Financial Literacy Calculation Scores when they owned specific ICT devices. It is interesting that out of the seven sub-groups for whom the ownership of a specific ICT device significantly changes their Financial Literacy Calculation Score, six of them are for rural adolescents.

Finally, this study sought to understand if higher adolescent YLI scores resulted in higher adolescent Financial Literacy Calculation Scores. Because both the YLI and the Financial Literacy Calculation Scores were earlier determined to be nonparametric, Spearman’s rank-order correlation was run to determine if there is a relationship between adolescent self-perceptions of leadership abilities and their ability to correctly calculate financial literacy math-related questions. There was a significant, strong and positive correlation between these two scales ($r_s$
This indicates that higher adolescent self-perceptions of leadership competencies correspond to higher math-related Financial Literacy Calculation Scores. While it is unclear if an increase in one variable causes an increase in the other, the finding does indicate that they are related. It may be that as adolescents gain confidence, they are more likely to seek out opportunities to access, learn and/or practice these type of calculation scores.

**Financial Decision Making**

The ability and encouragement factored into making financial decisions may be influenced by multiple factors. For adolescents, the decision whether or not to open and/or use a formal bank account is one type of financial decision making. As a whole, 7.1% of all adolescents reported they currently have an account at a banking institution. Interestingly, a higher percentage of adolescents responded positively that they have mobile phones with online banking services like M-Pesa (26.9%), which is an electronic banking institution. This may suggest that adolescents do not consider electronic banking functions to be banking institutions, possibly because they either are separating out banking versus savings accounts, or because they do not see a banking account as a potential savings account.

There are differences in adolescents’ access to certain financial products (Appendix R). It is interesting that out-of-school and rural students were more likely to report access to these financial services. Out-of-school students may have increased access to these products due to their older age and/or need to engage in formal and/or informal work. However, further inquiry is needed to understand the differences based on schooling status and geography. There were no significant differences between boys and girls.

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33 Note, parametric tests were also conducted using Pearson’s correlation, also indicating significant, strong and positive correlations between the two variables ($r(1007) = 0.162; p < 0.001$).
When it comes to parents, 90.6% believe that adolescents should have access to savings accounts at financial institutions, and 92.7% report that they would support their child to save formally in a bank account. It is interesting that slightly more parents would support their children to save in a formal banking account than think that they should have access to savings accounts at financial institutions. It is not clear what may have influenced this discrepancy. There are no significant differences in parental support depending on their sex (e.g., if it was a mother or father responding), the sex of their adolescent, and/or if they live in an urban or rural site.

When exploring the relationship between parental support for adolescents’ behaviors, the data indicate parental support for adolescents to save formally in a banking institution does not significantly affect whether or not those adolescents actually have a banking account ($X^2 (1, n = 700) = 0.134, p = 0.714$). There is a stronger, yet not significant at $\alpha = 0.05$, relationship between parental beliefs that adolescents should have access to savings accounts at financial institutions, and adolescent responses that they have a banking accounts ($X^2 (1, n = 684) = 3.810$, $p = 0.051$). This is interesting because it signifies that although it is helpful if parents believe that adolescents should have access to formal savings accounts, parental support is not necessarily a determinant of whether or not adolescents save in formalized savings accounts.

**Engagement**

One of the economic engagement opportunities assessed in these surveys was savings groups. 35.5% of adolescents reported saving money in past 12 months. Only 4.8% of all adolescents reported participation in a savings groups over the past 12-months. Low participation is similar across respondent groups (Appendix S). No sub-group differences are
statistically different. Further data would be required to understand why engagement rates are low.

When exploring the relationship between participation in savings groups and YLI scores, Mann Whitney U tests were conducted. The results indicate adolescents who participated in savings groups had significantly higher YLI scores than those who did not participate in savings groups (Appendix T). This relationship held for several sub-groups. We can therefore conclude that self-perceptions of leadership abilities may be influenced, formed, and/or practiced by and through membership in savings groups. Having an outlet like a savings group may provide spaces for adolescents to practice and grow in their confidence regarding leadership competencies.

*Education*

While not one of the five theorized components of adolescent economic empowerment, the role of education and learning is one of the components of the overall adolescent empowerment framework. As this component will be explored and analyzed as part of the mixed methods research question, quantitative analysis was conducted and is reported in this section. Parents were asked their opinions regarding how useful the information learned at school is to daily life. Across the board, parents responded that what children learn in school helps them to a high degree, as can be seen in Figure 9.
When exploring the relationship between parents’ beliefs regarding the usefulness of information learned at school\(^\text{34}\) and the schooling status of those adolescents (in-school and out-of-school), there is no significant relationship. In other words, parental views about the relevance of educational content does not statistically determine if their adolescents were in-school or out-of-school ($X^2 (1, n = 739) = 0.021, p = 0.884$). The lack of relationship holds when looking at girls and boys separately, as well as urban versus rural. These findings may indicate that while parents see the schooling content as useful, other factors determine if their adolescents are in-school or not.

**Mixed Methods Findings**

*Mixed methods research question: What are adolescents, their households, and teachers in urban and rural contexts in Kenya perceptions of adolescent economic empowerment?*

\(^{34}\) In order to conduct this analysis, parent responses were dichotomized; responses indicating that what children learn at school does not help them or helps them somewhat (original responses 1 and 2) were combined into a single response (now 1), and responses indicating that what children learn at school helps them quite a bit or very much (original responses 3 and 4) were combined into a single response (now 2).
As outlined in Chapter 3, the mixed methods analysis of data follows a convergent parallel process. While the quantitative and qualitative analyses occurred in parallel processes, the full interpretation of their meanings is explored in this section through a narrative weaving approach, exploring the full contextualization of adolescent economic empowerment. As presented earlier in Figure 2, this study conceptualizes adolescent economic empowerment as the combination of five separate economic empowerment components, while looking at their interactions with the influence of education, relations and norms regarding the enabling environment, power and gender, and individual and collective agency. These nine separate components provide the outline for exploring how adolescents, households, and teachers in both urban and rural Kenya actually construct and operationalize adolescent economic empowerment. This mixed methods analysis section separates out the nine components and the web of findings produced by the data through the qualitative and quantitative analyses.

Components of adolescent economic empowerment

Savings Habits

When it comes to understanding adolescent savings habits, and the beliefs that influence the habits, multiple elements were explored. Of the adolescents included in the research study, 35.5% have saved any money; with a wide range of savings amounts: 15 shillings to 50,000 shillings. The average amount reported as saved was 500 shillings (approximately $4.85 USD). Interestingly, a few trends regarding savings habits emerged from the data. The first is that boys are significantly more likely to have saved money than girls. Second, for those students who have saved in the last 12 months, they had significantly higher perceptions of self-leadership competencies (as measured by the YLI), and significantly higher scores on the Adolescent Savings Scale.
Overall, scores on the Adolescent Savings Scale were 24.08 out of 40, indicating moderate agreement statements regarding savings habits, and beliefs about savings. While this is positive and suggests that there seems to be support for savings habits, it is important to take into account its comparison with the reported savings rates amongst adolescents at 35.5%. This savings rate is similar to the savings rates amongst comparison (i.e. not intervention) adolescents in an endline study conducted by Population Council in 2013 (Austrian & Muthengi, 2013).

Exploring the qualitative data helps us to understand this relationship further.

Urban respondents in this study were slightly more likely than rural respondents to talk about the importance of savings. This may be related to a difference in opinion about what constitutes savings. While savings may be most commonly referred to in financial terms, e.g., saving liquid assets such as money, it may also include savings in more fixed assets, such as land and/or livestock. However, some rural respondents talked freely about livestock, but did not seem to make the connection to them as an asset, and savings through investment in livestock; for example, one rural out-of-school adolescent boy shared, “We the Maasai rarely save. WE keep money for buying livestock” (Adolescent_Rural_Boys_OOS_FGD).

Qualitative data also provided insights into why some adolescents may not be actively saving. Some parents and adolescents suggested that because adolescents do not have jobs, they are not saving. Additionally, adolescent savings skills were mentioned, by both adolescents and parents, to be affected by: not having money (sometimes linked to the lack of jobs held by adolescents, and/or the poor conditions in their communities), and not having knowledge of how to save, resulting in sometimes uninformed or non-strategic spending.

Taken together, this data indicate that although there is openness and seemingly general support for adolescents saving money, actual savings habits are likely constrained by factors
such as age, and access to resources. Further exploration should be done regarding better defining what constitutes savings (e.g., liquid resources such as cash, or less mobile resources such as livestock and land). It is promising that those students who have higher perceptions of leadership competencies are more likely to report they have saved in the past twelve months.

*Resources (monetary and non-monetary)*

Exploration into the resources valued and prioritized or addressed by respondents as part of adolescent economic empowerment fell into a few distinct categories: ICT devices, IGAs, and resources such as banking accounts, savings accounts, credit cards, and mobile phone banking options.

Overall ICT household ownership of ICT devices was higher than adolescent use of the same ICT devices. While household ownership, as identified by adolescents, of mobile phones was the highest amongst in comparison to radios, televisions, and computers, and the knowledge of the ability to use these devices as resources to gather information was quite high, their use of the devices is lower. Qualitative data indicated that in urban sites, some adolescents view the only way to access devices is to steal them. Across adolescent respondent groups, they seem to value the utility of ICT devices in terms of the connectivity they allow, versus the devices’ ability to access information or use for learning. This is likely influenced by the highest household ownership of devices being mobile phones. In general, urban ICT use was significantly higher than rural; boys’ use higher than girls, and in-school respondents’ use higher than out-of-school use, with the exception being the use of radio, which was reported as being used by adolescents significantly higher in rural versus urban settings, and girls were significantly more likely to use televisions than boys.
While respondents know and can list many types of devices/sources of information, few mention using them—computers and internet were rarely mentioned as resources used by respondents. Knowledge about phones is common, but actual use faces limitations due to access restrictions and challenges with illiteracy. Respondents most commonly referenced the use of radio and TV as an electronic source of information. Overall access to information via ICT devices may be limited based on the type of device adolescents have access to; however, access to phones, radios, and televisions by adolescents is linked to significantly higher financial literacy calculation scores, indicating that although adolescents may prioritize the use of devices for communication purposes over learning purposes, there may still be an influencing power of ICT on their ability to do math, although the reasoning behind this is unclear (e.g., is it because they come from households that have more resources to begin with, and therefore they have more opportunities to practice these calculation skills; is it because they use either human or virtual resources via ICT to learn and practice these skills, etc.). To understand if there is a contributory relationship would require further research and study.

Knowledge and use of ICT for information is limited by the lack of access (e.g., schools rarely have computer resources; teachers do not have training on devices; there is a lack of informed individuals in the community who can help adolescents with technology if there are questions; and a lack of funds prevents ownership as well as access because data cards are sometimes unaffordable to purchase as is time at a cyber café).

Another resource discussed by respondents was that of income generation activities. Respondents highlighted that both legal and illegal IGAs recognized, and potentially prioritized by respondents as a non-monetary resource-space they valued.

35 Note that the overall ownership and use rates for computers is so low, it may require a larger sample size for sufficient power in calculations to understand if it also results in higher financial literacy calculation scores.
As it relates to monetary resources discussed by respondents, most resources were financial and or short-term tangible. This may not be surprising, given the likelihood that adolescents often have limited access to resources of more substantial value and/or permanence (e.g., land, livestock), and/or the overall contextual constraints limiting overall resources in the communities included in this study. Adolescents and their parents seem to disconnect savings accounts and bank accounts; this may be due to challenges with how the questions were worded, and/or their rational differential reasoning that the two types of accounts are different.

When it comes to adolescent ownership of savings accounts, credit cards, and mobile phones with banking options like M-Pesa, out-of-school adolescents were significantly more likely than their in-school counterparts to have all three, while rural adolescents were significantly more likely than urban adolescents to have credit cards and mobile phones with banking options like M-Pesa. This seems to indicate that OOS adolescents have utilized these resources, either out of desire or necessity, more than in-school adolescents. The higher use rate in rural populations, especially with regards to mobile banking, is interesting, and more research should be done to understand this distinction.

Financial literacy knowledge

Perhaps one of the most interesting findings regarding adolescent economic empowerment in this study is that of the disconnect amongst adolescents between financial literacy calculation skills, and the interpretation of these calculations. Adolescent responses to questions regarding financial literacy calculation questions showed good internal reliability and consistency, despite overall low scores (6.31 out of 18, or 35%). At the same time, they demonstrated low internal reliability and consistency in the corresponding questions that asked for an interpretation of these scores; however, the absolute score on these questions by
adolescents is higher (17.5 out of 24, or 73%). If the adolescents miscalculated the math portion of the questions, it is unlikely they are able to correctly interpret the meaning, which would explain the lack of internal consistency when all questions are combined together, and may indicate that adolescents are ‘better’ at guessing the interpretation questions than the math questions. To better understand this phenomenon will require further study. One of the interactions in an adolescent focus group discussion may lend some light to this; while they may know certain terminology, such as trade and barter, they are unsure of the meaning of the terms. This application of terms and knowledge may be the missing piece preventing adolescents from fully realizing their potential knowledge on financial literacy.

In terms of overall financial literacy calculation scores, adolescents who reported saving money in the past twelve months had significantly higher scores than those who did not report saving money in the past twelve months. This may indicate that spaces and resources to apply specific knowledge regarding financial literacy components is a necessary condition for building and internalizing the knowledge. Similar findings regarding a correlation between YLI scores and financial literacy calculation scores was identified in the study; as adolescents build their knowledge and confidence, they are likely more able to apply these skills.

Financial Decision Making

Following from the preceding conversation regarding the disconnect between financial literacy calculation scores, and the interpretation of the meaning (e.g., if the resulting calculation indicates a profit or loss) likely indicates a potential disconnect in financial literacy knowledge and the skills to make solid financial decisions, thus limiting their overall ability to make informed choices, limiting their overall empowerment status and potential. That being said, according to the focus group discussion data with adolescents, regardless of whether or not they
were actively saving, adolescents often made the link between savings and both the ability to buy things and financial security. However, adolescent vocational desires often fail to take into account supply-and-demand considerations, or be representative of an informed local labor market analysis. While adolescents may be making the connection between skills, jobs, and finances, their responses also show a lack of sophisticated skills in financial decision making. This overall lack of knowledge, confidence, and the space to exercise and practice both, is likely inhibiting regarding adolescents’ overall ability to make sound, informed financial decisions. This likely sits at the individual level, because household support for savings does not have an effect on adolescent savings amounts or if adolescents have saved in the past 12 months (more regarding the role of parents/households on adolescents is explored in the upcoming sub-section on the mixed methods findings regarding power and gender).

*Engagement in activities – access*

Issues of activities largely focused on both savings groups as well as income generation activities (IGAs). Only 4.2% of adolescents reported saving money in a savings group, with no difference based on gender, geography, however OOS adolescents were significantly more likely to have engaged in savings groups than in-school adolescents. Participation in savings groups seems to influence adolescent YLI scores, indicating that having space with peers to problem solve and make decisions is important in building self-perceptions of leadership competencies.

With regards to adolescent engagement in IGAs, the low number of adolescents who confirmed participation in IGAs may warrant further exploration to understand their beliefs, behaviors, and trends as a population sub-group. Adolescents, parents and teachers all mentioned in their focus group discussions, adolescent engagement in a wide variety of IGAs, with the most frequent being piecemeal work or casual labor. In all, adolescent engagement in
these areas is often based on short-term opportunities requiring little specialized skill, making them largely relevant to the age range of adolescents (although age appropriate may be viewed differently, depending on if the task poses physical and/or mental harm, affecting development). That being said, some teachers expressed an opinion that adolescents should not take part in IGAs.

Influence of relations and norms

This sub-section will explore how issues of relations and norms are related to components of adolescent economic empowerment. Specific issues related to parent/guardian – adolescent connections, although certainly related to this domain, are discussed in the upcoming sub-section on gender and power; the interconnectedness of empowerment domains results in many overlaps such as this.

Across the qualitative data, when exploring the causes of dropout and reasons why adolescents miss school, financial constraints top the list. The next most frequently referenced cause of dropout is peer pressure. The role of peers was largely noted as a negative influence, but it could be hypothesized that the reverse could also hold true. Therefore, the power of role models as an influencing resource is something worth further exploration. It may follow that having positive role models and mentors can help overcome the barrier of peer pressure mentioned earlier; this idea has been supported by an urban dad, but warrants further exploration. The risk of not addressing the role of mentors or positive adult influences in the lives of adolescents can result, as alluded to by a teacher in one key informant interview, in adolescents at risk of being taken advantage of, such as was shared in the example with the salon earlier.

Issues related to physical safety were largely discussed in the focus group discussions. Issues of safety, in relation to overall crime and assault (ranging from petty theft to the taking of
lives) were discussed largely by adolescents, with an urban skew. Some rural respondents shared safety concerns regarding the journey to school and threats of motor vehicles as well as wild animals, although risks related to safety were more heavily recognized as influential factors related to overall access to spaces and resources in the urban setting. In some circumstances, a connection was made to the prevalence of drugs and alcohol.

Role of Education & Learning

Across the focus group discussions, as well as the household survey regarding the relevance of what is taught in school, respondents agreed that not only is education relevant, but they are learning valuable skills. Exploring further the subjects valued most, math was regularly mentioned during FGDs, due to its immediate application and benefits in the ‘real world’; “Math [is valued] because if you have a shop you need to know how to calculate otherwise you will be getting loss in business” (Urban out-of-school girl). However, it was noted that additional applicable skills, which used to be included in the curriculum but are now not, regarding home crafts and arts and crafts, were mentioned as desired knowledge and skills for adolescents to learn and practice. Interestingly, students and dads talked about teacher strictness as a demotivating factor influencing dropout rather than irrelevance of curriculum. Students also mentioned poor academic performance as something that was demotivating to students, again, influencing dropout.

When it comes to looking at the financial literacy calculation scores as a type of learning outcome related to math instruction, adolescents who reported learning about savings in school produced significantly higher Financial Literacy Calculation Scores. Going beyond the math calculation questions and exploring adolescent beliefs and habits about savings yield interesting contradictions. Adolescents, especially rural, stated they learned about savings in school; the
teachers from those same schools say it is not taught, and is not part of the curriculum. This may be because adolescents are interpreting lessons related to other subjects, such as math or general life skills, and making the connection to savings themselves. While overall, scores on the Adolescent Savings Scale indicate moderately high agreement with statements regarding savings habits, and beliefs about savings, adolescents still maintained an overall low rate of reported savings amongst adolescents at 35.5%.

**Role of Gender & Power**

One of the most prevalent powered relationships affecting adolescents is that of parents. While adolescents are traditionally in a ‘power-down’ relationship with their parents and adults in general, baseline data indicated that parents have limited influence on their adolescents when it comes to the quantitative measures included in this study. While parents are supportive of adolescents accessing savings accounts and formal bank accounts, this support is not a determinant if adolescents have a savings account or not. And parental beliefs about the relevance of educational content has no relation on if their adolescent children were in-school or out-of-school. All of these findings together seem to indicate that the role of parents is limited, and likely many of these relationships are more significantly affected by other, contextual factors. That being said, it is important to note that some teachers specifically mentioned the influence of parents’ use/involvement in the sales of drugs and alcohol. It does not mean, though, that adolescents do not need or depend on adult mentors and role models who may influence their beliefs and practices, but it may mean that those roles are filled by adults other than parents.

When it comes to exploring the gendered influences on adolescent economic empowerment, qualitative data indicated that husbands and boys largely get the last say in
decision making; this may have an association on boys’ significantly higher YLI scores than girls. The application of this may be seen in higher boys’ savings rates than girls, as well as the pattern that, when differences based on gender were statistically significantly different, boys had higher home ownership and use rates of ICT devices than girls. Some of the gendered implications of the differences between girls and boys manifest themselves through: gendered causes of school drop-out that were noted in many of the FGDs and KIIIs (e.g., drugs and alcohol affecting boys more; pregnancy affecting girls more), and gendered IGA opportunities separating girls from boys.

*Individual & Collective Agency*

Through the use of the YLI, which measures self-assessments of leadership competencies, individual scores on the index did not experience a ceiling effect, indicating that it may be a helpful tool for assessing changes in self-perceptions of leadership competencies over time. In this research study, boys reported significantly higher scores than girls, and rural adolescents reported significantly higher scores than urban students. While the outright score does not measure independently assessed levels on the leadership competencies, this means that although boys scored higher than girls, it does not necessarily mean that boys exhibit higher leadership competencies than girls, just that they ranked themselves at a higher level than girls, potentially indicating higher individual agency. That being said, adolescents who reported saving in the past twelve months had significantly higher YLI scores, which may indicate that having access to resources (which is largely gendered and powered in dynamics, as it relates to age, especially) may be an enabling factor for enhancing self-perceptions of leadership abilities.
CHAPTER FIVE: Discussion

Conclusions

In closing this research study, utility lies in reverting to the original purpose. The purpose of this study was to examine, from the perspectives of adolescents, households, and teachers their conceptualization of adolescent economic empowerment within two specific contexts in Kenya using a mixed methods methodological approach through a secondary data analysis. Specifically, in this study, this occurred through the exploration of three key research questions:

1. According to adolescents, households, and teachers, what knowledge, skills, access, and resources are valued and prioritized for adolescents in urban and rural settings of Kenya?
2. What influences Kenyan adolescents’ knowledge, attitudes, and practices related to economic empowerment skills?
3. What are adolescents, their households, and teachers in urban and rural contexts in Kenya perceptions of adolescent economic empowerment?

As outlined in Chapter Four, the data used in this secondary analysis permitted the researcher and reader to not only better understand what is adolescent economic empowerment, but also to understand what it looks like across the two specific Kenyan contexts included in this study. The results of the analysis in this study are only applicable to these two populations included in the study, and may not be generalizable to other populations in Kenya, or other countries. The methodological bilingualism utilizing multiple types of data (quantitative surveys, focus group discussions, and key informant interviews), and also multiple sources of respondents (adolescents, households, and teachers), allowed for a nuanced look at the complex nature of adolescent economic empowerment, what it looks like, and what affects it in a way that would be
prohibitive through a single analysis method. This added utility brought value to the depth of triangulation and analysis conducted in the study and is recommended for further studies focused not only on adolescent economic empowerment, but also empowerment studies at large.

The information in this section is a reflection upon the process and analysis findings from this study, how it situates with regard to current literature and theory, and what can be taken away as considerations for future research and theoretical development.

*Reflections on empowerment theory*

Existing literature suggests empowerment is a nuanced and complex construct and as such warrants in-depth explorations regarding what it looks like, and how it may fluctuate over time and space, as well as what influences it (e.g. Baird & Ozler, 2016; Kabeer, 1999; Malhotra, Schuler & Boender, 2002). This study not only explored empowerment theory for adolescents, but also looked at its measurement, with a special focus on the economic empowerment sub-component.

When exploring the seven tenets of empowerment (E1 to E7), the findings of this research support and contribute to the existing literature. Tenets 1 and 6 relate to education as a necessary but not sufficient condition for empowerment. The results of this study indicate that while schooling status sometimes results in different results, this is not always the case. An interesting example of this is that while many adolescents reported learning about savings in school, their teachers said it is not a subject they teach. There is a difference in how students and teachers perceive and intend the classroom material to be taught. At the same time, adolescents who reported learning about savings in school had higher financial literacy calculation scores from the survey data. This may indicate that no matter the intent of lessons taught in a classroom, students are likely to draw connections from the material and apply it in different
ways. Therefore, education, and specifically types of valued knowledge (e.g. math, literacy, home crafts, etc.) are indeed valued and seen as helpful, but may not be sufficient for fully informed decision making and empowerment processes. The Chant and Jones (2005) and The Girl Project (as referenced in Moeller, 2014) suggest that education is important to adolescent/youth economic empowerment. The findings of this study go beyond their findings and broaden the acceptable acquisition of knowledge to either formal or informal; this is more in-line with the UNESCO (2012) finding that basic literacy and numeracy is essential to development, without specifying whether it needs to come through formal or informal learning opportunities, which may or may not include formal schooling.

The second tenet of empowerment (E2) is that it is a non-linear process (CARE USA, 2010; Kabeer, 1999; Malhotra, Schuler & Boender, 2002; Monkman, 2011; Mosedale, 2005; Perkins & Zimmerman, 1995; Stromquist, 1995). The literature suggests that although empowerment is a process, it may look differently for different people, and it may or may not be linear in shape, direction, and fortitude. The difference in results and challenges faced by the eight sub-groups of adolescents across many of the domains assessed in this study seem to confirm E2. If empowerment were a linear process, the results would likely be more consistent with regards to in-school always scoring higher than out-of-school adolescents, yet this is not the case. In this specific study, the results may be influenced by the age differences across the urban and rural populations: the OOS populations are generally older than the in-school populations. However, the same conclusion about non-linearity also holds given this complication: if maturation and age correlated with higher perceptions of empowerment, the OOS population would consistently score higher than the in-school population. Yet this was not the case. While the in-school population had significantly higher adolescent savings scores and financial literacy
calculation scores than their out-of-school counterparts, they did not have significantly higher YLI scores.

Similarly, different response patterns amongst urban and rural students in this study support E3, that context matters. The challenges, barriers, values, and preferences of the urban and rural populations included in this study are different in many ways. For example, the ways in which safety and security influence the feelings and decisions in urban and rural settings is very different. While in the urban setting, many adolescents feared certain locations due to physical assault and crime, in the rural setting, this was largely limited to the threat of wild animals. Financial Literacy Calculation Scores were significantly higher for rural adolescents than urban adolescents in six of seven sub-groups tested, suggesting they are more sensitive to the effects of ICT as a resource. These findings support existing empowerment literature, which holds that context affects the supporting and restricting frameworks in which an individual lives (Malhotra, Schuler & Boender, 2002; Monkman, 2011; Mosedale 2005).

The fourth tenet of empowerment, E4, holds that collective engagement is important to empowerment processes. In this study, the role of others was highly prioritized, contributing to the existing literature on the issue (CARE USA, 2010; Hanmar & Klugman, 2016; Monkman, 2011; Perkins & Zimmerman, 1995; Stromquist, 1995). The negative influence of peer pressure, and the positive beliefs about role models both contribute to this tenet of empowerment. Not only are the adolescents all minors who are still at a formative age, but they also are still in-need of supportive action with and by others. Diving deeper, the influence of others (e.g., parents, teachers, role models, mentors), seem to be contradictory. The influence of parents, based on quantitative findings (e.g. parental support for adolescents having a savings account does not predict if adolescents actually have a savings account), is limited based on quantitative findings.
However, qualitative data highlights the role of peer pressure and ‘others’ on adolescent choices and decision making.

Issues of power and gender, as well as the need for engagement of men and boys in women and girls’ empowerment (E5) came out strongly in the results of this study. Not only do girls and boys face different barriers and expectations (e.g. different patterns of engagement in piecemeal work, different forms of peer pressure e.g. crime vs. sex), but they also score significantly different on many of the quantitative measures such as the YLI, financial literacy calculation score, different access to and use of various ICT devices, etc. Decision making opportunities were also noted as significantly different for men and boys than women and girls, especially amongst the rural population. These findings corroborate the need for accounting for and addressing issues of power and gender in empowerment-based programming that has been documented earlier (CARE USA, 2010; Monkman, 2011, Murphy-Graham, 2008; Stromquist, 2015).

Finally, E7 suggests that individual agency is critical to empowerment processes. This tenet of empowerment was also upheld through the study results. Individual perceptions of leadership abilities, as measured by the YLI, differed based on adolescent savings scores. This creates the link between one of the sub-dimensions of economic empowerment, savings beliefs and habits, and perceptions of abilities to act. The agency of adolescents, in relation to leadership competencies, seems to prove to be influential in equipping adolescents with needed confidence, decision making, and other skills so that they may make informed decisions. This finding compliments earlier studies, which recognize empowerment and power as gendered in nature (Monkman 2011, CARE USA 2010; Murphy-Graham 2008, Stromquist 2015).
Adolescent economic empowerment

Amongst the respondents included in this research study, the findings indicate that as it relates to issues of economic empowerment36, there is appreciation and desire across the three respondent groups (adolescents, parents, and teachers) for adolescents to build their knowledge, access, resources, and skills in these areas. These findings are new, as the literature review did not produce any existing studies which explore or address this issue. This interest, desire, and openness are juxtaposed with challenges in fully realizing these areas, indicating room for growth. Some of this may be obtained through links to formal schooling, but non-schooling options for learning and education in these content areas are likely required in order to overcome many of the contextual and financial barriers facing adolescents.

The findings from this study regarding savings habits (AEE1) support existing literature regarding the importance of savings in empowerment processes (e.g. Fewer, Ramos, & Dunning, 2013), but goes further in suggesting how it can be measured and what it looks like in the study populations in this research. Previous studies were not found to have made the link between gendered differences in savings rates amongst adolescents, or the link between adolescent self-reported savings and higher perceptions of leadership competencies.

Golla et al. (2011) discussed the importance of resources (AEE2) in economic empowerment processes. The findings of this research study provide context and details to adolescent-appropriate resources for consideration in future conceptualizations and measurement of adolescent economic empowerment. Specifically, this includes resources related to ICT, as well as IGAs. Additionally, findings regarding adolescents’ prioritization of short-term tangible

36 Defined in this research study as the interrelationships across: financial literacy, savings habits, resources, financial decision making, and engagement in activities
resources should be taken into consideration when defining the permanence and scale of resources appropriate in adolescent-based models.

While many existing studies discuss the importance of financial literacy (AEE3) for adolescents (e.g., Baird & Ozler, 2016; Fewer, Ramos, & Dunning, 2013; Hogarth, 2006; Pellowski-Wiger, Chapman, Baxter and DeJaeghere, 2015; UNICEF, 2012), none have found the disconnect between financial literacy calculation and financial literacy interpretation amongst adolescents. This is a new finding that should be further explored to understand what causes the disconnect, if it also holds across other populations, and how to address it.

Findings in this study provide insight into the influences upon adolescent financial decision making (AEE4) that are not reported upon in existing literature (Golla et al., 2011; Parra and Holden, 2014). Specifically, earlier studies were not found to assess the link between parental support for adolescent savings and actual adolescent decisions about savings (if they save, and how much).

Finally, engagement in activities (AEE5) in this study indicated that adolescents are currently engaged in income-generating activities that are largely small-scale, possibly limited by things like the lack of identification cards and lack of support from adults. This finding goes beyond the limited existing literature on adolescent engagement in financial spaces (Fewer, Ramos, and Dunning, 2013; Parra and Holden, 2014).

**Measurement of empowerment**

Malhotra et al. (2002) suggest the multi-dimensionality of empowerment requires care in constructing measurement variables. Malhotra & Schuler (2005) note how both quantitative and qualitative methods have been used to measure empowerment. The results of this study go beyond these earlier methodological findings to theorize, test, and recommend mixed methods as
a methodological approach suitable for empowerment studies. As presented in the mixed methods analysis section in Chapter Four, adolescent economic empowerment is also a highly complex and nuanced concept not only to define, but also to construct within and across respondent groups. This is in alignment with the challenge identified in the literature review of finding a single tested definition of adolescent economic empowerment. Because it is a mixture of multiple domains that interact at various levels (e.g., respondent type, geographical type, gender and power, etc.), there is no singular summative characterization of adolescent economic empowerment as a result of this research study. What this study does indicate is that when knit together, the individual domains and constructs of adolescent economic empowerment provide complex webs of information that can together be used in understanding and supporting empowerment processes amongst these specific individuals in Kenya. Findings in Chapter Four that result from a multitude of analyses and individual research questions confirm its complexity and its validity for understanding adolescent empowerment as constructed amongst respondents in Kenya.

Implications

While empowerment may be subjective in nature (Kabeer, 1997, 1998, and 2005), it is still possible to not only measure the components that make up its construction, but it is also possible to look at its inter-woven and complex nuances through a mixed methods methodological assessment. As the data utilized in this research study are part of a baseline data collection conducted before an intervention project began. In addition, due to the cyclical nature of empowerment that may change due to age, life circumstance, and/or across co-existing spaces within the same timeframe, a more enhanced understanding of adolescent economic
empowerment may be more fully realized through longitudinal tracking and interrogation of the components and constructs.

Specific findings regarding elements such as the disconnect between financial literacy calculation scores and the interpretation of these calculations should be taken into account regarding relevant and student-centered math and financial literacy curricula and instruction with adolescents. No other studies were identified as part of this research process, which similarly assessed and/or concluded there is a need to disaggregate the knowledge and skills related to financial literacy calculation and interpretation separately. I make specific reference to the testing on the financial literacy calculation score, which found a disconnect in internal consistency in adolescent responses based on the two types of questions. Similarly, the desire for expanded instruction to applied lifeskills such as homecrafts or arts and crafts indicate that there is a demand for applicable knowledge and skills for adolescents; this compliments other studies that have identified the need for contextualized education and empowerment (Baily, no date, as cited in Monkman, 2011; Mosedale 2005, CARE USA, 2010; Malhotra, Schuler & Boender, 2002; Monkman, 2011); however, no other studies were identified in this research study which assessed applied lifeskills and adolescent economic empowerment.

Throughout time, as there is a focus on enhancing adolescent economic empowerment, as it relates to overall adolescent empowerment, one consideration is that of potential backlashes of empowerment, and the consideration of ‘do no harm’. As gender and power relationships are altered through more equitable and informed decision making, particularly as it relates to formal schooling, there is a potential that individuals or groups in the population change faster than society would prefer to permit them. While an extreme case, exploring the experience of Nobel Laureate Malala Yousafzai, a Pakistani girl who was shot in an assassination attempt resulting
from the ways in which she and her father spoke out in favor of education for girls; a stance at cultural odds with many traditional and extremist individuals and activist groups in the region. As adolescents explore and build their knowledge, skills, resources, and access related to economic empowerment, considerations should be made to ensure they are able to develop and exercise these in environments that will at least tolerate, if not support, these developments and changes. Gendered nuances regarding how adolescent girls and boys experience, exercise, and access economic empowerment were pervasive across the study, indicating that any future efforts to address economic empowerment necessitate a gendered approach.

The practicality and significance of the findings in this study are many. As it relates to relevant curriculum taught in formal and/or informal learning spaces, the data suggest there is support for an expansion to include more life skills lessons focused on specific employability skills, as well as adaptable skills such as math. There is a need to (re)examine the relevance of curricula, in alignment with the future aspirations and prospects, consulting adolescents, parents, and teachers, with representation from multiple geographic areas. However, the relevance of any newly included subjects or skills should be balanced in relation to opportunities for practice and application. The importance of contextualization again connects with other previous studies’ findings (e.g. Baily, no date, as cited in Monkman, 2011, Mosedale 2005, CARE USA, 2010; Malhotra, Schuler & Boender, 2002; Monkman, 2011). Without the link between knowledge and application, there is a risk in perpetuating the results from this study which found adolescents were not connecting math calculation and math interpretation/application questions together, potentially limiting their current and future financial prospects.

**Recommendations for practitioners**
Based on the findings of this analysis, there are many recommendations for practitioners working with these groups of adolescents. The recommendations have been aligned with each of the nine components of adolescent empowerment so they can be easily cross-referenced with the study’s mixed-method findings which are at the end of Chapter Four.

Building upon the lessons regarding the influence of education and learning, I recommend that teachers need support building applied math lessons that link math calculations, to lessons about savings, and how to interpret results in real-world scenarios (such as profit vs. loss). They also need additional support with classroom management. Additional academic support should be made available to struggling students to decrease dropout rates and increase learning outcomes. At a systems level, the national curriculum should include topics around savings, as well as applied skills such as home crafts and arts and crafts to bridge between indigenous and modern values in education.

When it comes to the influence of relations and norms shaping a person’s environment, I recommend that positive role models should be leveraged to support adolescents. Furthermore, if employment or training positions are facilitated on behalf of adolescents, they need to be vetted in advance to ensure they are empowering versus exploitative of adolescents.

In order to build better knowledge of and savings habits amongst adolescents, gendered consideration of access to financial resources should be further explored to ensure that any new opportunities and skills related to savings do not perpetuate gendered barriers that currently separate boys and girls. Additionally, due to the wide range and low median savings amounts of adolescents, savings lessons and any new savings opportunities need to be appropriately scaled in their design.
Resources in this study largely focused on ICT resources as enabling tools for enhanced economic empowerment. Programs need to consider issues of gendered access to resources, such as ICT. Because gender, geographic location, and schooling status result in different access to and use of ICT devices, assumptions about how adolescents get and share information need to be appropriately updated. For example, if there are assumptions that adolescents can access updated market information using mobile phones or computers, certain groups of adolescents (namely girls, rural adolescents, and OOS adolescents) are likely to miss out.

Results of this study show adolescents do not connect math and its interpretation in real-world financial scenarios, as assessed in the financial literacy component of this study. It is therefore likely this disconnect limits their ability to make informed financial choices. Programming activities should build in more applied math and interpretation questions into economic empowerment activities. Additionally, schooling-curriculum should be reviewed to strengthen applied math skills and standards.

Because household influence on adolescent financial decision making appears limited, other individuals and/or resources should be identified and made available as support mechanisms for adolescents. Also needed is training and support on how to access and assess updated information for financial decision making.

Adolescent engagement in activities may provide key opportunities to practice and exercise new knowledge and skills. Adolescents should be trained in how to choose engagement opportunities, such as vocational training opportunities or engagement in IGAs based on informed financial decisions and updated data regarding local labor market analyses. Identification cards should also be explored as an enabling factor to facilitate future engagement in more employment spaces.
When it comes to issues of power and gender, positive role models who do not promote negative gendered stereotypes should be leveraged to support adolescents. Finally, as it relates to individual and collective agency, safe and age-appropriate opportunities to learn and practice leadership competencies need to be designed and supported by positive role models.

Suggestions for further research

While this research study provides a critical insight into not only adolescent economic empowerment in urban and rural settings of Kenya, it also opens the door and sets-up multiple opportunities for further research. This includes the need to expand this study through the use of longitudinal research with the same individuals, to better understand if and how empowerment changes over time. In what domains, and through what application, do adolescents progress or regress regarding the multiple domains and constructs of adolescent economic empowerment? This will allow testing of the spiral model of empowerment proposed in Figure 9.

There is also a need to further explore the role of parents, role models, and mentors. In what ways, circumstances, and with what limitations do others influence adolescents’ empowerment—specifically their economic empowerment? The data in this study indicate limited areas where parents’ beliefs and/or support influence their children. However, only a few areas were explored, leaving many gaps of other potential areas in which parents may or may not have a more pronounced influence. The inability to ask probing questions due to the use of secondary qualitative data added to this study’s limitation in understanding this issue.

There could be value in conducting a policy analysis to further explore the influence of policies and formalized structures on adolescent economic empowerment. For example, what influence, if any, do national policies regarding curriculum content and/or delivery have on the knowledge and skills adolescents learn? What influence, if any, do policies regarding access to
formalized savings and banking accounts have on adolescents? A policy analysis was not included in this study, however issues related to schooling curricula were mentioned by multiple stakeholders.

As it relates to economic empowerment, the issue of ‘social capital’ was not explored as a domain in the proposed adolescent economic empowerment framework, largely due to a lack of relevant data. However, a separate case study further interrogating social capital may provide a valuable additional domain to understand the additional areas of influence impacting adolescents’ choices, spaces, prioritizations, and agency.
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Appendix A: Adolescent FGD Guide

**A. Financial Literacy**
- a) Have you been taught about saving money? Who teaches you or taught you about savings?
- b) Do you save money? If yes, What do you spend your savings on? If no, why aren’t you saving?
- c) Do you think that saving money is important? If yes, why?
- d) What resources are available to learn about saving money?
- e) Who do you teach about the importance of saving?
- f) Do other adolescents in this area engage in income generating activities? If YES, what are some of the IGAs they engage in? How do they go about it? *(Give examples)*

**B. ICT Literacy**
- g) How do you access information?
- h) Do your age mates know how to use ICT gadgets? What do you use the gadgets for?
- i) What type of information do you look for/access?
- j) What are some of the challenges you face in accessing ICT gadgets (laptops, ipads, internet e.t.c) in this area?

**C. Sexual Reproductive Health (SRH)**
- k) Is it easy to access health facilities for reproductive health services? What makes this easy or hard?
- l) What are the biggest challenges to access health facilities for reproductive health services?
- m) Do your parents discuss with you SRH issues (puberty, menstruation, sex e.t.c)? If YES, how do they do it and what do they discuss with you?
- n) What do you do when you have a question about SRH? Would you talk to someone? If YES, who would you talk to? If Not, why?
- o) How common is it for girls to experience /female circumcision?
- p) Is circumcision desirable? If yes, why?
- q) How common is it for girls to experience early marriages in your community?
- r) Is early marriage desirable? If yes, why?
- s) Are there any places you feel unsafe at the community? Why?

**D. Participation**
- t) What skills make a person successful?
- u) What are some opportunities for girls to be leaders?
- v) What are some opportunities for boys to be leaders?
- w) Do women, men, girls and boys get engaged in making decisions for community development in this area? If Yes, how are they engaged? What are the factors that affect their engagement in these issues?
x) Do you have anyone in your life that really inspires you? Why does this person inspire you?

E. School

y) Why do you think some students drop out of school?
z) What subjects in school are useful?
   aa) What do you wish you learned in school?
   bb) What are some of the reasons why girls are absent from class?
   cc) What are some of the reasons why boys are absent from class?
   dd) What are the best things about school?
   ee) What skills are most useful to learn for your future? Probe: Why are these skills needed?
Appendix B: Parents/Women and Men FGD Guide

GIRLS EMPOWERMENT PROJECT (GEP)
BASELINE SURVEY AND GENDER AND POWER ANALYSIS
FOCUS GROUP DISCUSSION GUIDE (FGD) GUIDE

Community: Women and Men

Adolescent ECE, ICT and SRH
How do adolescents in your household/community save?
How do you as parents support them?
Do adolescents in this area engage in income generating activities? If YES, what are some of the IGAs they engage in? How do they go about it? (Give examples)
Where do adolescents get information about sexual reproductive health in this area/village?
Where do you think they should get this information?
In your opinion, how should the SRH needs of adolescents in the community be addressed?
What would happen if a 15-year-old girl accessed a health facility for sexual and reproductive health services?

Knowledge, Attitudes and Perceptions on Community Harmful Practices
Is it common for girls to experience female circumcision?
Is circumcision desirable? If yes, why?
Is it common for girls to experience early marriages in your community?
Is early marriage desirable? If yes, why?
How have cases of circumcision been handled in this community?
What actions have been taken
What actions have been taken when a girl got married early?

Participation in Decision Making & Leadership
How are women, men, girls and boys engaged in making key decisions for community development in this area? What are the factors that affect their engagement in these issues?
How are household decisions made? Who is involved in key decisions concerning the HH (i.e. income, expenditures, family planning, and education e.t.c) and how are negotiations around these decisions managed?
Do you think that any measures should be put in place to ensure that women and men equally take leadership positions at community level? If yes, what measures?
What are the main forms of violence common against women and girls in this area? What is normally done to the perpetrators?

Gender and Power
What changes would need to happen for men and women to be equal in the community?
What are some of the efforts/interventions that have been implemented by government institutions, CBOs and local CSOs in promoting gender equality (define it to the group)?
What challenges have these CBOs, local CSOs and government institutions faced in their quest to promote gender equality?
What are your recommendations on achieving gender equality in this community?
What institutions are involved in programmes that focus on empowerment of women and girls in this area? What have been their biggest achievements so far? What challenges have they faced?
What are the most common gender stereotypes in this community? How has the community tried to address stereotyping?

**School**

Why do some students drop out of school?
What subjects in school are useful?
What subjects are missing from school?
What are some of the reasons why girls are absent from class?
What are some of the reasons why boys are absent from class?
What efforts are being taken to support education in this community?
What changes need to happen to ensure that all boys and girls partake in education?
Appendix C: Teachers KII Guide

GIRLS EMPOWERMENT PROJECT (GEP)
BASELINE SURVEY AND GENDER AND POWER ANALYSIS
KEY INFORMANT INTERVIEW (KIIs) GUIDE

Teachers and Principals of Schools

Economic Empowerment
Do schools in this area have financial literacy courses?
   If YES, what are some of the topics or issues taught?
What are some of the ways in which adolescents in this area use to save?
How do parents support them in saving?
How does the school support them in saving?
Do adolescents in this area engage in income generating activities?
   If YES, what are some of the IGAs they engage in?
   How do they go about it? (Give examples)
What key skills about saving do students need to learn?

Sexual Reproductive Health
In your opinion, how should the SRH needs of adolescents in this community be addressed?
Are there health programs or opportunities designed for adolescents in this area?
   If YES what are some of these programs?
Who designed them?
Were adolescents involved in their design?
Does this school offer sex education to students?
   If YES, what are some of the topics that are taught?
   Do you have teachers with training on SRH who does the training?
   How regularly is it taught?
   Do the teachers face any barriers to teach about SRH?
      What are those barriers? And who contributes to or enforces these barriers? What would help to remove these barriers, i.e. what do you as a teacher/principal need to be able to address and teach about ASRH issues in your classroom or school?
      What makes you comfortable or uncomfortable about teaching and addressing ASRH issues in your classroom/school?
   If No, why?
Are there policies or plans that support adolescents and youth sexual and reproductive health (SRH) education in schools in this area? Kindly state some of these policies or plans
What are some of the institutions that support implementation of policies, laws and regulations on FGM in this area?
   What have been their achievements so far?
   What challenges have they faced?
What are some of the institutions that support implementation of policies, laws and regulations on early marriage in this area?
What have been their achievements so far?
What challenges have they faced?

**Information Communication Technology**
Do schools in this area have computer literacy course?
If YES, is there a policy to govern teaching of ICT in the school?
If no, are there other places where adolescents can learn computer literacy skills?
What are some of the skills or topics taught in computer literacy courses?
What are some of the challenges that ICT in schools would face in this area?
What would you propose as the strategies to address these challenges?

**Gender and power**
What are some of the roles allocated to women, men, boys and girls in the Households, and in the Community? Are they fairly distributed? Give reasons. What is the distribution they based on?
How often do you involve boys and girls in making key decisions in their schools? How does this school ensure gender equality for both boys and girls?
What measures do you think can be put in place to ensure that women and men equally take leadership position both at community?
What are the main forms of violence common against women, girls and boys in this area?
When there is a case of violence against girls in this area, what is normally done?

Are there institutions that are engaged in empowerment of women and girls in the schools in this area? What interventions are they implementing? What is the impact of their interventions? What challenges do they face?
Appendix D: Adolescent Quantitative Survey

ADOLESCENTS EMPOWEREMENT PROJECT (AEP)
BASELINE SURVEY AND GENDER AND POWER ANALYSIS 2016
IN-SCHOOL AND OUT-OF-SCHOOL ADOLESCENTS QUESTIONNAIRE

Introduction
Thank you for agreeing to talk with me. The purpose of this conversation is to learn information about boys and girls, like yourself, and your families and communities. We want to learn about your experiences going to school, as well as other topics like health, technology, and savings. Your participation in this is voluntary and you may choose not to answer or not to continue at any time. Your answers will be kept anonymous and not shared with your teachers, family, or friends. This is not an exam, and so there are no correct or incorrect answers.

Respondent ID and Location
StuName: Student’s name______________________
StuID: Student ID number: ___________________
Date: Date of data collection: ________________
GPS: _______________________________
Guard: What is the name of your guardian (Optional)?
Phone: If you have a family telephone number, what is it (Optional)?

SECTION A: DEMOGRAPHIC PROFILE
A1. Project Site: 1- Rural 2- Urban37
A2. Category of Respondent: 1- Boy 2- Girl
A3. Category of Respondent: 1- In-School 2- Out-of-School (if in-school go to question A4, if out-of-school, go to question A6)
A4. If in-School, what level?
   1- Lower Primary (Class 1-4)
   2- Upper Primary (Class 4-8)
   3- Lower Secondary (Form 1-2)
   4- Upper Secondary (Form 3-4)
A5. Which school do you attend? (Provide list to choose from): ____________________ (go to question A7)
   Rural
   Urban38
A6. If Out-of-school, what is the highest level reached?
   1- Lower Primary (Class 1-4)
   2- Upper Primary (Class 4-8)
   3- Lower Secondary (Form 1-2)

37 Note: as part of the data and site confidentiality, the locale names have been renamed urban/rural
38 Note: as part of the data and site confidentiality, the names of schools have been removed here
4- Upper Secondary (Form 3-4)
5- none

A7. Age: _____________________________

SECTION B: GENDER AND POWER ASSESSMENT

B1. Time Profile
For each of the following activities, please answer how frequently you have time to do them:

<table>
<thead>
<tr>
<th>B1a. Have time to study</th>
<th>Everyday = 1</th>
<th>Some days in the week = 2</th>
<th>Almost never = 3</th>
<th>Never = 4</th>
<th>Refuse to answer = 98</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1b. Have time to spend with friends</td>
<td>Everyday = 1</td>
<td>Some days in the week = 2</td>
<td>Almost never = 3</td>
<td>Never = 4</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>B1c. Have time to do things you like</td>
<td>Everyday = 1</td>
<td>Some days in the week = 2</td>
<td>Almost never = 3</td>
<td>Never = 4</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>B1d. How often are you too tired to pay attention in class</td>
<td>Everyday = 1</td>
<td>Some days in the week = 2</td>
<td>Almost never = 3</td>
<td>Never = 4</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>

B2. Gender Equity (GEI)
For each of the following statements, please indicate if you agree strongly, agree somewhat, disagree somewhat, or disagree strongly.

| B2a. Women have the right to hold leadership positions in the community | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 |
| B2b. A female president can be as effective as a male president | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 |
| B2c. At home, both boys and girls should ask permission to go play with their friends | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 |
| B2d. Girls have the same right to go to school as boys | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 |
| B2e. It is good for boys to talk about their problems with their male friends | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 |
| B2f. Men and women both have the right | Agree | Agree | Disagree | Disagree |
SECTION C: SEXUAL REPRODUCTIVE HEALTH (SRH)

C1. Knowledge and Access

C1a. Do you get any information about your body changes?  
1=Yes  2= No 98- refuse to answer (if no, skip to C1c)

C1b. If YES, where do you get such information? (choose all that apply)

1- Books  
2- Magazines  
3- newspaper  
4- Radio  
5- TV  
6- parents  
7- Teaches  
8- Friends  
9- Internet  
10- School  
11- Youth organizations  

---

to enrol in advanced schooling

B2g. I respect a man who walks away from a fight

B2h. A husband and wife should decide together if they want to have children

B2i. Both men and women have the right to choose why they marry

B2j. Girls should be allowed to play sports

B2k. Boys should be allowed to play sports

B2l. If I heard a man insulting a woman, I would tell the man to stop

B2m. If I heard a woman insulting a man, I would tell the woman to stop

B2n. Men should know about family planning before marriage

B2o. Women should know about family planning before marriage
12- Health workers
13- Religious leaders
14- Others (Specify)___________________
88- do not know

NOTE: C1c to C1f are for 14-19 year old adolescents only!

C1c. Do you get any information about sex, HIV/AIDS, STIs or Family planning?
   1=Yes
   2= No
   98 = refuse to answer

C1d. If YES, where do you get such information? (choose all that apply)
   1- Books
   2- Magazines
   3- newspaper
   4- Radio
   5- TV
   6- parents
   7- Teaches
   8- Friends
   9- Internet
   10- School
   11- Youth organizations
   12- Health workers
   13- Religious leaders
   14- Others (Specify)___________________
   88- do not know

C1e. Have you visited a health facility/hospital in the past 12 months to seek any service related to SRH (give examples of contraceptives, treatment of STIs e.t.c)
   1=Yes
   2= No
   98 = refuse to answer
   (if no, go to C1f, if yes, go to C2a)

C1f. If No, why not? (choose all that apply)
   1. I fear my parents will know
   2. I don’t know where to go
   3. I am afraid to go
   4. I do not have money to pay for the visit
   5. I do not have reliable transportation
   6. I fear that people will see me and talk about me.
   7. Other (specify)__________

C2. Behaviour

C2a. Have you had any sexual intercourse?
   1=Yes
2= No
98 = refuse to answer
(if yes, go to C2b, if no, go to C2f)

C2b. At what age did you have your first sexual intercourse? ______________

C2c. Did you use a condom during your last sexual encounter?
   1=Yes
   2= No
   98 = refuse to answer

C2d. Are you currently using a contraceptive method other than condoms?
   1=Yes
   2= No
   98 = refuse to answer

(if yes, go to C2e, if no, go to C2g)

C2e. If yes, which one?
   1- Emergency pills
   2- Implants
   3- birth control pills
   4- IUDs
   5- other (describe)__________

(now skip to C2g)

C2f. If you ever have sex before marriage, would you use a condom?
   1=Yes
   2= No
   98 = refuse to answer

C2g. Do you know where to get a contraceptive method, if you wanted it?
   1=Yes
   2= No
   98 = refuse to answer

C2h. Would you use a contraceptive method if you knew how to access it?
   1=Yes
   2= No
   98 = refuse to answer

(if respondent is a girl, go to C2i, if respondent is a boy, go to C3a)

C2i. (for girls only) Have you ever been pregnant?
   1=Yes
   2= No
   98 = refuse to answer
C2j. have you ever had a child?
   1=Yes
   2= No
   98 = refuse to answer

C2k. how old were you when you gave birth to your first child? ____________ 98 = refuse to answer

C3. Confidence in accessing services

For each of the following statements, please indicate if you agree strongly, agree somewhat, disagree somewhat, or disagree strongly.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree strongly = 4</th>
<th>Agree somewhat = 3</th>
<th>Disagree somewhat = 2</th>
<th>Disagree strongly = 1</th>
<th>Refuse to answer = 98</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3a. I am confident that I could get condoms if I needed them</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3b. I am confident I could get an HIV test if I needed it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3c. I am confident that I could get information on how to avoid getting pregnant/impregnating a girl, if I needed it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3d. I am confident I could get a family planning method, other than condoms or pills, if I needed it</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3e. I am confident I could reach a health facility for SRH services without difficulty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3f. I am confident my parents would support me to access a health facility for SRH services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3g. I am confident I could access a health facility for SRH services, even if my parents did not support me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3h. If I access a health facility for SRH services, the doctor/nurse would be helpful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3i. If I access a health facility for SRH services, the doctor/nurse would yell at me</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C3j. If I access a health facility</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
for SHR services, my friends would support me

<table>
<thead>
<tr>
<th></th>
<th>strongly = 4</th>
<th>somewhat = 3</th>
<th>somewhat = 2</th>
<th>strongly = 1</th>
<th>answer = 98</th>
</tr>
</thead>
<tbody>
<tr>
<td>C3k. I would feel confident to access a health facility for SRH services</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>

### C4. Knowledge and Perceptions on FGM and Early Marriages

For each of the following statements, please indicate if you agree strongly, agree somewhat, disagree somewhat, or disagree strongly.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree strongly = 4</th>
<th>Agree somewhat = 3</th>
<th>Disagree somewhat = 2</th>
<th>Disagree strongly = 1</th>
<th>Refuse to answer = 98</th>
</tr>
</thead>
<tbody>
<tr>
<td>C4a. It is normal for girls to drop out of school and get married</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C4b. It is normal for boys to drop out of school and marry</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C4c. It is normal for a girl to undergo circumcision</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C4d. Undergoing female circumcision is an important ritual</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C4e. Adolescents should be taught about using a condom to prevent HIV?</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C4f. Adolescents should be taught about contraceptive methods to prevent pregnancy?</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>

### C5. Perceptions, Beliefs, Attitudes and gender roles stereotypes

For each of the following statements, please state whether you think the following statements are true or false.

<table>
<thead>
<tr>
<th>SRH Knowledge and perception</th>
<th>True = 1</th>
<th>False = 0</th>
<th>Do not know = 88</th>
<th>Refuse to answer = 98</th>
</tr>
</thead>
<tbody>
<tr>
<td>C5a. A girl can get pregnant the first time she has sex</td>
<td></td>
<td></td>
<td>Do not know = 88</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5b. Condoms can be used more than once</td>
<td>True = 1</td>
<td>False = 0</td>
<td>Do not know = 88</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5c. If used properly condoms can prevent against pregnancy</td>
<td>True = 1</td>
<td>False = 0</td>
<td>Do not know = 88</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5d. If used properly condoms can prevent against HIV transmission</td>
<td>True = 1</td>
<td>False = 0</td>
<td>Do not know = 88</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5e. A person who looks strong &amp; health can have HIV/AIDs</td>
<td>True = 1</td>
<td>False = 0</td>
<td>Do not know = 88</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5f. A person can get HIV/AIDs through mosquito, flea or bedbug bite</td>
<td>True = 1</td>
<td>False = 0</td>
<td>Do not know = 88</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5g. A person can get HIV/AIDs through sharing food with a person with HIV/AIDS</td>
<td>True = 1</td>
<td>False = 0</td>
<td>Do not know = 88</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5h. A person can get HIV/AIDs by touching a person with AIDs</td>
<td>True = 1</td>
<td>False = 0</td>
<td>Do not know = 88</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5i. Condom use reduces the chance of getting HIV/AIDs and STIs</td>
<td>True = 1</td>
<td>False = 0</td>
<td>Do not know = 88</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5j. Sticking to one sexual monogamous uninfected partner reduces the risk of HIV infection</td>
<td>True = 1</td>
<td>False = 0</td>
<td>Do not know = 88</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5k. Abstaining from sex prevents HIV infection</td>
<td>True = 1</td>
<td>False = 0</td>
<td>Do not know = 88</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>

C5l. Have you ever heard about Sexually Transmitted Infections (STIs)?
1=Yes
2= No
98 = refuse to answer
(if yes, go to C5m, if no, go to C5n)

C5m. If YES, which STIs do you know?
1- Gonorrhoea
2- Syphilis
3- Others (Specify): ______

For each of the statements below, indicate whether it is true or false.
### Gender Roles Stereotypes

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
<th>Refuse to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>C5n. Women who carry condoms are easy “or prostitutes;</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5o. Having sex with many women is a sign of manhood;</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5p. “Real men” don’t use condoms</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5q. The female (sexual partner) is responsible for protection.</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5r. My friends would laugh at me for refusing to have sex.</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>

### Attitudes about TBV

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
<th>Refuse to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>C5s. I have the right to complain if a teacher touches me inappropriately in exchange for money</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5t. I have the right to complain if an adult touches me inappropriately in exchange for money</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5u. I have the right to complain if a schoolmate touches me inappropriately in exchange for money</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>

### Negotiation

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
<th>Refuse to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>C5v. I am confident that I can convince my partner to use condoms if desired</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5w. I am confident I could talk with my partner about contraceptive options</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5x. I am confident I could ask my partner to get tested for HIV</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5y. I am confident I could refuse sex if I did not want to have sex</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5z. I am confident I could resist peer pressure to participate in risky behaviors</td>
<td>Agree = 1</td>
<td>Disagree = 0</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>

For each of the following statements, please indicate if you agree strongly, agree somewhat, disagree somewhat, or disagree strongly.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree strongly = 4</th>
<th>Agree somewhat = 3</th>
<th>Disagree somewhat = 2</th>
<th>Disagree strongly = 1</th>
<th>Refuse to answer = 98</th>
</tr>
</thead>
<tbody>
<tr>
<td>C5aa. If I ask my partner to use a condom he/she would get angry</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5ab. If I asked my partner to get tested for HIV, he/she would get angry</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>C5ac. If I refused sexual intercourse with my partner he/she would get angry</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>
### SECTION D: INFORMATION COMMUNICATION TECHNOLOGY

**D1. Assessment of ownership and application of ICT skills**

From a list of devices which one do you use (Y or N).

<table>
<thead>
<tr>
<th>ICT GADGET</th>
<th>OWN AT HH(Y or N)</th>
<th>If yes, How frequently?</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1a. Mobile Phone</td>
<td>Yes = 1 (if yes, go to D1b, if no, go to D1c) No = 0</td>
<td>D1b. Every day = 1 Some days in the week =2 Almost never = 3 Never = 4 Refuse to answer = 98</td>
</tr>
<tr>
<td>D1c. Computer</td>
<td>Yes = 1 (if yes, go to D1d, if no, go to D1e) No = 0</td>
<td>D1d. Every day = 1 Some days in the week =2 Almost never = 3 Never = 4 Refuse to answer = 98</td>
</tr>
<tr>
<td>D1e. Radio</td>
<td>Yes = 1 (if yes, go to D1f, if no, go to D1g) No = 0</td>
<td>D1f. Every day = 1 Some days in the week =2 Almost never = 3 Never = 4 Refuse to answer = 98</td>
</tr>
<tr>
<td>D1g. TV</td>
<td>Yes = 1 (if yes, go to D1h, if no, go to D1i) No = 0</td>
<td>D1h. Every day = 1 Some days in the week =2 Almost never = 3 Never = 4 Refuse to answer = 98</td>
</tr>
</tbody>
</table>

**D1i. Do you have access to the internet?**

1=Yes
2= No
98 = refuse to answer (if yes, go to D1j, if no, go to D1o)

**D1j. Do you have access to internet at home?**

1=Yes
2= No
98 = refuse to answer

**D1k (for in-school students) Do you have access to internet at school? □ Yes □ No**

1=Yes
2= No
98 = refuse to answer

**D1l. Besides at home and at school, do you have access to internet at another location?**

1=Yes
2= No
98 = refuse to answer

**D1m. If Yes, Where?**

1- Youth centre
2- internet cafe
3- library at school
4- other (specify)___
98- refuse to answer

D1n. How often do you use the internet?

| Every day = 1 | Some days in the week = 2 | Almost never = 3 | Never = 4 | Refuse to answer = 98 |

D1o. Do you access a computer outside your house?
   1=Yes
   2= No
   98 = refuse to answer
   (if yes, go to D1p, if no, go to E1)

D1p. If yes, where?

   1- Youth centre
   2- internet cafe
   3- library at school
   4- other (specify)___
   98- refuse to answer

SECTION E: FINANCIAL LITERACY

E1. Who makes decisions about money in your household? (select the best fit)
   1- Both My mother & father
   2- my mother
   3- my father
   4- my siblings
   5- others (specify): ____
   88- do not know
   98- refuse to answer

E2. In the last 12 months, have you saved any money?
   1=Yes
   2= No
   98 = refuse to answer
   (if yes, go to E3, if no, go to E10)
E3. If YES, how have you been saving the money? *(check all that apply)*
1- Saving at home
2- Saving in a savings account
3- Giving it to a family member to save on my behalf
4- Saving in an informal savings club
88- do not know
98- refuse to answer

E4. Where do you get the money to save? *(select all that apply)*
1- My Father
2- My Mother
3- Both my mother and father
4- My sisters
5- My brothers
6- small business
7- other (specify)

E5. Approximately how much savings do you currently have? ________ 98 = refuse to answer

E6. Who decides what your savings are spent on? *(select the best answer)*
1- I decide,
2- my parents decide
3- someone else decides
98- refuse to answer

E7. How often do you set money aside for savings? *(select one)*
1- every day,
2- 2-3 times a week,
3- 2-3 times a month,
4- once a month,
5- less than one a month
88- do not know
98- refuse to answer

E8. Do you save money in a youth savings group?
1=Yes
2= No
98 = refuse to answer
E9. What do you spend your savings on? (choose all that apply) □ to pay for basic needs (Clothes, food), □ to pay for things to help me work □ to pay for things related to school □ to have fun □ to start a business one day □ to pay for medical expenses □ Others (Specify):

- □ to pay for basic needs (Clothes, food)
- □ to pay for things to help me work
- □ to pay for things related to school
- □ to have fun
- □ to start a business one day
- □ to pay for medical expenses
- □ Others (Specify):

E10. Do you engage in any activities that generate income?

1 = Yes
2 = No
98 = refuse to answer

(if yes, go to E11, if no, go to E12)

E11. If Yes, what type of activity: (check all that apply)

1. Small business
2. Casual worker
3. Crop cultivation
4. Poultry rearing
5. Tailoring
6. Carpentry
7. Cattle grazing for a pay
8. Other (specify): ……………………..
98 = refuse to answer

E12. If I need money for school, I can get it

1 = Yes
2 = No
88 = do not know
98 = refuse to answer

(if yes, go to E13, if no, go to E14)

E13. If yes Where do you get money that you use at school (Choose as many as they apply)?

1. Father
2. Mother
3. Siblings
4. Other Relatives
5. girlfriend/boyfriend
6. Teachers sometimes
7. Employees in the school sometimes
8. From my account
9. I do part-time piece work
10. Other (specify)

E14. Do you have any of the following as your own?

E14a. Credit card
1 = Yes
2 = No
98 = refuse to answer

E14b. Mobile phone with online banking/buying services e.g M-Pesa
1=Yes  
2= No  
98 = refuse to answer  
E14c Account at a banking institution  
1=Yes  
2= No  
98 = refuse to answer  

E15. Have you ever learned about the importance of saving?  
1=Yes  
2= No  
98 = refuse to answer  
(if yes, go to E16, if no, go to E17)  
E16. If yes, from whom (check all that apply)?  
1- teacher  
2- parent  
3- sibling  
4- in a club/group  
5- Friends  
6- Other  
98- refuse to answer  

For the following statements, please indicate if you strongly agree, agree, disagree, or strongly disagree  

<table>
<thead>
<tr>
<th>E17. Saving money is important to me</th>
<th>Agree strongly = 4</th>
<th>Agree somewhat = 3</th>
<th>Disagree somewhat = 2</th>
<th>Disagree strongly = 1</th>
<th>Refuse to answer = 98</th>
</tr>
</thead>
<tbody>
<tr>
<td>E18. I do not like to think about money issue</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>E19. I think about saving money for my future</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>E20. Money is just for spending on things I want</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>E21. Learning about finances is important to me</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>E22. I like to manage my own money</td>
<td>Agree strongly</td>
<td>Agree somewhat</td>
<td>Disagree somewhat</td>
<td>Disagree strongly</td>
<td>Refuse to</td>
</tr>
</tbody>
</table>
E23. I set long term financial goals
Answer: Refuse to answer = 98

E24. My financial situation limits my ability to do things that are important to me
Answer: Refuse to answer = 98

E25. Whenever I do small income generating activities, I keep written records of all my income
Answer: Refuse to answer = 98

E26. Whenever I do income generating activities, I keep written records of all the expenses I incur (all the money that goes out)
Answer: Refuse to answer = 98

E27. Whenever I do an income generating project, I take time to calculate the difference between the money that I get from the project and all the expenses that I incur in running the project.
Answer: Refuse to answer = 98

E28. I am willing to trade my immediate rewards for greater gains in future
Answer: Refuse to answer = 98

E29. I know where to get information on different market prices
Answer: Refuse to answer = 98

F: Financial Literacy
For the next few questions, I’m going to tell you a story and ask you some questions about it.

F1. James and his sister are living in a rented house. They have been working for two months, they have no savings. They are paid monthly and have just received their wages. The following is their to-do list: buy a cable TV, Pay rent, Buy outdoor furniture. Which tasks on the list do you think they need to pay immediate attention to?

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
<th>Do not know</th>
<th>Refuse to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>F1a. Buy a cable TV</td>
<td>1</td>
<td>0</td>
<td>88</td>
<td>98</td>
</tr>
<tr>
<td>F1b. Pay rent</td>
<td>1</td>
<td>0</td>
<td>88</td>
<td>98</td>
</tr>
<tr>
<td>F1c. Buy outdoor furniture</td>
<td>1</td>
<td>0</td>
<td>88</td>
<td>98</td>
</tr>
</tbody>
</table>
Understanding financial concepts

In this final section of our discussion please listen carefully to the stories given. Take note of the numbers in the stories and follow closely what the story says. Then state whether the statements that follow are true or false and give answers to other questions asked.

F2 | Mary bought a 50kg bag of beans at Kshs 10,000.00. She divided the bag into 1kg packets and then sold the 1kg packets of beans at Kshs 300.00 each:
---|---
F2a. Mary ran a loss when she sold the beans | 1- Correct answer (false)  
2- Incorrect answer (true)  
88- do not know  
98- refuse to answer
F2b. Mary made a profit when she sold the beans | 1- Correct answer (True)  
2- Incorrect answer (false)  
88- do not know  
98- refuse to answer
F2c. The buying price for the beans was USD1.00 per kg | a) Correct answer (false)  
b) Incorrect answer (true)  
88- do not know  
98- refuse to answer
F2d. How much did Mary get after selling all the beans? | 1- Correct answer (15,000 Kshs)  
2- Incorrect answer  
88- do not know  
98- refuse to answer
F2e. How much was Mary’s gross profit? | 1- Correct answer (5,000 Kshs)  
2- Incorrect answer  
88- do not know  
98- refuse to answer

Mary had bought the beans in Marikiti vegetable market. She had spent Kshs 300.00 on transport.

F2f. How much was Mary’s net profit | 1- Correct answer (4,700 Kshs)  
2- Incorrect answer  
88- do not know  
98- refuse to answer

F3 | Gudo wanted to buy 2l cooking oil from OK shop. He knew that the price of cooking oil was Kshs 350 So he had set aside Kshs 350 to buy the oil. On arriving at the shop he found that because of the OK Grand Challenge Jackpot Promotion, the price of cooking oil had been reduced to Kshs 300 only. In this case:
---|---
F3a. Gudo ran a loss | 1. Correct answer (false)  
2. Incorrect answer (true)  
88- do not know  
98- refuse to answer
F3b. Gudo made a profit | 1. Correct answer (false)  
2. Incorrect answer (true)  
88- do not know
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>98- refuse to answer</td>
</tr>
<tr>
<td><strong>F3c. Gudo earned interest</strong></td>
<td>1. Correct answer (false)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Incorrect answer (true)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>88- do not know</td>
<td></td>
</tr>
<tr>
<td></td>
<td>98- refuse to answer</td>
<td></td>
</tr>
<tr>
<td><strong>F3d. Gudo realized a saving</strong></td>
<td>1) Correct answer (True)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2) Incorrect answer (false)</td>
<td></td>
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<tr>
<td></td>
<td>88- do not know</td>
<td></td>
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<tr>
<td></td>
<td>98- refuse to answer</td>
<td></td>
</tr>
</tbody>
</table>

**F4** Sekai deposited KShs 20,000.00 into her savings account. She left it in the account for five years. She did not withdraw any amount. She also did not deposit more. But when she checked her balance after the five years, it was KShs 25,000.00. In this case:

<p>| | | |</p>
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<thead>
<tr>
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<tbody>
<tr>
<td><strong>F4a. The bank had stolen Sekai’s money</strong></td>
<td>3) Correct answer (false)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4) Incorrect answer (true)</td>
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<tr>
<td></td>
<td>88- do not know</td>
<td></td>
</tr>
<tr>
<td></td>
<td>98- refuse to answer</td>
<td></td>
</tr>
<tr>
<td><strong>F4b. Sekai had made some profit</strong></td>
<td>5) Correct answer (false)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6) Incorrect answer (true)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>88- do not know</td>
<td></td>
</tr>
<tr>
<td></td>
<td>98- refuse to answer</td>
<td></td>
</tr>
<tr>
<td><strong>F4c. Sekai’s money had earned interest</strong></td>
<td>7) Correct answer (True)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8) Incorrect answer (false)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>88- do not know</td>
<td></td>
</tr>
<tr>
<td></td>
<td>98- refuse to answer</td>
<td></td>
</tr>
<tr>
<td><strong>F4d. Sekai ran a loss</strong></td>
<td>9) Correct answer (false)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10) Incorrect answer (true)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>88- do not know</td>
<td></td>
</tr>
<tr>
<td></td>
<td>98- refuse to answer</td>
<td></td>
</tr>
<tr>
<td><strong>F4e. What rate of return did Sekai earn on her initial investment?</strong></td>
<td>1- Correct answer (25%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2- incorrect answer</td>
<td></td>
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<tr>
<td></td>
<td>88- do not know</td>
<td></td>
</tr>
<tr>
<td></td>
<td>98- refuse to answer</td>
<td></td>
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</tbody>
</table>

**F5** Dapi took a loan of Kshs 100,000 at an annual interest rate of 15% per year. He returned the loan in six months together with the interest.

<p>| | | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>F5a. How much interest did he pay?</strong></td>
<td>1- Correct answer (Kshs 7500)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2- incorrect answer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>88- do not know</td>
<td></td>
</tr>
<tr>
<td></td>
<td>98- refuse to answer</td>
<td></td>
</tr>
<tr>
<td><strong>F5b. What was the total amount he paid back to the bank?</strong></td>
<td>1- Correct answer (Kshs 107,500)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2- incorrect answer</td>
<td></td>
</tr>
<tr>
<td></td>
<td>88- do not know</td>
<td></td>
</tr>
<tr>
<td></td>
<td>98- refuse to answer</td>
<td></td>
</tr>
<tr>
<td><strong>F5c. Immediately upon taking the Kshs 100,000 Dapi</strong></td>
<td>1- Correct answer (Kshs 250,000)</td>
<td></td>
</tr>
</tbody>
</table>
went to Tanzania and made a bulk purchase of textiles with Kshs 90,000. He used Kshs 10,000 for transport. When he sold the textiles he realized Kshs 350,000. What was Dapi’s gross profit?

<p>| | | | | | |</p>
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<tbody>
<tr>
<td></td>
<td></td>
<td>2</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>incorrect answer</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>88</td>
<td>do not know</td>
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<tr>
<td></td>
<td></td>
<td>98</td>
<td>refuse to answer</td>
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</tr>
</tbody>
</table>

F5d. What was Dapi’s net profit after paying back the loan and its interest?

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<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Correct answer (Kshs 242,500)</td>
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<tr>
<td></td>
<td></td>
<td>2</td>
<td>incorrect answer</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>88</td>
<td>do not know</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>98</td>
<td>refuse to answer</td>
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F5e. Who made a higher percentage profit?

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<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>Correct answer (Dapi)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td>2</td>
<td>incorrect answer</td>
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<td></td>
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<td>88</td>
<td>do not know</td>
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<tr>
<td></td>
<td></td>
<td>98</td>
<td>refuse to answer</td>
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F5f. What percentage profit did Dapi realise

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<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Correct answer (100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>incorrect answer</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>88</td>
<td>do not know</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>98</td>
<td>refuse to answer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

G. Leadership

G1. Do you hold (currently) any leadership position in school or at home?

1=Yes
2= No
98 = refuse to answer

G2. Are you involved in any youth group/organization?

1=Yes
2= No
98 = refuse to answer

For each of the statements below, indicate the how well you agree with the statements

<p>| | | | | | |</p>
<table>
<thead>
<tr>
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<td>Rarely = 1</td>
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<td>Sometimes = 2</td>
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<td>Most of the time = 3</td>
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<td>Refuse to answer = 98</td>
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</table>

G3. I like to try new activities that I know how to do.

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<td>Rarely = 1</td>
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<td></td>
<td>Refuse to answer = 98</td>
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</table>

G4. My friends ask me for advice.

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<td>Rarely = 1</td>
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<td>Sometimes = 2</td>
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<td></td>
<td>Refuse to answer = 98</td>
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G5. I recognize when people have different skills to contribute to a task.

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<td>Rarely = 1</td>
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<td>Sometimes = 2</td>
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<td></td>
<td>Refuse to answer = 98</td>
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</table>

G6. I am comfortable when my teacher on me to answer a question.

<p>| | | | | | |</p>
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<tbody>
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<td></td>
<td>Rarely = 1</td>
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<td></td>
<td>Sometimes = 2</td>
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<td>Most of the time = 3</td>
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<td>Refuse to answer = 98</td>
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</tr>
<tr>
<td><strong>G7</strong></td>
<td>I contribute ideas to discussions at home even if they are different from others’ ideas.</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
</tr>
<tr>
<td><strong>G8</strong></td>
<td>I ask questions at school when I understand something.</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
</tr>
<tr>
<td><strong>G9</strong></td>
<td>I can describe my thoughts to others</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
</tr>
<tr>
<td><strong>G10</strong></td>
<td>The things I do set a good example for my peers.</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
</tr>
<tr>
<td><strong>G11</strong></td>
<td>I consider possible outcomes of my decisions before making them.</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
</tr>
<tr>
<td><strong>G12</strong></td>
<td>I accept responsibility for the outcome my decisions.</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
</tr>
<tr>
<td><strong>G13</strong></td>
<td>I recognize when choices I make today can affect my life in the future.</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
</tr>
<tr>
<td><strong>G14</strong></td>
<td>I can show what is important to me with my actions.</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
</tr>
<tr>
<td><strong>G15</strong></td>
<td>If someone does not understand me, I try to find a different way of saying what is on my mind.</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
</tr>
<tr>
<td><strong>G16</strong></td>
<td>I encourage others to join together to help my community.</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
</tr>
<tr>
<td><strong>G17</strong></td>
<td>I cooperate with others to get things done at home.</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
</tr>
<tr>
<td></td>
<td>Question</td>
<td>Rating Options</td>
<td></td>
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<td>---</td>
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</tr>
<tr>
<td>G18</td>
<td>If someone treats me unfairly at school, I am comfortable telling an adult.</td>
<td>Rarely = 1, Sometimes = 2, Most of the time = 3, Always = 4, Refuse to answer = 98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G19</td>
<td>I am willing to work hard to achieve my dreams.</td>
<td>Rarely = 1, Sometimes = 2, Most of the time = 3, Always = 4, Refuse to answer = 98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G20</td>
<td>I am better able to finish a task when I plan ahead.</td>
<td>Rarely = 1, Sometimes = 2, Most of the time = 3, Always = 4, Refuse to answer = 98</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>G21</td>
<td>When I have the opportunity, I can organize my peers to do an activity.</td>
<td>Rarely = 1, Sometimes = 2, Most of the time = 3, Always = 4, Refuse to answer = 98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G22</td>
<td>I am interested in being a leader at my school.</td>
<td>Rarely = 1, Sometimes = 2, Most of the time = 3, Always = 4, Refuse to answer = 98</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G23</td>
<td>I try to understand the cause of a problem before trying to solve it.</td>
<td>Rarely = 1, Sometimes = 2, Most of the time = 3, Always = 4, Refuse to answer = 98</td>
<td></td>
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</tbody>
</table>

**SECTION H NEXT SECTION: QUESTIONS ON SCHOOL**

H1. Have you ever had to repeat any class?
   1=Yes
   2= No
   98 = refuse to answer

*(if yes, go to H2, if no, go to H4 if the student is in-school, if no and the student is OOS, go to H12)*

H2. How many times did you repeat? _____ 98- refuse to answer

H3. Why did you repeat a level/grade?
   1- I failed the test at the end of a year
   2- illness
   3- dropped out temporarily due to school fees
   4- dropped out due to other reasons
   5- lack of fees
   98- refuse to answer

**NOTE: H4 – H11 are for students who are in-school only!**

H4. This month have you been absent from school?
   1=Yes
H5. How many days were you absent from school? _____ 98 = refuse to answer

H6. Why were you absent?
1- Sickness
2- lack of fees
3- Indiscipline
4- Others (specify)
5- 98 = refuse to answer

For the next three questions, please share how you feel in different contexts. Do you feel this way rarely, sometimes, most of the time, or almost always?

<table>
<thead>
<tr>
<th>H7. Do you feel safe at school?</th>
<th>Rarely = 1</th>
<th>Sometimes = 2</th>
<th>Most of the time = 3</th>
<th>Almost always = 4</th>
<th>Refuse to answer = 98</th>
</tr>
</thead>
<tbody>
<tr>
<td>H8. Do you feel safe on the way to school?</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>H9. Do you feel safe at home?</td>
<td>Rarely = 1</td>
<td>Sometimes = 2</td>
<td>Most of the time = 3</td>
<td>Almost always = 4</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>

H10. Have you ever dropped out of school, and re-enrolled afterwards?
1=Yes
2= No
98 = refuse to answer

H11. Why did you drop out of school? Please tell us the main reason only. (choose 1)
1- lack of school fees
2- did not like school
3- school is not useful
4- failed a subject
5- family reasons
6- had to work
7- was afraid to go to school
8- illness
9- migrated
10- lack of school supplied or uniform
11- violence/conflict
12- there was no school
13- other ____________

Thank you for your time and honest responses
Appendix E: Household Quantitative Survey

ADOLESCENTS EMPOWEREMENT PROJECT (AEP)  
BASELINE SURVEY AND GENDER AND POWER ANALYSIS 2016  
HOUSEHOLD QUESTIONNAIRE

Introduction
Thank you for agreeing to talk with me. The purpose of this conversation is to learn information about men and women, boys and girls and communities. We want to learn about your experiences as well as other topics like health, technology, and savings. Your participation in this is voluntary and you may choose not to answer or not to continue at any time. Your answers will be kept anonymous and not shared with others in your community. This is not an exam, and so there are no correct or incorrect answers.

HOUSEHOLD

Household Identity and Tracking data
Name: Name of respondent: ________________

HHID. Household ID: ________________

Addr: Address/location of the household: __________________________

GPS: GPS coordinates of the household: ___________________

Sex: Sex: 1=Male 2=Female

Tele: If you have a family telephone number, what is it? ___________________

A Biographical Information

A1 Project site: 1- Rural 2- Urban

A2: Is the Head of Household an adolescent? Yes = 1, no = 2
(if response is yes, go to A3, if no, go to A10)

A3: Is your mother living?
  1- yes
  2- no
  88- do not know
  98- refuse to answer

A4: Is your father living?
  1- yes
  2- no
  88- do not know
  98- refuse to answer
A5. Are you married?
1- yes
2- no
98- refuse to answer

A6. With whom do you live?
1- Nobody else
2- Siblings
3- Partner (e.g., girlfriend/boyfriend)
4- other
98- refuse to answer

A7: What is the highest level of education your mom completed?
6- Lower Primary (Class 1-4)
7- Upper Primary (Class 4-8)
8- Lower Secondary (Form 1-2)
9- Upper Secondary (Form 3-4)
10- University
11- College
12- None
88- do not know
98- refuse to answer

A8: What is the highest level of education your father completed?
1- Lower Primary (Class 1-4)
2- Upper Primary (Class 4-8)
3- Lower Secondary (Form 1-2)
4- Upper Secondary (Form 3-4)
5- University
6- College
7- None
88- do not know
98- refuse to answer

A9. Are you responsible for taking care of younger siblings?
3- yes
4- no
98- refuse to answer

(if respondents are adolescents, skip to question B1)
### A10. SELECTION OF THE RESPONDENT

<table>
<thead>
<tr>
<th>Name</th>
<th>Unique ID number 39</th>
<th>Relationship</th>
<th>Marital status</th>
<th>Sex</th>
<th>Religion</th>
<th>Age</th>
<th>If respondent is an adolescent is she/he tracked as part of the cohort? 40</th>
<th>If respondent is school aged, is she/he enrolled in school?</th>
<th>If no, was she/he enrolled in the past?</th>
<th>Why did he/she drop out? (choose the best one answer)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A10a_Na</td>
<td>A10a_I</td>
<td>A10a_rel</td>
<td>A10a_marita</td>
<td>A10a_s</td>
<td>A10a_age</td>
<td>A10a_cohort</td>
<td>A10a_enrol</td>
<td>A10a_pastenrol</td>
<td>A10a_reasondrop</td>
</tr>
</tbody>
</table>

39 Note: the adolescent ID number must match that which is used in the adolescent survey

40 For the enumerator to fill out
<table>
<thead>
<tr>
<th>me</th>
<th>D</th>
<th>1</th>
<th>ex</th>
<th>A10b_age</th>
<th>A10b_cohort</th>
<th>A10b_enrol</th>
<th>A10b_pastenrol</th>
<th>A10b_reasondrop</th>
</tr>
</thead>
<tbody>
<tr>
<td>A10b_Name</td>
<td>A10b_ID</td>
<td>A10b_rel</td>
<td>A10b_marital</td>
<td>A10b_sex</td>
<td>A10b_age</td>
<td>A10b_cohort</td>
<td>A10b_enrol</td>
<td>A10b_pastenrol</td>
</tr>
<tr>
<td>A10c_Name</td>
<td>A10c_ID</td>
<td>A10c_rel</td>
<td>A10c_marital</td>
<td>A10c_sex</td>
<td>A10c_age</td>
<td>A10c_cohort</td>
<td>A10c_enrol</td>
<td>A10c_pastenrol</td>
</tr>
<tr>
<td>A10d_Name</td>
<td>A10d_ID</td>
<td>A10d_rel</td>
<td>A10d_marital</td>
<td>A10d_sex</td>
<td>A10d_age</td>
<td>A10d_cohort</td>
<td>A10d_enrol</td>
<td>A10d_pastenrol</td>
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<td>Etc.</td>
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</table>
SECTION B: ACTIVITY PROFILE

B1. What is the main source of income for the head of household?
   1- Livestock Keeping
   2- Formal Employment
   3- Informal employment/Business
   4- Other (Specify): ______________
   88- Do not know
   98- Refuse to answer

(If respondent is male, go to B2, if respondent is female, go to B3; if respondent is an adolescent, go to B5)

B2. (If the head of household is a married man) Does your wife earn an income?
   1=Yes
   2= No
   98 = refuse to answer

   (If response is yes, go to B4, if response is no, go to B5)

B3. (If the head of household is a married woman) Do you earn an income?
   1=Yes
   2= No
   98 = refuse to answer

   (If response is yes, go to B4, if response is no, go to B5)

B4. What is her/your main source of income?
   1- Livestock Keeping
   2- Formal Employment
   3- Informal employment/Business
   4- Other (Specify): ______________

B5. Who else contributes to household income? (choose all that apply)
   1- Son
   2- Daughter
   3- No one else
   4- Other (Specify) ___________________

   (if respondent is adolescent, skip to D1)

B6. Who decides how the money is spent?
   1- Husband
   2- Wife
   3- Both
   4- Others (specify): ______________
## SECTION C: INEQUALITIES IN DECISION MAKING

C1. Who makes decisions at the household on the following matters?

<table>
<thead>
<tr>
<th>C1</th>
<th>What</th>
<th>Husband</th>
<th>Wife</th>
<th>Both husband and wife together</th>
<th>Other</th>
<th>Refuse to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>Where we stay</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>b</td>
<td>How much money we spend on the household goods</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>c</td>
<td>What food is cooked</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>d</td>
<td>Which schools children will attend</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>e</td>
<td>Which economic activity to engage in</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>f</td>
<td>Which assets to acquire</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>g</td>
<td>What birth control methods to use</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>h</td>
<td>How household chores are undertaken</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>i</td>
<td>Number of children to have</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>j</td>
<td>If children attend school</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
</tr>
<tr>
<td>k</td>
<td>How long children will remain in school</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>98</td>
</tr>
</tbody>
</table>
C1. At what age their children will get married

- Husband = 1
- Wife = 2
- Both husband and wife together = 3
- Other = 4
- Refuse to answer = 98

C1. Whether or not their daughters undergo female circumcision

- Husband = 1
- Wife = 2
- Both husband and wife together = 3
- Other = 4
- Refuse to answer = 98

C2. Who gets the final say when there is a difference in opinion?

- Husband = 1
- Wife = 2
- Both husband and wife together = 3
- Other = 4
- Refuse to answer = 98

SECTION D: POVERTY ANALYSIS

D1. What is the average monthly income for the HH? _________________

D2. What assets do you own?

<table>
<thead>
<tr>
<th>Asset</th>
<th>Yes = 1</th>
<th>No = 0</th>
<th>Refuse to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>D2a House</td>
<td></td>
<td></td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>D2b Land</td>
<td></td>
<td></td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>D2c Livestock</td>
<td></td>
<td></td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>D2d Shelter</td>
<td></td>
<td></td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>D2e Farm tools</td>
<td></td>
<td></td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>D2f Finances</td>
<td></td>
<td></td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>D2g Other</td>
<td></td>
<td></td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>

D3. Do you have household savings?

1 = Yes
2 = No
98 = refuse to answer
D4. How have you been saving money? *(Choose all that apply)*
   1- Saving at home
   2- Saving in a savings account
   3- Giving it to a family member to save on my behalf
   4- Saving in an informal savings club
   5- Other (specify) ______________________

D5. If your daughter(s) asked you for money for school expenses, would you give it to them?
   1=Yes 
   2= No
   98 = refuse to answer

D6. If your son(s) asked you for money for school expenses, would you give it to them?
   1=Yes 
   2= No
   98 = refuse to answer

D7. Do(es) your daughter(s) save?
   1=Yes 
   2= No
   98 = refuse to answer

D8. Do(es) your son(s) save?
   1=Yes 
   2= No
   98 = refuse to answer

D9. (if respondent answered yes that their son(s) and/or daughter(s) save, ask this question, if not, click “not applicable”) How does your child save?
   1- Saving at home
   2- Saving in a savings account
   3- Giving it to a family member to save on my behalf
   4- Saving in an informal savings club
   5- Others (Specify): ______________________
6- Not applicable

98- refuse to answer

D10. Would you support your child to save formally in a bank account?
   1=Yes
   2= No
   98 = refuse to answer

D11. Would you support your child to get training on how to save, how to engage in IGAs and how to use ICT?
   1=Yes
   2= No
   98 = refuse to answer

D12. Do you think that adolescents should have access to savings accounts at financial institutions?
   1=Yes
   2= No
   98 = refuse to answer

D13. Have you taught your children about the importance of savings?
   1=Yes
   2= No
   98 = refuse to answer

D14. Have your children taught you about the importance of savings?
   1=Yes
   2= No
   98 = refuse to answer

For the following statement, please indicate if you agree strongly, agree somewhat, disagree somewhat, or disagree strongly:

<table>
<thead>
<tr>
<th>D15. I know where to get information on different market prices</th>
<th>Agree strongly</th>
<th>Agree somewhat</th>
<th>Disagree somewhat</th>
<th>Disagree strongly</th>
<th>Refuse to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>98</td>
</tr>
</tbody>
</table>

(if respondent is an adolescent, finish the survey)

SECTION E: PERCEPTIONS ON RESOURCE ALLOCATION: GENDER NORMS AND LEADERSHIP

For the following statements, please indicate if you agree strongly, agree somewhat, disagree somewhat, or disagree strongly.

<table>
<thead>
<tr>
<th>E1</th>
<th>In our household money is allocated equally between men</th>
<th>Agree strongly</th>
<th>Agree somewhat</th>
<th>Disagree somewhat</th>
<th>Disagree strongly</th>
<th>Refuse to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td></td>
<td>E2</td>
<td>Gender Equity</td>
<td></td>
<td></td>
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<td>---</td>
<td>---</td>
<td>---</td>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>and women</td>
<td>= 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E2</td>
<td>In the household men control most of the money</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>E3</td>
<td>Women have a say in how money is allocated</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>E4</td>
<td>In our community money is allocated equally between men and women</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>E5</td>
<td>in our community men decide how money is to be allocated</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>E6</td>
<td>Our culture demands that men control money</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>E7</td>
<td>Women in our community are not allowed to control money</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>

|   | Women have the right to hold leadership positions in the community | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E8 | A female president can be as effective as a male president | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E9 | At home, both boys and girls should ask permission to go play with their friends | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E10 | Girls have the same right to go to school as boys | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E11 | It is good for men to talk about their problems with their male friends | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E12 | Men and women both have the right to enrol in advanced schooling | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E13 | I respect a man who walks away from a fight | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E14 | A husband and wife should decide together if they want to | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E16 | Both men and women have the right to choose why they marry | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E17 | Girls should be allowed to play sports | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E18 | Boys should be allowed to play sports | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E19 | If I heard a man hurting a woman, I would tell the man to stop | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E20 | If I heard a woman hurting a man, I would tell the woman to stop | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E21 | Men should know about family planning before marriage | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E22 | Women should know about family planning before marriage | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |

### E3 Leadership

| E23 | Parents/family members consider the child’s opinion when they make decisions about schooling | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E24 | Parents listen to boys and girls equally | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E25 | In my community, adults listen to girls and boys equally | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E26 | When making decisions community leaders consider the needs of girls | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E27 | In my community there are leadership opportunities for young boys | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E28 | In my community there are leadership opportunities for young girls | Agree strongly = 4 | Agree somewhat = 3 | Disagree somewhat = 2 | Disagree strongly = 1 | Refuse to answer = 98 |
| E29 | Men and women are equally influential in making | Agree strongly | Agree somewhat | Disagree somewhat = 2 | Disagree strongly | Refuse to answer = 98 |
In my community, it is normal for women to join clubs or social groups

<table>
<thead>
<tr>
<th>Agree strongly = 4</th>
<th>Agree somewhat = 3</th>
<th>Disagree somewhat = 2</th>
<th>Disagree strongly = 1</th>
<th>Refuse to answer = 98</th>
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</thead>
<tbody>
<tr>
<td>E3 0</td>
<td>In my community, it is normal for women to join clubs or social groups</td>
<td>4</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

SECTION F: KNOWLEDGE AND ATTITUDES TOWARDS HARMFUL PRACTICES

F1. Are there cases of female circumcision in your community?
- 1=Yes
- 2= No
- 88= Do not know
- 98 = refuse to answer

F2. If Yes, What actions have been taken on those who perpetrate these practices?
- 1- Arrested
- 2- Prosecuted
- 3- No action was taken
- 4- Others (specify): ___________
- 88- do not know
- 98- refuse to answer

F3. Are there cases of early marriages in your community?
- 1=Yes
- 2= No
- 88= Do not know
- 98 = refuse to answer

F4. If Yes, What actions have been taken on those who perpetrate these practices?
- 1- Arrested
- 2- Prosecuted
- 3- No action was taken
- 4- Others (specify): ___________
- 88- do not know
- 98- refuse to answer

For the following statements, please indicate if you agree strongly, agree somewhat, disagree somewhat, or disagree strongly.

<table>
<thead>
<tr>
<th>F5</th>
<th>It is normal for girls to drop out of school and get married</th>
<th>Agree strongly = 4</th>
<th>Agree somewhat = 3</th>
<th>Disagree somewhat = 2</th>
<th>Disagree strongly = 1</th>
<th>Refuse to answer = 98</th>
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</thead>
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<tr>
<td>182</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agree strongly</td>
<td>Agree somewhat</td>
<td>Disagree somewhat</td>
<td>Disagree strongly</td>
<td>Refuse to answer</td>
</tr>
<tr>
<td>---</td>
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<td>----------------</td>
<td>----------------</td>
<td>--------------------</td>
<td>------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>F6</td>
<td>It is normal for boys to drop out of school and marry</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>F7</td>
<td>It is normal for a girl to undergo circumcision</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>

### SECTION G: KNOWLEDGE AND ATTITUDES TOWARDS ASRH

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Agree strongly</th>
<th>Agree somewhat</th>
<th>Disagree somewhat</th>
<th>Disagree strongly</th>
<th>Refuse to answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>G1</td>
<td>Sexuality education should be taught in the classroom</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G2</td>
<td>Adolescents, including my own, should be taught how to use a condom to prevent HIV</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G3</td>
<td>Adolescents, including my own, should be taught how to use birth control pills to prevent pregnancy</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G4</td>
<td>Adolescents, including my own, should be allowed to access condoms if they need them</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G5</td>
<td>Adolescents, including my own, should be allowed to access contraceptives if they need them</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G6</td>
<td>Any girl who falls pregnant while still in school should be expelled</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G7</td>
<td>Both the pregnant girl and boy responsible for pregnancy should be expelled from school</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G8</td>
<td>The girl should be allowed to come to the same school after delivery to complete her education</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G9</td>
<td>Adolescents, including my own, should be taught about appropriate and inappropriate touching</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G10</td>
<td>Adolescents, including my own, should be taught Where to get birth control pills</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G11</td>
<td>Adolescents, including my own, should be taught How to use birth control pills</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G12</td>
<td>Adolescents, including my own, should be taught Where to get condoms</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat = 3</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
<tr>
<td>G13</td>
<td>Adolescents, including my own, should be taught how to use condoms</td>
<td>Agree strongly = 4</td>
<td>Agree somewhat</td>
<td>Disagree somewhat = 2</td>
<td>Disagree strongly = 1</td>
<td>Refuse to answer = 98</td>
</tr>
</tbody>
</table>
G14. Adolescents, including my own, should be taught how to tell a boy/ girl ‘NO’ if s/he does not want to have sex  | Agree strongly = 4  | Agree somewhat = 3  | Disagree somewhat = 2  | Disagree strongly = 1  | Refuse to answer = 98
G15. Schools should have supportive adolescent and youth sexual and reproductive health policies  | Agree strongly = 4  | Agree somewhat = 3  | Disagree somewhat = 2  | Disagree strongly = 1  | Refuse to answer = 98
G16. I would get in trouble with the community, if they get to know that I told an adolescent where they can receive SRH services  | Agree strongly = 4  | Agree somewhat = 3  | Disagree somewhat = 2  | Disagree strongly = 1  | Refuse to answer = 98
G17. I find it difficult to speak about sex with my children  | Agree strongly = 4  | Agree somewhat = 3  | Disagree somewhat = 2  | Disagree strongly = 1  | Refuse to answer = 98
G18. I feel embarrassed to talk about sexuality with my children  | Agree strongly = 4  | Agree somewhat = 3  | Disagree somewhat = 2  | Disagree strongly = 1  | Refuse to answer = 98
G19. What is your opinion about this statement: My child can reach SRH services without much difficulty  | Agree strongly = 4  | Agree somewhat = 3  | Disagree somewhat = 2  | Disagree strongly = 1  | Refuse to answer = 98

For the following statements, please indicate if you have talked with your children about these topics during the past 12 months:

| G20 | puberty and their changing body (menstruation/ wet dreams)? | Yes = 1 | No = 0 | Refuse to answer = 98
| G21 | ways to prevent pregnancy how to use a condom to prevent HIV and other STIs? | Yes = 1 | No = 0 | Refuse to answer = 98
| G22 | how to say ‘No’ if they do not want to have sex | Yes = 1 | No = 0 | Refuse to answer = 98
| G23 | where to get birth control pills if they need them | Yes = 1 | No = 0 | Refuse to answer = 98

G24. Has your child ever been tested for HIV or STIs?
1=Yes
2= No
88- Do not know
98 = refuse to answer

G25. If your child asked you for money to access a health facility, would you give it to him/her?
1=Yes
2= No
98 = refuse to answer

G26. What do you think would happen if your child went to a health facility for reproductive health services?
1. The health staff would help him/her
2. The health staff would yell at him/her
88- Do not know
98 = refuse to answer

Next section: H: School & Learning

H1a. This month, has <<insert first Cohort student’s name>> been absent from school?
  1=Yes  
  2= No  
  88- Do not know  
  98 = refuse to answer
(if yes, go to H2, if no, go to next cohort student in the HH or H4)
H2a. How many days was she/he absent from school? _____ (88 = do not know, 98 = refuse to answer)
H3a. Why was she/he absent?
  1- Sickness
  2- lack of fees
  3- Suspension
  4- Others (specify)____________________
  88- Do not know
  98- refuse to answer

H1b. This month, has <<insert second Cohort student’s name>> been absent from school?
  1=Yes  
  2= No  
  88- Do not know  
  98 = refuse to answer
(if yes, go to H2, if no, go to H4)
H2b. How many days was she/he absent from school? _____ (88 = do not know, 98 = refuse to answer)
H3b. Why was she/he absent?
  1- Sickness
  2- lack of fees
  3- Suspension
  4- Others (specify)____________________
  88- Do not know
  98- refuse to answer

H4. Which of the following statements best describes your opinion of how useful what children learn at school is to their daily lives?

41 Note: for each child-specific question, we need to ask this separately for each of the cohort students
42 Repeat if there are multiple cohort tracked students in the same HH
1. What children learn at school does not help them
2. What children learn at school helps them somewhat
3. What children learn at school helps them quite a bit
4. What children learn at school helps them very much
98. refuse to answer

For the following statements, please indicate if you do these activities every day, some days in the week, almost never, or never.

<table>
<thead>
<tr>
<th></th>
<th>How often do you check your child’s homework books/daily performance?</th>
<th>Every day = 1</th>
<th>Some days in the week = 2</th>
<th>Almost never = 3</th>
<th>Never = 4</th>
<th>Refuse to answer = 98</th>
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<tbody>
<tr>
<td>H5</td>
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<table>
<thead>
<tr>
<th></th>
<th>How often do you discuss your child’s school performance with him/her?</th>
<th>Every day = 1</th>
<th>Some days in the week = 2</th>
<th>Almost never = 3</th>
<th>Never = 4</th>
<th>Refuse to answer = 98</th>
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<td>H6</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>How often do you discuss your child’s school performance with his/her teacher?</th>
<th>Every day = 1</th>
<th>Some days in the week = 2</th>
<th>Almost never = 3</th>
<th>Never = 4</th>
<th>Refuse to answer = 98</th>
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<tr>
<td>H7</td>
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</table>

H8. Are you a member of the school Parents Teacher Association (PTA)?
1=Yes
2= No
98 = refuse to answer

**H9-H12 is for parents who have students who are enrolled**

For the following questions, please indicate if you think it true rarely, sometimes, most of the time, or almost always

<table>
<thead>
<tr>
<th></th>
<th>How often are your daughters safe on their journey to school?</th>
<th>Rarely = 1</th>
<th>Sometimes = 2</th>
<th>Most of the time = 3</th>
<th>Almost always = 4</th>
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<table>
<thead>
<tr>
<th></th>
<th>How often are your sons safe on their journey to school?</th>
<th>Rarely = 1</th>
<th>Sometimes = 2</th>
<th>Most of the time = 3</th>
<th>Almost always = 4</th>
<th>Refuse to answer = 98</th>
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<table>
<thead>
<tr>
<th></th>
<th>How often are your daughters safe while at school?</th>
<th>Rarely = 1</th>
<th>Sometimes = 2</th>
<th>Most of the time = 3</th>
<th>Almost always = 4</th>
<th>Refuse to answer = 98</th>
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<tr>
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<th>How often are your sons safe while at school?</th>
<th>Rarely = 1</th>
<th>Sometimes = 2</th>
<th>Most of the time = 3</th>
<th>Almost always = 4</th>
<th>Refuse to answer = 98</th>
</tr>
</thead>
<tbody>
<tr>
<td>H12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Thank you (finish the survey)
Appendix F: CARE Data Use Permission Letter

21 March 2017

To Whom It May Concern:

The purpose of this letter is to grant permission for Amanda Moll, Knowledge & Learning Advisor with the CARE USA Education Team, to use anonymized databases from the PCTFI Baseline study conducted by CARE Kenya for her dissertation research study through secondary analyses. The data includes both quantitative and qualitative datasets; both will be anonymized by CARE staff before Amanda accesses them, removing names and location identifiers.

The data in question was collected in accordance with a series of CARE policies that serve to guide research initiatives at CARE:

The CARE USA Suggested guidance for interviewing children;
The CARE USA Stories and Images Consent Policy,
CARE’s Ethical Guidelines for Programming and Research,
CARE USA’s Guidelines for Involving Children in Advocacy and PR,
CARE’s guidance on Ethical and effective discussions of trauma,
CARE’s Do No Harm Framework

The use of this data is contingent upon the sharing of the resulting research study with CARE for review before it is published externally. CARE reserves the right to review this report over a period of two weeks, at the end of which CARE may request that any organizational identifiers be removed from the research study, but may not request any changes in findings.

Should you have any questions, please do not hesitate to let me know.

Regards,

[Signature]

Lotte Renaut
Senior Research & Learning Advisor, Education Team
151 Ellis Street
Atlanta, GA 30303
404-979-9492
Appendix G: Qualitative Research Question Analysis Mapping

Qual question: According to adolescents, households, and teachers, what skills, access, knowledge, and resources are valued and prioritized for adolescents in urban and rural settings of Kenya?

Skillset questions

<table>
<thead>
<tr>
<th>Adolescent Skillset Questions</th>
<th>Parent skillset questions:</th>
<th>Teacher skillset questions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Financial Literacy</strong></td>
<td><strong>Participation in Decision Making &amp; Leadership</strong></td>
<td><strong>Economic Empowerment</strong></td>
</tr>
<tr>
<td>b) Do you save money? If yes, What do you spend your savings on? If no, why aren’t you saving?</td>
<td>How are household decisions made? Who is involved in key decisions concerning the HH (i.e. income, expenditures, family planning, and education e.t.c) and how are negotiations around these decisions managed?</td>
<td>Do schools in this area have financial literacy courses? If YES, what are some of the topics or issues taught? What are some of the ways in which adolescents in this area use to save? What key skills about saving do students need to learn?</td>
</tr>
<tr>
<td>c) Do you think that saving money is important? If yes, why?</td>
<td>School</td>
<td><strong>Information Communication Technology</strong></td>
</tr>
<tr>
<td>e) Who do you teach about the importance of saving?</td>
<td>Why do some students drop out of school? What subjects in school are useful? What subjects are missing from school?</td>
<td>Do schools in this area have computer literacy course? If YES, is there a policy to govern teaching of ICT in the school? If no, are there other places where adolescents can learn computer literacy skills? What are some of the skills or topics taught in computer literacy courses?</td>
</tr>
<tr>
<td><strong>B. ICT Literacy</strong></td>
<td><strong>Participation in Decision Making &amp; Leadership</strong></td>
<td><strong>Information Communication Technology</strong></td>
</tr>
<tr>
<td>g) How do you access information?</td>
<td>How are household decisions made? Who is involved in key decisions concerning the HH (i.e. income, expenditures, family planning, and education e.t.c) and how are negotiations around these decisions managed?</td>
<td>Do schools in this area have computer literacy course? If YES, is there a policy to govern teaching of ICT in the school? If no, are there other places where adolescents can learn computer literacy skills? What are some of the skills or topics taught in computer literacy courses?</td>
</tr>
<tr>
<td>h) Do your age mates know how to use ICT gadgets? What do you use the gadgets for?</td>
<td>School</td>
<td><strong>Information Communication Technology</strong></td>
</tr>
<tr>
<td>i) What type of information do you look for/access?</td>
<td>Why do some students drop out of school? What subjects in school are useful? What subjects are missing from school?</td>
<td>Do schools in this area have computer literacy course? If YES, is there a policy to govern teaching of ICT in the school? If no, are there other places where adolescents can learn computer literacy skills? What are some of the skills or topics taught in computer literacy courses?</td>
</tr>
<tr>
<td>j) What are some of the challenges you face in accessing ICT gadgets (laptops, ipads, internet e.t.c) in this area?</td>
<td><strong>Participation in Decision Making &amp; Leadership</strong></td>
<td><strong>Information Communication Technology</strong></td>
</tr>
<tr>
<td><strong>D. Participation</strong></td>
<td><strong>Participation in Decision Making &amp; Leadership</strong></td>
<td><strong>Information Communication Technology</strong></td>
</tr>
<tr>
<td>t) What skills make a person successful?</td>
<td>How are household decisions made? Who is involved in key decisions concerning the HH (i.e. income, expenditures, family planning, and education e.t.c) and how are negotiations around these decisions managed?</td>
<td>Do schools in this area have computer literacy course? If YES, is there a policy to govern teaching of ICT in the school? If no, are there other places where adolescents can learn computer literacy skills? What are some of the skills or topics taught in computer literacy courses?</td>
</tr>
<tr>
<td><strong>E. School</strong></td>
<td><strong>Participation in Decision Making &amp; Leadership</strong></td>
<td><strong>Information Communication Technology</strong></td>
</tr>
<tr>
<td>c) Why do you think some students drop out of school?</td>
<td>School</td>
<td><strong>Information Communication Technology</strong></td>
</tr>
<tr>
<td>d) What subjects in school are useful?</td>
<td>Why do some students drop out of school? What subjects in school are useful? What subjects are missing from school?</td>
<td>Do schools in this area have computer literacy course? If YES, is there a policy to govern teaching of ICT in the school? If no, are there other places where adolescents can learn computer literacy skills? What are some of the skills or topics taught in computer literacy courses?</td>
</tr>
<tr>
<td>e) What do you wish you learned in school?</td>
<td><strong>Participation in Decision Making &amp; Leadership</strong></td>
<td><strong>Information Communication Technology</strong></td>
</tr>
<tr>
<td>Access questions</td>
<td>Parent Access Questions</td>
<td>Teacher Access Questions</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td><strong>Adolescent Access Questions</strong></td>
<td><strong>Adolescent ECE, ICT and SRH</strong></td>
<td><strong>Economic Empowerment</strong></td>
</tr>
<tr>
<td><strong>A. Financial Literacy</strong></td>
<td>How do adolescents in your household/community save? Do adolescents in this area engage in income generating activities? If YES, what are some of the IGAs they engage in? How do they go about it? <em>(Give examples)</em></td>
<td>Do schools in this area have financial literacy courses? What are some of the ways in which adolescents in this area use to save? Do adolescents in this area engage in income generating activities? If YES, what are some of the IGAs they engage in? How do they go about it? <em>(Give examples)</em></td>
</tr>
<tr>
<td>b) Do you save money? If yes, What do you spend your savings on? If no, why aren’t you saving?</td>
<td><strong>Participation in Decision Making &amp; Leadership</strong></td>
<td><strong>Information Communication Technology</strong></td>
</tr>
<tr>
<td>e) Who do you teach about the importance of saving?</td>
<td>How are women, men, girls and boys engaged in making key decisions for community development in this area? What are the factors that affect their engagement in these issues? How are household decisions made? Who is involved in key decisions concerning the HH (i.e. income, expenditures, family planning, and education e.t.c) and how are negotiations around these decisions managed?</td>
<td>Do schools in this area have computer literacy course? If YES, is there a policy to govern teaching of ICT in the school? If no, are there other places where adolescents can learn computer literacy skills?</td>
</tr>
<tr>
<td>f) Do other adolescents in this area engage in income generating activities? If YES, what are some of the IGAs they engage in? How do they go about it? <em>(Give examples)</em></td>
<td><strong>School</strong></td>
<td>Are there institutions that are engaged in empowerment of women and girls in the schools in this area? What interventions are they implementing? What is the impact of their interventions? What challenges do they face?</td>
</tr>
<tr>
<td><strong>B. ICT Literacy</strong></td>
<td>What changes need to happen to ensure that all boys and girls partake in education?</td>
<td></td>
</tr>
<tr>
<td>g) How do you access information?</td>
<td></td>
<td>****</td>
</tr>
<tr>
<td>h) Do your age mates know how to use ICT gadgets? What do you use the gadgets for?</td>
<td></td>
<td>****</td>
</tr>
<tr>
<td>i) What type of information do you look for/access?</td>
<td></td>
<td>****</td>
</tr>
<tr>
<td>j) What are some of the challenges you face in accessing ICT gadgets (laptops, ipads, internet e.t.c) in this area?</td>
<td></td>
<td>****</td>
</tr>
<tr>
<td><strong>D. Participation</strong></td>
<td></td>
<td>****</td>
</tr>
<tr>
<td>w) Do women, men, girls and boys get engaged in making decisions for community development in this area? If Yes, how are they</td>
<td></td>
<td>****</td>
</tr>
</tbody>
</table>
engaged? What are the factors that affect their engagement in these issues?

### Resource questions

**Adolescent Resources Questions**

**A. Financial Literacy**
- a) Have you been taught about saving money? Who teaches you or taught you about savings?
- b) Do you save money? If yes, What do you spend your savings on? If no, why aren’t you saving?
- d) What resources are available to learn about saving money?

**B. ICT Literacy**
- g) How do you access information?
- j) What are some of the challenges you face in accessing ICT gadgets (laptops, ipads, internet e.t.c) in this area?

**D. Participation**
- b) Do you have anyone in your life that really inspires you? Why does this person inspire you?

**E. School**
- d) What are the best things about school?

### Parent resource questions:

**Adolescent ECE, ICT and SRH**
- How do adolescents in your household/community save?
- How do you as parents support them?
- Do adolescents in this area engage in income generating activities? If YES, what are some of the IGAs they engage in? How do they go about it? *(Give examples)*

### Teacher resource questions

**Economic Empowerment**
- Do schools in this area have financial literacy courses?
- What are some of the ways in which adolescents in this area use to save?
- How do parents support them in saving?
- How does the school support them in saving?
- Do adolescents in this area engage in income generating activities? If YES, what are some of the IGAs they engage in? How do they go about it? *(Give examples)*

**Information Communication Technology**
- Do schools in this area have computer literacy course?
  - If YES, is there a policy to govern teaching of ICT in the school?
  - If no, are there other places where adolescents can learn computer literacy skills?
- What are some of the skills or topics taught in computer literacy courses?
- What are some of the challenges that ICT in schools would face in this area?
- What would you propose as the strategies to address these challenges?

**Gender and power**
Are there institutions that are engaged in empowerment of women and girls in the schools in this area? What interventions are they implementing? What is the impact of their interventions? What challenges do they face?

**Gender and power analysis**

<table>
<thead>
<tr>
<th>A. Participation</th>
<th>Parent Survey Questions</th>
<th>Teacher Gender and power questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) What are some opportunities for girls to be leaders?</td>
<td><strong>Gender and Power</strong> What changes would need to happen for men and women to be equal in the community?</td>
<td>What are some of the roles allocated to women, men, boys and girls in the Households, and in the Community? Are they fairly distributed? Give reasons. What is the distribution they based on? How often do you involve boys and girls in making key decisions in their schools? How does this school ensure gender equality for both boys and girls? What measures do you think can be put in place to ensure that women and men equally take leadership position both at community? What are the main forms of violence common against women, girls and boys in this area? When there is a case of violence against girls in this area, what is normally done? Are there institutions that are engaged in empowerment of women and girls in the schools in this area? What</td>
</tr>
<tr>
<td>b) What are some opportunities for boys to be leaders?</td>
<td>What are some of the efforts/interventions that have been implemented by government institutions, CBOs and local CSOs in promoting gender equality (define it to the group)? What challenges have these CBOs, local CSOs and government institutions faced in their quest to promote gender equality? What are your recommendations on achieving gender equality in this community?</td>
<td></td>
</tr>
<tr>
<td>c) Do women, men, girls and boys get engaged in making decisions for community development in this area? If Yes, how are they engaged? What are the factors that affect their engagement in these issues?</td>
<td>What are the most common gender stereotypes in this community? How has the community tried to address</td>
<td></td>
</tr>
<tr>
<td><strong>B. School</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Teacher Gender and power questions

- What are some of the roles allocated to women, men, boys and girls in the Households, and in the Community? Are they fairly distributed? Give reasons. What is the distribution they based on?
- How often do you involve boys and girls in making key decisions in their schools? How does this school ensure gender equality for both boys and girls?
- What measures do you think can be put in place to ensure that women and men equally take leadership position both at community?
- What are the main forms of violence common against women, girls and boys in this area? When there is a case of violence against girls in this area, what is normally done? Are there institutions that are engaged in empowerment of women and girls in the schools in this area? What
**Participation in Decision Making & Leadership**

How are women, men, girls and boys engaged in making key decisions for community development in this area? What are the factors that affect their engagement in these issues?

What interventions are they implementing? What is the impact of their interventions? What challenges do they face?

Note: issues of gender and power will also be assessed throughout the analyses of questions above (e.g., do girls and boys share different narratives re: access to resources to start income generation activities? Do students and teachers respond differently about how financial decisions are made? etc.)
### Appendix H: Quantitative Research Question Analysis Mapping

Quantitative research question: What influences Kenyan adolescents’ knowledge, attitudes and practices related to economic empowerment skills?

<table>
<thead>
<tr>
<th>Hypothesis 1: Adolescents’ gender influences their economic empowerment skills</th>
<th>Disaggregate the analyses outlined below by these categorical variables.</th>
<th>Quantitative analyses will utilize non-parametric tests, assuming non-normality. Because my research has not shown previous studies measuring these variables in general, nor with these specific populations, I do not have an assumption of normality.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypothesis 2: Adolescents’ location (urban/rural) influences their economic empowerment skills</td>
<td>GEI = section B2 in the adolescent survey and section E2 in the household survey</td>
<td>Significance testing will utilize Wilcoxin’s test</td>
</tr>
<tr>
<td>Hypothesis 3: Adolescents’ schooling status (in/out of school) affects their economic empowerment skills</td>
<td>IGA participation in E10-E11</td>
<td>Correlational testing will utilize Spearman’s rho</td>
</tr>
<tr>
<td>GEI = section B2 in the adolescent survey and section E2 in the household survey</td>
<td>Reliability testing of indices will utilize cronbach’s alpha</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 4: adolescent and/or household self-perceptions of gender equality, as measured by the Gender Equitable Index (GEI), influences adolescent participation in income generation activities (IGAs)</td>
<td>Youth group membership in E8</td>
<td>Statistical significance is determined at alpha = 0.05 levels</td>
</tr>
<tr>
<td>Hypothesis 5: adolescent and/or household self-perceptions of gender equality, as measured by the Gender Equitable Index (GEI), influences adolescent participation in youth savings groups</td>
<td>YLI = adolescent survey section G3-G23</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 5: adolescent self-perceptions of leadership abilities, as measured by the Youth Leadership Index (YLI), influences adolescent participation in savings groups</td>
<td>Participation in IGAs = E10-E11</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 6: Adolescent access to ICT influences their use of ICT</td>
<td>Access to ICT = D1a, D1c, D1g, D1i, D1j, D1k, D1l, D1o</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 7: Adolescent use of ICT influences their financial literacy and decision making</td>
<td>Use of ICT = D1b, D1d, D1n</td>
<td></td>
</tr>
<tr>
<td>Use of ICT = D1b, D1d, D1n</td>
<td>Financial literacy scores = section F</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 8: Adolescent access to money influences their savings habits, financial literacy and decision making, savings beliefs, and/or participation in income generation activities</td>
<td>Access to money = E2, E4, E12, E13, Savings habits = E2, E3, E5, E6, E7, Financial literacy and decision making = section F Participation in IGAs = E10-E11 Savings beliefs: E17-29</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 9: Adolescent knowledge about savings influence their financial literacy and decision making</td>
<td>Knowledge about savings: E15, E16 Financial literacy and decision making = section F</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 10: household support for adolescent savings influences adolescent savings habits</td>
<td>Household support for adolescent savings = D10-14 Savings habits = E2, E3, E5, E6, E7</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 11: household support for adolescent use of formal bank accounts influences adolescent use of formal bank accounts</td>
<td>Household support for adolescent use of formal bank accounts = D10-12 Adolescent use of formal bank accounts = E14</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 12: adolescent self-perceptions of leadership abilities, as measured by the Youth Leadership Index (YLI), influences adolescent financial literacy and decision making</td>
<td>YLI = adolescent survey section G3-G23 Financial literacy and decision making = section F</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 13: household beliefs about the usefulness of schooling influences adolescent schooling status</td>
<td>household beliefs about the usefulness of schooling = H4 Adolescent schooling status = A3</td>
<td></td>
</tr>
</tbody>
</table>
Appendix I: Comparison of YLI Histograms
Appendix J: Adolescent Savings Scale Histograms

- **Project Site:** Rural, **Adolescent Sex:** Boy, **In School Status:** In-school
  - Mean = 21.81
  - Std. Dev. = 0.028
  - N = 106

- **Project Site:** Rural, **Adolescent Sex:** Boy, **In School Status:** Out-of-school
  - Mean = 21.55
  - Std. Dev. = 8.08
  - N = 141
Project Site: Urban, Adolescent Sex: Boy, In-School Status: In-school

Mean = 25.67
SD = 9.23
N = 132

Project Site: Urban, Adolescent Sex: Boy, In-School Status: Out-of-school

Mean = 23.09
SD = 6.91
N = 29
Appendix K: Histograms of the Financial Literacy Calculation Score

Adolescent Sex: Boy, Project Site: Rural, In-School Status: In-school

- Mean = 21.61
- Std Dev = 0.038
- N = 106

Adolescent Sex: Boy, Project Site: Rural, In-School Status: Out-of-school

- Mean = 21.55
- Std Dev = 0.06
- N = 141
Appendix L: Referenced Barriers to Education

<table>
<thead>
<tr>
<th>Category</th>
<th>Barrier</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gendered Issues</td>
<td>Early marriage</td>
<td>Cited by over half of the student groups, rural parents, and teachers as a primarily gendered issue affecting girls.</td>
</tr>
<tr>
<td></td>
<td>Pregnancy</td>
<td>Although stated by all student groups, rural parents, and teachers, it is fundamentally a gendered issue affecting girls</td>
</tr>
<tr>
<td></td>
<td>Menstruation/puberty</td>
<td>Mostly referenced as a girl-focused issue; there was mention that puberty and voice changes made some boys not want to go to school. A rural mom noted that it is no longer a problem because girls received sanitary pads in school.</td>
</tr>
<tr>
<td>Positive Influences</td>
<td>Peer pressure</td>
<td>This was the second most frequently mentioned barrier among all student groups, ¾ parent groups, and urban teachers. Peer pressure to drop-out or engage in activities that would lead to dropout is high; this may relate to low self-esteem mentioned by an urban, out-of-school girl.</td>
</tr>
<tr>
<td></td>
<td>Lack of role models</td>
<td>Cited as a barrier by dads, this may be relevant to the peer pressure and low self-esteem that adolescents face. If there is a lack of people who adolescents can look up to, they may be more likely to succumb to negative peer pressure.</td>
</tr>
<tr>
<td></td>
<td>Value/relevance of education</td>
<td>Students, parents, and teachers all noted that not fully knowing the value of education leads some not to attend and/or drop-out of school.</td>
</tr>
<tr>
<td>Economic Issues</td>
<td>Poverty</td>
<td>The most consistently mentioned barrier; all fourteen subgroups referenced poverty and its effects as a barrier to accessing education.</td>
</tr>
<tr>
<td></td>
<td>The need to earn money</td>
<td>Revealed by all parents and teachers, as well as in-school girls (both urban and rural). It is interesting that most students, especially boys, did not mention this as a barrier to education.</td>
</tr>
<tr>
<td>Learning environment</td>
<td>Poor learning environment</td>
<td>Half of students, male parents, and some teachers all stated poor learning environments as something affecting education and dropout. While teachers think the quality of education is good, they recognized some challenges related to resources available, overcrowded classrooms, and the lack of training on specific subjects.</td>
</tr>
<tr>
<td></td>
<td>(materials &amp; people)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Educational performance</td>
<td>Students and parents recognized poor performance and the toughness of school as demotivating.</td>
</tr>
<tr>
<td></td>
<td>Distance</td>
<td>Rural teachers mentioned that the distance traversed meant that students may come across wild animals, which scared some of the girls, affecting their desire to travel to school.</td>
</tr>
<tr>
<td>External Factors</td>
<td>Drugs &amp; alcohol</td>
<td>More than half of the students, as well as dads and urban teachers, mentioned drugs and alcohol as being influential in student dropout, primarily boys, making this a gendered issue.</td>
</tr>
<tr>
<td>Health &amp; FGM</td>
<td>In-school girls, rural dads, and rural teachers mentioned health problems and/or FGM as barriers to education due to increased absences and potential withdrawal from school. It is interesting that no moms talked about health or FGM as a problem, and in fact, some said that FGM was not a problem. More research is needed to understand the nuances behind the responses (e.g., is the response “FGM is not a problem here” a politically correct answer since it is illegal? Are moms more likely to support FGM as a culturally necessary practice to ensure their daughters marry, and therefore they are less likely to say it is a problem?). The issue of FGM was not a focus of this research area, and so warrants further evaluation and analysis.</td>
<td></td>
</tr>
</tbody>
</table>
Appendix M: Mean YLI Cronbach Alpha scores by respondent group

<table>
<thead>
<tr>
<th>All adolescents: All girls: All rural: All in-school:</th>
<th>Rural girls</th>
<th>Urban girls</th>
<th>Rural boys</th>
<th>Urban boys</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.906</td>
<td>0.888</td>
<td>0.896</td>
<td>0.906</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All urban:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.912</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>All boys:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0.917</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>All in-school: too few cases to analyze</td>
<td></td>
<td></td>
<td>Out-of-school: too few cases to analyze</td>
</tr>
<tr>
<td></td>
<td>In-school: 0.873</td>
<td>Out-of-school: too few cases to analyze</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In-school: 0.891</td>
<td>Out-of-school: too few cases to analyze</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In-school: 0.918</td>
<td>Out-of-school: too few cases to analyze</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>In-school: 0.918</td>
<td>Out-of-school: too few cases to analyze</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix N: Inter-item correlational data for items related to financial literacy

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale Mean if Item Deleted</th>
<th>Scale Variance if Item Deleted</th>
<th>Corrected Item-Total Correlation</th>
<th>Cronbach’s Alpha if Item Deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mary ran a loss when she sold the beans</td>
<td>28.386</td>
<td>13.634</td>
<td>.033</td>
<td>.791</td>
</tr>
<tr>
<td>Mary made a profit when she sold the beans</td>
<td>29.247</td>
<td>14.088</td>
<td>-.214</td>
<td>.797</td>
</tr>
<tr>
<td>The buying price for the beans was USD 1.00 per keg</td>
<td>28.771</td>
<td>13.150</td>
<td>.106</td>
<td>.795</td>
</tr>
<tr>
<td>How much did Mary get after selling all the beans</td>
<td>28.614</td>
<td>11.833</td>
<td>.540</td>
<td>.763</td>
</tr>
<tr>
<td>How much was Mary’s gross profit</td>
<td>28.664</td>
<td>11.702</td>
<td>.560</td>
<td>.762</td>
</tr>
<tr>
<td>How much was Mary’s net profit?</td>
<td>28.700</td>
<td>11.499</td>
<td>.613</td>
<td>.757</td>
</tr>
<tr>
<td>Gudo ran a loss</td>
<td>28.363</td>
<td>13.701</td>
<td>.012</td>
<td>.791</td>
</tr>
<tr>
<td>Gudo made a profit</td>
<td>29.058</td>
<td>12.821</td>
<td>.256</td>
<td>.783</td>
</tr>
<tr>
<td>Gudo earned interest</td>
<td>29.009</td>
<td>12.928</td>
<td>.200</td>
<td>.787</td>
</tr>
<tr>
<td>Gudo realized a saving</td>
<td>29.242</td>
<td>13.887</td>
<td>-.090</td>
<td>.794</td>
</tr>
<tr>
<td>The bank had stolen Sekai’s money</td>
<td>28.359</td>
<td>13.799</td>
<td>-.040</td>
<td>.793</td>
</tr>
<tr>
<td>Sekai had made some profit</td>
<td>29.072</td>
<td>12.860</td>
<td>.251</td>
<td>.783</td>
</tr>
<tr>
<td>Sekai’s money had earned interest</td>
<td>29.220</td>
<td>13.884</td>
<td>-.085</td>
<td>.795</td>
</tr>
<tr>
<td>Sekai ran a loss</td>
<td>28.413</td>
<td>13.595</td>
<td>.037</td>
<td>.792</td>
</tr>
<tr>
<td>What rate of return did Sekai earn on her initial investment</td>
<td>28.942</td>
<td>11.605</td>
<td>.597</td>
<td>.759</td>
</tr>
<tr>
<td>How much interest did he pay?</td>
<td>28.973</td>
<td>11.387</td>
<td>.689</td>
<td>.752</td>
</tr>
<tr>
<td>What was the total amount he paid back to the bank?</td>
<td>28.996</td>
<td>11.464</td>
<td>.678</td>
<td>.754</td>
</tr>
<tr>
<td>What was Dapis gross profit?</td>
<td>29.040</td>
<td>11.805</td>
<td>.596</td>
<td>.760</td>
</tr>
<tr>
<td>What was Dapis net profit after paying back the loan and its interest</td>
<td>29.121</td>
<td>12.269</td>
<td>.514</td>
<td>.767</td>
</tr>
<tr>
<td>Who made a higher percentage profit?</td>
<td>28.825</td>
<td>11.685</td>
<td>.541</td>
<td>.763</td>
</tr>
<tr>
<td>What percentage profit did Dapi realise?</td>
<td>28.906</td>
<td>11.806</td>
<td>.518</td>
<td>.765</td>
</tr>
</tbody>
</table>
Appendix O: YLI scores were significantly higher for adolescents who reported saving money during the past 12 months

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean YLI Score for:</th>
<th>Statistical Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adolescents who reported saving money over the last 12 months</td>
<td>Adolescents who did not report saving money over the last 12 months</td>
</tr>
<tr>
<td>All adolescents</td>
<td>58.32</td>
<td>53.06</td>
</tr>
<tr>
<td>All boys</td>
<td>59.93</td>
<td>55.70</td>
</tr>
<tr>
<td>All girls</td>
<td>56.49</td>
<td>51.33</td>
</tr>
<tr>
<td>All rural adolescents</td>
<td>59.26</td>
<td>54.39</td>
</tr>
<tr>
<td>All urban adolescents</td>
<td>57.45</td>
<td>51.05</td>
</tr>
<tr>
<td>All in-school adolescents</td>
<td>58.33</td>
<td>53.99</td>
</tr>
<tr>
<td>All out-of-school adolescents</td>
<td>58.31</td>
<td>52.0</td>
</tr>
<tr>
<td>In-school rural boys</td>
<td>61.44</td>
<td>55.34</td>
</tr>
<tr>
<td>In-school urban girls</td>
<td>54.13</td>
<td>48.06</td>
</tr>
<tr>
<td>Out-of-school rural girls</td>
<td>58.27</td>
<td>50.65</td>
</tr>
<tr>
<td>Out-of-school urban boys</td>
<td>58.08</td>
<td>47.35</td>
</tr>
</tbody>
</table>
## Appendix P: ICT Device Results

<table>
<thead>
<tr>
<th>Device</th>
<th>Rural</th>
<th>Urban</th>
<th>Mobile phone</th>
<th>Frequency with which adolescent respondents, who confirmed the device is owned at their home, noted they access the device daily or weekly</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Percentage of students who responded positively that the device is owned at their home</td>
<td>Frequency with which adolescent respondents, who confirmed the device is owned at their home, noted they access the device daily or weekly</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile phone</td>
<td>Rural</td>
<td>90.4%</td>
<td>This difference is statistically different; $X(1) = 19.23, p &lt; 0.001$</td>
<td>Rural</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>97.3%</td>
<td></td>
<td>Urban</td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>95.5%</td>
<td>This difference is statistically different; $X(1) = 5.677, p = 0.017$</td>
<td>Boys</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>91.8%</td>
<td></td>
<td>Girls</td>
</tr>
<tr>
<td>In-school</td>
<td></td>
<td>95%</td>
<td>This difference is statistically different; $X(1) = 4.376, p = 0.037$</td>
<td>In-school</td>
</tr>
<tr>
<td>OOS</td>
<td>91.7%</td>
<td></td>
<td></td>
<td>OOS</td>
</tr>
<tr>
<td>Computers</td>
<td>Rural</td>
<td>3.4%</td>
<td>This difference is statistically different; $X(1) = 5.449, p = 0.022$</td>
<td>Rural</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>6.5%</td>
<td></td>
<td>Urban</td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>6.5%</td>
<td>This difference is statistically different; $X(1) = 5.245, p = 0.022$</td>
<td>Boys</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>3.4%</td>
<td></td>
<td>Girls</td>
</tr>
<tr>
<td>In-school</td>
<td></td>
<td>6.5%</td>
<td>This difference is statistically different; $X(1) = 7.772, p = 0.005$</td>
<td>In-school</td>
</tr>
<tr>
<td>OOS</td>
<td>2.8%</td>
<td></td>
<td></td>
<td>OOS</td>
</tr>
<tr>
<td>Radio</td>
<td>Rural</td>
<td>66.8%</td>
<td>Not significantly different; $X(1) = 0.724, p = 0.389$</td>
<td>Rural</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>64.2%</td>
<td></td>
<td>Urban</td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>71.8%</td>
<td>This difference is statistically different; $X(1) = 13.574, p &lt; 0.001$</td>
<td>Boys</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>60.7%</td>
<td>This difference is statistically different; $X(1) = 13.574, p &lt; 0.001$</td>
<td>Girls</td>
</tr>
<tr>
<td>In-school</td>
<td></td>
<td>71.7%</td>
<td>This difference is statistically different; $X(1) = 18.698, p &lt; 0.001$</td>
<td>In-school</td>
</tr>
<tr>
<td>OOS</td>
<td>58.7%</td>
<td></td>
<td></td>
<td>OOS</td>
</tr>
<tr>
<td>TV</td>
<td>Rural</td>
<td>26.1%</td>
<td>This difference is statistically different; $X(1) = 195.159, p &lt; 0.001$</td>
<td>Rural</td>
</tr>
<tr>
<td></td>
<td>Urban</td>
<td>70.3%</td>
<td></td>
<td>Urban</td>
</tr>
<tr>
<td></td>
<td>Boys</td>
<td>46.5%</td>
<td>Not significantly different; $X(1) = 0.293, p = 0.588$</td>
<td>Boys</td>
</tr>
<tr>
<td></td>
<td>Girls</td>
<td>44.8%</td>
<td></td>
<td>Girls</td>
</tr>
<tr>
<td>In-school</td>
<td></td>
<td>59.8%</td>
<td>This difference is statistically different; $X(1) = 93.472, p &lt; 0.001$</td>
<td>In-school</td>
</tr>
<tr>
<td>OOS</td>
<td>29.4%</td>
<td></td>
<td></td>
<td>OOS</td>
</tr>
</tbody>
</table>
Appendix Q: Financial literacy calculation scores were significantly higher for adolescents who reported ICT ownership at the home

<table>
<thead>
<tr>
<th>ICT device</th>
<th>Adolescent category</th>
<th>Financial literacy calculation score based on ownership of device</th>
<th>Mann Whitney U statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes owned</td>
<td>No, not owned</td>
<td>U = 22,749.5, p &lt; 0.001, r = -0.016</td>
</tr>
<tr>
<td>Phone</td>
<td>6.47</td>
<td>4.12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All adolescents</td>
<td></td>
<td>U = 10,177, p = 0.001, r = -0.14</td>
</tr>
<tr>
<td></td>
<td>6.54</td>
<td>3.72</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All boys</td>
<td></td>
<td>U = 2,795.5, p = 0.009, r = -0.12</td>
</tr>
<tr>
<td></td>
<td>7.34</td>
<td>4.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All girls</td>
<td></td>
<td>U = 9,267.5, p = 0.014, r = -0.1</td>
</tr>
<tr>
<td></td>
<td>5.74</td>
<td>4.13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All out-of-school adolescents</td>
<td></td>
<td>U = 5,014.5, p &lt; 0.001, r = -0.2</td>
</tr>
<tr>
<td></td>
<td>6.17</td>
<td>2.03</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural in-school boys</td>
<td></td>
<td>U = 178, p = 0.031, r = -0.21</td>
</tr>
<tr>
<td></td>
<td>8.02</td>
<td>3.71</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural out-of-school girls</td>
<td></td>
<td>U = 945, p = 0.001, r = -0.26</td>
</tr>
<tr>
<td></td>
<td>4.69</td>
<td>0.52</td>
<td></td>
</tr>
<tr>
<td>Computer</td>
<td>All out-of-school adolescents</td>
<td></td>
<td>U = 1,766, p = 0.01, r = -0.012</td>
</tr>
<tr>
<td></td>
<td>10.0</td>
<td>5.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural out-of-school boys</td>
<td></td>
<td>U = 28, p = 0.043, r = -0.17</td>
</tr>
<tr>
<td></td>
<td>16.5</td>
<td>5.92</td>
<td></td>
</tr>
<tr>
<td>Radio</td>
<td>All adolescents</td>
<td></td>
<td>U = 97,170, p &lt; 0.001, r = -0.12</td>
</tr>
<tr>
<td></td>
<td>6.78</td>
<td>5.43</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All out-of-school adolescents</td>
<td></td>
<td>U = 20,876.5, p &lt; 0.001, r = -0.19</td>
</tr>
<tr>
<td></td>
<td>6.75</td>
<td>4.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All boys</td>
<td></td>
<td>U = 17,297, p = 0.017, r = -0.11</td>
</tr>
<tr>
<td></td>
<td>7.53</td>
<td>6.31</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All girls</td>
<td></td>
<td>U = 32,590, p = 0.009, r = -0.11</td>
</tr>
<tr>
<td></td>
<td>6.05</td>
<td>4.92</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All rural adolescents</td>
<td></td>
<td>U = 28,695.5, p &lt; 0.001, r = -0.15</td>
</tr>
<tr>
<td></td>
<td>6.88</td>
<td>5.05</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural out-of-school girls</td>
<td></td>
<td>U = 3,028, p = 0.043, r = -0.17</td>
</tr>
<tr>
<td></td>
<td>5.28</td>
<td>2.98</td>
<td></td>
</tr>
<tr>
<td>Television</td>
<td>All adolescents</td>
<td></td>
<td>U = 106,528, p &lt; 0.001, r = -0.13</td>
</tr>
<tr>
<td></td>
<td>7.01</td>
<td>5.73</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All rural adolescents</td>
<td></td>
<td>U = 19,895.5, p &lt; 0.001, r = -0.02</td>
</tr>
<tr>
<td></td>
<td>8.2</td>
<td>5.59</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All boys</td>
<td></td>
<td>U = 22,038.5, p = 0.037, r = -0.1</td>
</tr>
<tr>
<td></td>
<td>7.76</td>
<td>6.71</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All girls</td>
<td></td>
<td>U = 32,003, p &lt; 0.001, r = -0.15</td>
</tr>
<tr>
<td></td>
<td>6.39</td>
<td>4.97</td>
<td></td>
</tr>
<tr>
<td></td>
<td>All out-of-school adolescents</td>
<td></td>
<td>U = 15,950.5, p &lt; 0.001, r = -0.25</td>
</tr>
<tr>
<td></td>
<td>7.93</td>
<td>4.95</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural out-of-school boys</td>
<td></td>
<td>U = 1,005, p = 0.008, r = -0.22</td>
</tr>
<tr>
<td></td>
<td>9.37</td>
<td>5.32</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rural out-of-school girls</td>
<td></td>
<td>U = 1,317.5, p = 0.001, r = -0.25</td>
</tr>
<tr>
<td></td>
<td>7.64</td>
<td>2.53</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Urban in-school girls</td>
<td></td>
<td>U = 1,703.5, p = 0.027, r = -0.18</td>
</tr>
<tr>
<td></td>
<td>4.97</td>
<td>3.08</td>
<td></td>
</tr>
</tbody>
</table>
Appendix R: Adolescent access to financial products

<table>
<thead>
<tr>
<th></th>
<th>Out-of-school</th>
<th>In-school</th>
<th>Statistical difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>% of adolescents who report having a savings account</td>
<td>11.7%</td>
<td>3%</td>
<td>$X^2 (1, n = 1006) = 29.009, p &lt; 0.001$</td>
</tr>
<tr>
<td>% of adolescents who report having a credit card</td>
<td>8.8%</td>
<td>0.4%</td>
<td>$X^2 (1, n = 1005) = 42.962, p &lt; 0.001$</td>
</tr>
<tr>
<td>% of adolescents who report having a mobile phone with online banking like M-Pesa</td>
<td>54.7%</td>
<td>2.6%</td>
<td>$X^2 (1, n = 1007) = 345.535, p &lt; 0.001$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rural</th>
<th>Urban</th>
<th>Statistical difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.7%</td>
<td>1.1%</td>
<td>$X^2 (1, n = 1005) = 19.084, p &lt; 0.001$</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Rural</th>
<th>Urban</th>
<th>Statistical difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>35.3%</td>
<td>16.2%</td>
<td>$X^2 (1, n = 1007) = 46.186, p &lt; 0.001$</td>
</tr>
</tbody>
</table>
Appendix S: Percentage of adolescents who reported participating in savings groups over the past 12 months

<table>
<thead>
<tr>
<th>All adolescents: 4.8%</th>
<th>All girls: 3.8%</th>
<th>All rural: 4.4%</th>
<th>All in-school: 1.9%</th>
<th>Rural girls</th>
<th>In-school: 1.4%</th>
<th>Out-of-school: 6.9%</th>
</tr>
</thead>
<tbody>
<tr>
<td>All boys: 4.7%</td>
<td>All urban: 3.8%</td>
<td>All out-of-school: 6.8%</td>
<td>Rural boys</td>
<td>In-school: 1.9%</td>
<td>Out-of-school: 6.4%</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Urban boys</td>
<td>In-school: 1.5%</td>
<td>Out-of-school: 11.8%</td>
<td></td>
</tr>
</tbody>
</table>
Appendix T: YLI scores were significantly higher for adolescents who reported saving in groups over the last 12 months

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean YLI Score for:</th>
<th>Statistical Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Adolescents who reported saving in groups over the last 12 months</td>
<td>Adolescents who did not report saving in groups over the last 12 months</td>
</tr>
<tr>
<td>Overall adolescent</td>
<td>63.97</td>
<td>57.56</td>
</tr>
<tr>
<td>Girls</td>
<td>63.52</td>
<td>55.47</td>
</tr>
<tr>
<td>Rural adolescents</td>
<td>66.28</td>
<td>58.06</td>
</tr>
<tr>
<td>Out-of-school adolescents</td>
<td>64</td>
<td>56.96</td>
</tr>
<tr>
<td>In-school rural boys</td>
<td>78.5</td>
<td>60.3</td>
</tr>
</tbody>
</table>