



STUDY ON THE USE OF EFFECTUATION THEORY IN YOUTH ENTREPRENEURSHIP EDUCATION AND TRAINING PROGRAMS

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USAID's YouthPower Learning generates and disseminates knowledge about the implementation and impact of positive youth development (PYD) and cross-sectoral approaches in international youth development. We are leading research, evaluations, and events designed to build the evidence base and inform the global community about how to transition young people successfully into productive, healthy adults. PYD is defined by USAID as:

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TABLE OF CONTENTS

Acro	onyms and Abbreviations	ii
I.	Executive Summary	I
II.	Introduction	4
А. В.	5	4 5
III.	Understanding Effectuation Theory: Literature Review Findings	6
A. B. C. D. E.	Overview of the Theory Subsequent Theoretical Research on Effectuation Theory Merits of the Effectual Approach	6 7 10 12 13
	Bridging the Theoretical Gap: Applying Effectuation Theory to Youth Entrep cation and Training	reneurship I 5
A. B. C. D. E. F.	Youth EE&T Models Using Effectuation Theory Key Features of Youth Entrepreneurship Programs Applying Effectuation Theory Use of Effectuation Theory in Program Models	15 16 19 21 25 26
v .	Recommendations for Using Effectuation in Youth EE&T Programs	28
	ex I: Ghana Case Study Visit Report: Supporting Rural Youth to Start Busing ctuation Theory	esses using 30
	ex II: Mozambique Case Study Visit Report: Developing Youth Entrepreneuria g Effectuation Theory	al Mindsets 36
Ann	ex III: Overview of Common EE&T Methods	42
Ann	ex IV: Extended Research Methodology	43
А. В. С.		43 44 44
Ann	ex V: Research Activity Respondents	45
A. B. C. D. E.	Case Study Visit: Training Program Staff Key Informant Interview Protocol Case Study Visit: Program Partner Key Informant Interview Protocol	46 50 54 57 63
Refe	rences	65

ACRONYMS AND ABBREVIATIONS

AMAN-CED	AMAN-Center for Entrepreneurship Development
BMC	Business Model Canvas
CV	Curriculum Vitae
EDNA-Myanmar	Entrepreneurship Development Network Asia-Myanmar
EE&T	Entrepreneurship Education and Training Programs
ICT	Information and Communications Technology
KII	Key Informant Interview
LMIC	Low and middle-income countries
MBA	Master of Business Administration
MVP	Minimum Viable Product
NGO	Non-governmental Organization
PWDs	People with Disabilities
PYD	Positive Youth Development
RCT	Randomized Control Trial
SEL	Social and Emotional Learning
SOW	Statement of Work
тот	Training of Trainers
USAID	United States Agency for International Development
US	United States
UVA	University of Virginia
VIA	Values in Action
VSLA	Village Savings and Loan Association
YBTT	Youth Business Trinidad and Tobago
YEfL	Youth Empowerment for Life

I. EXECUTIVE SUMMARY

The USAID/Africa Bureau commissioned this study to better understand both the theoretical underpinnings and practical training application of effectuation theory for youth in lower and middleincome countries to inform future programming efforts. It draws on both effectuation theory literature as well as data collected from practitioners employing effectuation theory for their training activities. One of the primary issues that the paper will highlight is the disconnect between the original theory, which attempted to explain the behavior of high-growth entrepreneurs in developed country settings, and its subsequent application to training youth in low and middle-income countries, which has evolved largely independent of the original theory.

A. BACKGROUND ON THEORY

Effectuation theory, originally developed by Dr. Saras Sarasvathy in a seminal 2001 article, is an attempt to describe entrepreneurial behavior. Effectuation theory rests on two fundamental premises that contrast it with the causal theories. First, while causal theories of entrepreneurial behavior traditionally assume a future that is knowable and can therefore be predicted, effectuation posits that entrepreneurs face an unknowable and therefore unpredictable future. Second, effectuation theory suggests that entrepreneurs create opportunities rather than simply exploiting existing ones. Entrepreneurs then, in a sense, create the future.

Effectuation theory employs five principles (Figure 1):1

- "Affordable loss," emphasizes the importance of entrepreneurs focusing on what they can afford to lose rather than attempting to assess potential future gains or returns.
- Identification of strategic partnerships is a mechanism for expanding resources, otherwise known as the "crazy quilt" principle.
- Leveraging contingencies, or the "lemonade" principle, suggests that entrepreneurs using effectual logic treat surprises as opportunities to be seized rather than unanticipated barriers (i.e., using lemons to make lemonade).
- "Pilot in the plane" describes the overriding logic of the theory and echoes the notion described above; that entrepreneurs themselves, not externally determined trends, dictate the direction that the future takes.
- Focus on means over ends. Otherwise known as the "bird-in-hand" principle, this concept stresses three assets that everyone has: identity (who I am), knowledge (what I know), and networks (who I know).

B. ORIGINS OF EFFECTUATION THEORY

Effectuation theory, for about a decade after its conception, received only limited attention from academics and was therefore subjected to only limited empirical testing, either to determine whether it accurately described entrepreneurial behavior or whether, as a logic, it was superior to the causal approaches (described in more depth in Section III), which it aimed to supplant. Although it gained increased attention beginning around 2012, much of the newer research took effectual logic in other



Figure 1 Five Principles of Effectuation Theory

¹ Society for Effectual Action n.d.a.

directions, a departure from the entrepreneurial behavior it originally purported to describe. Furthermore, research on effectuation outside of the U.S. was even thinner. This is critical because Sarasvathy's original study considered only U.S.-based growth entrepreneurs, making it difficult to determine the extent to which her findings were relevant to populations in developing country environments or, specifically, to youth populations.

Effectuation was developed originally as an attempt to explain entrepreneurial behavior; not as the basis for designing entrepreneurship curricula and conducting training. Thus, efforts to incorporate effectual principles into entrepreneurship training courses, which has been the focus of practitioners, proceeded largely independent of the development of the original theory. Additionally, practitioner efforts have also developed independent of one another; cross-pollination of information on effectuation among various types of practitioners has been limited to date.

C. OVERVIEW OF FINDINGS

One of the primary findings was that this approach is being applied to a youth training context, though it was not the original intent of the theory. YouthPower Learning's findings cover seven training efforts that most robustly employ or are influenced by effectual principles. Several common training program elements emerged. First, each training program employed a screening process designed to ensure that program participants adequately bought-in and committed to their entrepreneurial journeys. Second, most training programs took place over an extended period of time, providing sufficient opportunity both for theoretical training as well as for the program participants to apply their learnings to their ventures in a real-world setting. And third, most programs did not offer stand-alone entrepreneurship training; rather it was offered as part of a wider suite of services that included capacity building, mentoring, market linkages, and ecosystem development support. Probably the greatest distinction among the programs served was in their choice of trainers, with different programs assigning different levels of importance to their trainers' backgrounds. All, however, stressed the "effectual mindset" of their trainers, which each believed was of paramount importance.

The YouthPower Learning Team (referred to henceforth as YouthPower Learning) observed some variance in the extent to which each of the five principles (bird in hand, affordable loss, crazy quilt, lemonade, and pilot in the plane,) were stressed in each program. The "bird in hand" principle was probably the most frequently employed; while the "crazy quilt" principle was also popular across programs. Both were widely regarded as highly relevant to youth populations due to the ability of young people to connect the principles to experiences in their own lives. Youth also demonstrated a reasonable grasp of the "affordable loss" principle given their often resource-strapped situations. The "lemonade" principle was harder to apply as many participants had not yet experienced setbacks, while "pilot in the plane" was harder for young people to conceptualize.

The youth-focused entrepreneurship programs included in this study often strived to achieve multiple objectives rather than simply equipping young people to build a business. The programs YouthPower Learning observed had such varied objectives as shifting attitudes, developing entrepreneurial skills that can be applied in any organizational setting (as distinct from the narrower objective of establishing a new venture), helping participants overcome constraints, and reinforcing social and emotional learning and soft skills.

Table I	Summary	of Uses o	f Effectuation	Theory in	Youth E	EE&T Programs
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Use of Effectuation Theory to	Key Findings
Shift Youth Mindsets	Many of the programs highlighted here incorporate effectuation theory most fully in their "beginner" entrepreneurship courses, those trainings that come in the pre-incubation stage of their activity pipelines. These organizations rely on effectuation theory to shape participants' mindsets regarding entrepreneurship.
Build Entrepreneurial Skills	Organizations also leverage effectuation theory to help participants build an understanding of the entrepreneurial process, that is, the skills individuals need to replicate the business start-up process over time. These practitioners recognize that many youth businesses may indeed fail (overall, survival rates of new businesses are quite low), and thus participants need to be able to repeat the business venture creation process in the future. Effectuation theory is useful in this regard, as a set of heuristics (behaviors) that can be taught for lifelong application.
Help Youth Overcome Constraints	Numerous EE&T programs rely on effectuation theory to help youth overcome constraints to entrepreneurship.
Support Social and Emotional Learning (SEL) and Soft Skills Development	Many of the youth EE&T programs incorporating effectuation theory go beyond the economic sphere and in fact, incorporate aspects of personal development. From YouthPower's perspective, "personal development" primarily involves the strengthening of key SEL and soft skills. A core tenet of effectuation theory is the bird-in-hand principle, which asserts that one's identity is a crucial aspect of the entrepreneurial process; the principle necessitates introspection and self- reflection by entrepreneurs.

Effectual approaches were never used as the sole basis for trainings, but were complemented by other methodologies. These included both alternative approaches to entrepreneurship development as well as philosophical and spiritual influences.

Even though this theory was not initially designed for training, there are a number of benefits to employing effectuation in training efforts, though some practitioners also noted some challenges.

Practitioner Reflections on Using Effectuation Theory in Youth EE&T Programs		
Benefits	Challenges	
 Applicable and useful across economic sectors Simple and easy to understand across contexts 	 Some youth (especially those who have been progressed through a linear, causal education model) can find effectuation a difficult mindset to adopt 	

Table 2 Benefits and Challenges of Applying Effectuation Theory to Youth EE&T Programs

 Has a bias towards action, aligned with "learning by doing" approaches Helps youth get their businesses off the ground more quickly Supports youth to become aware of their available resources Has a bias towards action, aligned with "Challenging to identifying good and teachers that embrace the approach Note a disconnect between the approach and the broader entrep ecosystem (often still reliant of 	trainers
 Recognizes that individual entrepreneurs need an ecosystem of support Strengths-based approach, which helps youth to focus on leveraging what they have versus what they do not 	effectual effectual reneurial

D. Recommendations

Our findings point to several recommendations for using effectuation in youth programming:

- Anecdotally, effectuation-based youth EE&T programs seem effective; however, the theory's application to the youth EE&T setting is still nascent, and more research needs to be conducted to better understand if and how these training models create impact. Thus, practitioners and funders should support pilot testing of effectuation-based youth EE&T programs, including a substantive research component, to advance the evidence base. Programs should also seek to learn more about the effectiveness of combining different applied entrepreneurial methodologies to identify the most effective program design.
- Practitioners should intentionally design youth EE&T programs and ensure that intended program outcomes match the participant profile being targeted by the program. The typology of youth entrepreneurs, developed as part of YouthPower's What Works in Entrepreneurship Education and Training Programs for Youth? evidence report is a useful tool for guidance during program design. Furthermore, youth EE&T programs should offer a suite of wraparound business development support services (i.e., market linkages, mentoring, ecosystem development support) to further enhance youth's chance of success.
- Finally, practitioners and funders should look beyond individual capacity building efforts to also strengthen the entrepreneurial ecosystem. This may include influencing entrepreneurship policy, supporting development of specialized support services, increasing access to equity financing initiatives, strengthening learning and research institutions, and shifting cultural norms related to entrepreneurship. Choice of training approach is of somewhat limited relevance if the ecosystem is broadly weak and unsupportive of entrepreneurship development.

II. INTRODUCTION

A. STUDY OVERVIEW

The USAID/Africa Bureau commissioned YouthPower Learning to better understand both the theoretical underpinnings and practical training application of effectuation theory. USAID asked YouthPower Learning to conduct a review of published peer-reviewed articles and gray literature on effectuation theory and its applications in entrepreneurship training and to conduct interviews and observations of training programs that are applying effectuation theory. The purpose of the study is to support USAID Africa Mission education programs seeking to prepare and mentor resource-poor youth in effective entrepreneurship skills to understand how effectuation theory is currently being used to prepare young entrepreneurs, and the benefits and challenges of using the theory in programming.

The study aims to address the following questions:

- How is effectuation theory currently being used in preparing young entrepreneurs globally?
- Is effectuation-based youth programming being used in Africa? If so, what are key program models?
- What are the benefits and challenges of using effectuation theory in programming? Are there benefits to using this model versus others?
- How is effectuation theory being used in training and what are the results of integrating this model into youth entrepreneur training programs?
- Does effectuation theory in entrepreneurship training help to promote youth access to start-up resources? What are key strategies that the theory promotes to link youth to start-up resources?

One of the primary issues that the paper will highlight is the disconnect between the original theory, which attempted to explain the behavior of high-growth entrepreneurs in developed country settings, and its subsequent application to the training of youth in low and middle-income countries, which has evolved largely independent of the original theory. Section III provides a summary of effectuation theory from an academic standpoint, whereas Section IV addresses the key research questions, drawing upon data collected from key informant interviews (KIIs) and case study visits.

B. RESEARCH METHODOLOGY

To understand theoretical analyses and practical applications of effectuation theory, YouthPower Learning first completed a literature review, which was supplemented by KIIs and case study visits to answer the study questions. A brief description of the methods of each activity follows and is further detailed in Annex III.

Literature Review

The literature review focused on analysis and synthesis of peer-reviewed published articles and sources identified in the grey literature on effectuation theory and its applications in entrepreneurship training. In particular, YouthPower Learning sought to highlight international or Africa-specific programs in the peer-reviewed literature or from reports from youth entrepreneurship training programs that employed elements of effectuation theory. Results included 77 sources related broadly to effectuation theory, including examples in Burundi and Ethiopia, which were not training specific. Few sources were related to youth training programs globally or in African countries, which included trainings being delivered in Senegal, Mozambique, and Ghana. All references, which were assessed by YouthPower Learning for relevance, are listed in the report reference list.

Key Informant Interviews

To supplement the literature review, YouthPower Learning consulted leaders in effectuation research and effectuation-based training application through KIIs. YouthPower Learning conducted 12 interviews with representatives from organizations and academic programs implementing youth entrepreneurship training that employs elements of effectuation and experts who have researched, taught, and/or partnered with organizations that have incorporated effectuation into training programs. Discussions with these leaders informed the review and overall research process. Informants provided reports and other resources and offered guidance on contacts for additional KIIs. The KII protocol and participant table are included in the Annexes, and KII findings are highlighted in Section IV of the report.

Case Study Visits

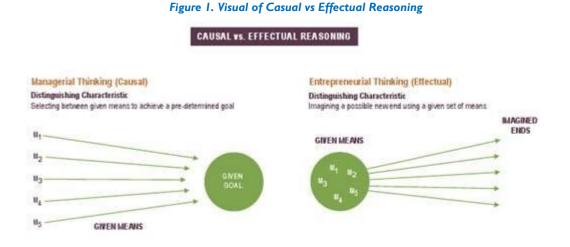
YouthPower Learning conducted two case study visits to organizations located in Ghana and Mozambique incorporating effectuation theory into training programs with youth entrepreneurs. However, similar youth training programs were also identified in Nigeria, Senegal, Brazil, Pakistan, Myanmar, Trinidad and Tobago, and the United States. The goals of these week-long observations and participant and trainer interviews was to better understand the process of integrating effectuation theory into ongoing and future program models. Study sites were determined by 1) the maturity of the youth entrepreneurship training program, 2) the alignment of the program with principles of effectuation theory, and 3) the applicability of the programmatic model to an African context. Additionally, after being recommended by stakeholder organizations and experts in effectuation-based entrepreneurship training, all candidates for case study visits participated in KIIs prior to site selection. Case study visits were determined in collaboration with USAID. Details regarding approach and findings of case study visits are included in Annexes I and II.

III. UNDERSTANDING EFFECTUATION THEORY: LITERATURE REVIEW FINDINGS

A. ORIGINS OF THE THEORY

Effectuation theory, developed by Professor Saras Sarasvathy, is her attempt to explain "what makes entrepreneurs entrepreneurial." In order to answer this question, Dr. Sarasvathy interviewed 27 company founders across multiple industries and asked each to solve a set of ten decision problems. Based on their answers, she analyzed their "decision logic" and generated what is now referred to as effectuation theory; a way of approaching decision-making and subsequently acting on those decisions.

Effectuation theory was developed as a counterpoint to the causal approaches that dominated academic research at that time. Causal reasoning is often associated with business schools and managerial thinking and focuses first on goals and then the set of choices associated with reaching it. Effectuation, on the other hand, looks first at resources and then the goals that can be achieved by employing those. This is perhaps best understood using the depiction in Figure $1.^{i2}$



As we discuss the evolution of the theory, we want to stress that effectuation was not developed to be used for training purposes, nor did it consider application to youth or to contexts outside of the U.S.

² Ibid.

Rather, it was narrowly focused on growth entrepreneurs in developed country environments and was solely an attempt to explain their behavior.

B. OVERVIEW OF THE THEORY

i. Theoretical Precepts

Before introducing the elements of effectuation theory, let's look at some of the concepts underpinning it. The key notions include the following: 1) entrepreneurs face "true" uncertainty; that the future is not only unknown but unknowable; 2) the idea generation process actually employed by entrepreneurs is means-focused rather than ends-focused; 3) entrepreneurs create markets rather than relying on their pre-existence; as such the development of firms and the development of markets are simultaneous, rather than independent, processes; and 4) effectuation is characterized by a focus on entrepreneurial expertise over industry expertise; that is, entrepreneurship is a repeatable process and therefore entails a skill set that can be developed and improved with repetition. Let's look at each of these in turn.

Uncertainty

One of the fundamental tenets of effectuation theory is the notion of uncertainty; not just that the future is not known with precision, but that it is fundamentally unknowable. This is perhaps best articulated by Frank Knight, the University of Chicago economist who described the phenomenon now known as "Knightian Uncertainty" to describe it:

"Uncertainty must be taken in a sense radically distinct from the familiar notion of Risk, from which it has never been properly separated.... The essential fact is that 'risk' means in some cases a quantity susceptible of measurement, while at other times it is something distinctly not of this character; and there are far-reaching and crucial differences in the bearings of the phenomena depending on which of the two is really present and operating.... It will appear that a measurable uncertainty, or 'risk' proper, as we shall use the term, is so far different from an unmeasurable one that it is not in effect an uncertainty at all."³

The distinction is of crucial importance because, while risk can be managed, true uncertainty does not lend itself to prediction of any sort. Causal approaches rely on the choice of alternative potential futures while effectual approaches assume an unknown future.

Means over Ends

Effectuation theory emphasizes means (resources) over ends (goals). In terms of starting points, this is a key distinction between causation and effectuation processes. Sarasvathy (2001) articulates the difference.

"Causation processes take a particular effect as given and focus on selecting between means to create that effect. Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means" (p. 245).

The emphasis on means over ends suggests the importance of focusing on resources on hand; consistent with the resource-based view of the firm, which stresses the role that resources play in determining strategic choices (Fisher 2012). Sarasvathy (2001) notes that this is akin to a chef who is given a menu in

³ Knight 1921.

advance and required to purchase the requisite ingredients to develop it (causation); versus one who is given the ingredients and required to produce a menu from them (effectuation).

While Fisher suggests that entrepreneurs "focus on the resources they have on hand and ignore market needs in uncovering an opportunity" (p. 1020), it is perhaps more accurate to say that entrepreneurs employing effectuation discover market needs differently (through trial and error rather than through analysis); that rather than beginning with market needs and subsequently mobilizing resources, entrepreneurs employing effectuation first identify resources on hand and subsequently determine the market needs that can be met within those constraints.

Market Development

Much of the entrepreneurship literature has focused on market opportunities as objectively identifiable and therefore discoverable (Shane and Venkataraman 2000).⁴ Sarasvathy and Dew (2008) outlined the typical set of activities that this entails; including the development of a business plan based on extensive market research and competitive analyses and the subsequent acquisition of resources and stakeholders relevant to the plan's implementation. The goal of such an approach is sustained competitive analysis and competitive advantage include Michael Porter (1980), whose approach to strategy and analysis is embodied in his Five Forces framework.

Effectuation theory rejects this view, arguing that 1) competitive advantage is always fleeting and the search for a sustainable source of it is therefore at best temporary, and 2) it fails to describe the source of market opportunities. Effectuation theory instead argues that market creation is concomitant with the entrepreneurial process and the formation of the entrepreneurial enterprise; that is, that entrepreneurs engage in a process of transforming their environments (Sarasvathy, Dew, Read, and Wiltbank 2008). As Sarasvathy and Dew (2008) argue, "markets *emerge* (italics theirs) as a result of technological and institutional evolution of populations of firms engaged in adaptive processes of exploration and exploitation within a changing competitive landscape" (p. 538). In essence, entrepreneurs using effectuation create opportunities rather than exploiting those that already exist. The notion that the future may be created may be the most important distinction between effectuation theory and causal approaches. The parallel approach in strategic management is probably most closely embodied in Blue Ocean Strategy (Kim and Mauborgne 2005), which emphasizes creating new, unexplored market space.

Entrepreneurship as a Skill

As its fourth and final precept, effectuation theory posits that entrepreneurship is a skill that can be developed and that entrepreneurs can improve their entrepreneurial skillset through repetition. Read and Sarasvathy (2005), in their most extensive treatment of the subject, describe what they call "entrepreneurial expertise" as "a set of skills, models, and processes that can be acquired with time and deliberate practice" (p. 45). In support of this view Dew, Read, Sarasvathy, and Wiltbank (2015) found that expert entrepreneurs demonstrated a superior ability to that of novices to adjust to unpredictable situations through improved decision-making.

Effectuation theory also suggests that entrepreneurs are more likely to engage in effectual decision-making than those trained in traditional management. Dew, Read, Sarasvathy, and Wiltbank (2009), in a study of M.B.A students and expert entrepreneurs, found that entrepreneurs were in fact more likely to use effectuation in making decisions with respect to capturing target segments than M.B.A students. M.B.A students were more likely to use predictive information while entrepreneurs generally ignored predictions

⁴ An "objectively identifiable" opportunity can best be described as one that is pre-existing and apparent to the careful observer.

and showed more flexibility in altering their goals as new information became available. In fact, the tendency of entrepreneurs to employ effectual thinking is, as Sarasvathy (2008) puts it, "what makes entrepreneurs entrepreneurial."

ii. The Five Principles of Effectuation Theory

Sarasvathy (2008) introduced five principles of effectuation that are logical extensions of the precepts discussed. These include bird-in-hand; affordable loss; crazy quilt; lemonade; and pilot-in-the-plane.

Entrepreneurial Method	Description
Affordable Loss	Affordable loss refers to the entrepreneur's control over downside risks. Entrepreneurs employing effectuation focus on what they can afford to lose rather than potential gains or future returns.
Crazy Quilt (Strategic Partnerships)	Crazy quilt refers to leveraging partnerships as a mechanism for expanding resources. Central to this notion is the idea that stakeholders will self- select and become partners in opportunity creation (including through the contribution of resources) in exchange for the opportunity to benefit from the new venture's success.
Lemonade (Leveraging Contingencies)	Lemonade refers to leveraging uncertainty by treating surprises as opportunities. Effectuation theory suggests that this is superior to attempting to follow a straight-line path to a goal that does not permit deviations as new information becomes available or new opportunities arise.
Pilot-in-the-Plane	In addition to these four core original principles, pilot-in-the-plane is the logic to effectuation theory; the notion that people, not trends, dictate the direction of the future. This is an extension of the notion of market transformation discussed above. Entrepreneurs can be actors in determining the future course of events.
Bird-in-Hand (Means)	Bird-in-hand refers to the entrepreneur's assets, which the theory suggests is the entrepreneur's identity (who I am); knowledge (what I know); and networks (who I know). These assets are what Sarasvathy refers to as the "means" available to the entrepreneur to create opportunities.

 Table 3 Overview of Effectuation Principles

iii. Chandler's Validated Scale

While effectuation had been codified in the principles described above, it remained unclear a decade after the theory was developed whether it represented a coherent framework (given its many different subdimensions) and whether it was truly distinct from causation theories. Chandler, et al. (2011) identified the need for creating measures to allow for the quantitative, empirical testing of effectual as well as causal processes and developed a validated scale for assessing them. Chandler's scale measures effectuation along multiple sub-dimensions; short-term experimentation, affordable loss, flexibility, and pre-commitments. Short-term experimentation, affordable loss, and flexibility appear to be specific to effectuation. However, pre-commitment also demonstrates some overlap with causation approaches and is thus a shared subdimension with causation theories. As a result of Chandler's work, evidence suggests that effectuation is a coherent and (mostly) distinct approach from causation theories as proposed by Sarasvathy; with the single exception of the pre-commitments sub-dimension. More recent studies in effectuation are delving deeper into capturing information on the sub-dimensions through methods such as experience sampling and in-depth case studies.

C. SUBSEQUENT THEORETICAL RESEARCH ON EFFECTUATION THEORY

i. Early Days (2001–2012)

For roughly a decade after Dr. Sarasvathy's seminal publication, effectuation theory received somewhat limited attention (Fisher 2012). As Fisher notes, however, this is not unusual in the wake of the development of a new theory, which often takes time to get traction. Matalamaki (2017) supports this view, noting that this is particularly true in a field such as entrepreneurship without well-developed, established paradigms. Arend, Saroogi, and Burkemper (2015) observes that diffusion of the theory during this time was fairly limited. Many of the articles published over this period (over half, by his count) were written by a common set of authors and featured substantial repetition of the material covered in the seminal article. A useful comprehensive summary of effectuation literature published over this period of time is provided by Perry, Chandler, and Markova (2012).

ii. Current Research (2012–2019)

Around 2012 effectuation theory began to gain significant attention in the research (Matalamaki, 2017). Interestingly, although some of the research is in closely related fields such as nonprofit and social entrepreneurship (Yusuf and Sloan 2015) and international entrepreneurship and lean global start-ups (Rasmussen and Tanev 2015), much of the research has diverged from its original subject (entrepreneurship) and has instead applied effectual thinking to other fields. It includes new product development (Coviello and Joseph 2012); R&D and innovation (Brettel, Mauer, Engelen, and Kupper 2012); internationalization (Sarasvathy, Kumar, York, and Bhagavatula 2014⁵; strategic management (Wiltbank, Dew, Read, and Sarasvathy 2006); and angel (Wiltbank, Dew, Read, and Sarasvathy 2006); and angel (Wiltbank, Dew, Read, and Sarasvathy 2009) and venture (Xia, Lindsay, Seet 2010) investing (although the latter few articles pre-dated 2012). Most of these new threads fall outside of the scope of this paper. As Matalamaki notes, "New ventures and startups still provide the context for many articles, but the proportion of studies reporting on them has dropped considerably in recent years. Accordingly, studies on new ventures and startups are not viewed as one of the main streams in the current research."

One key issue in the first several years after the theory was introduced was the lack of empirical testing. Part of the challenge in testing effectuation theory is that it must be tested along all of its dimensions (that is, along each of the principles). There is also an inherent weakness in testing effectuation theory (as there is with testing any theory of entrepreneurship). The theory is inherently subject to positive selection bias. That is, YouthPower Learning can study only those firms that survived. We are unable to gather information or perspectives from those firms that failed. Sarasvathy's original study did attempt to take this into account by looking at entrepreneurs that had established multiple ventures (including both successful and unsuccessful ones) in an attempt to capture some "failed" ventures, but this remains an imperfect solution. This is a particularly acute problem when studying entrepreneurial ventures, because a very large percentage of them do indeed fail. With that caveat, YouthPower Learning will look at what empirical tests have revealed.

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iii. Initial Empirical Testing

The most significant test of effectuation theory was a meta-analysis conducted in 2009 (Read, Song, and Smit 2009). This study examined 9,897 new ventures across the original four effectuation principles: means (bird-in-the-hand); partnerships (crazy quilt); affordable loss, and leveraging contingencies (lemonade). Unfortunately, no details are provided in the study on those who started the ventures (age, sex) or where they started them (geographical location). The study found significant positive correlations with new venture performance across three of the dimensions; means (including all three components—who I am, what I know, and who I know); partnerships; and leveraging contingencies. The only dimension on which a positive correlation was not found was affordable loss. It was unclear to the authors why a correlation with affordable loss was not found. However only four studies measured it, creating only a limited evidence base. YouthPower Learning may also speculate that many entrepreneurs in the target group are risk-takers by nature and may have a tendency to over-estimate their chances of success. This is dealt with a bit more extensively below as YouthPower Learning discusses critiques of effectuation theory.

iv. Empirical Tests Outside of the U.S.

Unfortunately, YouthPower Learning found that empirical testing in non-U.S. cultures (outside of Africa, which we deal with in the following sub-section) was scant. YouthPower Learning found only three tests of any significance and two unfortunately have significant caveats associated with them. Kistler and Gillig (2017) looked at entrepreneurs in the German context to see to what extent they applied effectuation. They found effectuation used there to a lesser extent than Sarasyathy found in her original study, but the majority of firms studied were in manufacturing industries, with only a couple of companies in ICT. Because Sarasvathy's original study looked primarily at ICT entrepreneurs, it is unclear whether the results are attributable to cultural differences or to industry differences. This issue is explored in greater depth when YouthPower Learning looks at critiques of effectuation theory. The second test, performed by Magalhaes and Abouzeid (2018), found that entrepreneurs in Kuwait tended to employ effectuation theory in spite of the high uncertainty avoidance characterizing that culture. However, they acknowledged that their sample size of seven was too small to draw any definitive conclusions. The third study explored the relationship between effectuation and deliberate practice. In a study of microfinance borrowers in Sri Lanka, Ranabahu, and Barrett (2019) found that both effectuation and causation logics facilitate deliberate practice, which they defined as "the process of achieving expertise through self-regulated, effortful, and repetitive activities." The same study also showed that, while both effectuation and causation logics are used during start-up, effectuation logics predominate.

v. Empirical Tests: Africa

Two empirical tests in Africa provide mixed results. Eyana, Masurel, and Paas (2017) looked at Ethiopian tour operators on the elements of effectuation as framed by Chandler and arrived at some confusing results. They found that that elements of effectuation contributed to positive financial performance (with pre-commitment, or partnerships, positively correlated with sales, profit, and assets and affordable loss positively correlated to profit)⁶ although neither means nor leveraging contingencies were correlated with financial performance, while the use of causation approaches was more closely correlated with employment generation. Eijdenberg, Paas, and Masurel (2017), on the other hand, in a study on small businesses in Burundi, found no link between small business growth and either causation or effectuation approaches.

⁶ The reader may recall that Chandler found pre-commitment also to be a characteristic of causal approaches, not just effectual approaches. This was not noted in the article, but further muddies the results.

vi. Empirical Tests: Youth

With regards to the study of effectuation theory in relation to youth broadly, the evidence base is limited in terms of how the theory explains the behavior of youth entrepreneurs. Jones and Li (2017)⁷ found that two teenage brothers who successfully started a venture used aspects of effectuation in their entrepreneurial process. Hulsink and Koek (2014)⁸ similarly found that young entrepreneurs use bootstrapping, a way of starting a business using only one's personal resources (rather than outside capital or support), as well as effectuation to "accommodate financial capital constraints and mobilize social support from their parents and other entrepreneurial family members and friends."

Overall, it is probably safe to conclude that empirical tests of the use and effectiveness of effectuation theory outside of the United States, and in its application specifically to young people, are inadequate to reach any firm conclusions.

D. MERITS OF THE EFFECTUAL APPROACH

As demonstrated earlier in section C, the evidence is scant regarding both I) the extent to which effectual approaches are employed by entrepreneurs and 2) whether this method is in fact superior to causal approaches. This is further compounded by the difficulties involved in teasing out the extent to which success is attributable to the approach chosen by the entrepreneur vs. the contribution made by the enabling environment (ecosystem) in which the entrepreneur functions. (This is discussed in greater depth later on in this paper). However, effectual thinking and use of the effectual approach appear to offer several merits to alternative theories about entrepreneurial development. YouthPower Learning has identified four specific features that are intuitively appealing.

i. Consistency with the Criteria often Applied by Early-Stage Investors

Approaches and criteria used by early-stage investors are often a good measuring stick against which one can assess successful approaches to entrepreneurship, since these investors have "skin in the game" and therefore a vested interested in employing tested approaches. Such investors are moving away from approaches that stress careful planning to bets on the entrepreneurs themselves. In many cases early-stage funders do not even attempt to assess the idea itself, but seek to invest in a team they believe is capable of finding a workable one even in cases where their first or even second idea may fail.

ii. Focus on Resource Constraints

Resource constraints are a reality for most entrepreneurs. Many do not access funding through formal channels (such as banks or equity funds) but instead resort to bootstrapping or rely on the three F's (family, friends, and fools). This is most pronounced for resource-strapped entrepreneurs in developing countries. Many of them may lack access even to networks capable of financing their business. This reality drives the bird-in-hand philosophy as entrepreneurs are forced to focus on resources to which they already have access. Affordable loss is also an important reality for these entrepreneurs. Many of them lack any kind of buffer against even temporary income shortfalls.

iii. Embrace of Serendipity

Most economic development models (at both the individual and macro-level) fail to account for serendipity in any meaningful way. However, luck (defined here as the confluence of circumstances that conspire to work in the favor of a business or country) can often be a decisive factor in determining success. The

⁷ Jones and Li 2017

⁸ Hulsink and Koek 2014

effectuation theory itself also does not focus on individual characteristics of the entrepreneur in any way. One of the reasons that it has proven so difficult to replicate successful economic development models is because the conditions present at the time that a certain approach is employed may vary dramatically from one case to the next. While seizing opportunities within a changing environment is far easier said than done, the effectual model does at least address its importance.

iv. Emphasis on Action

The effectual approach places a premium on action rather than study and analysis. This lends itself well to populations that do not necessarily have sophisticated analytical tools at their disposal or the means to apply them effectively. Effectuation's "learning by doing" approach is arguably more consistent with the learning approach most familiar to these populations.

E. CRITIQUES OF EFFECTUATION THEORY

There are several critiques of effectuation theory in the literature. Chiles, Bluedorn, and Gupta (2007) contend that it is not well-defined nor especially original while several critiques, including Perry, et al. (2012) contend that the theory has not been subject to adequate testing. (Arend, Saroogi, and Burkemper note both in their 2015 critique discussed later.) YouthPower Learning will focus, however, on what we consider the two most robust critiques. The first is that behavioral biases and use of heuristics may lead to sub-optimal outcomes under effectuation theory. The second is Arend's more comprehensive critique. We have added a few other observations. These include 1) robust assumptions regarding the sophistication of the entrepreneur's enabling environment; 2) an overly simplistic assumption regarding the market and the way the entrepreneur engages with it; and 3) assumption of the entrepreneur as a single individual. These critiques apply to the theory generally. Additional critiques as they apply to youth are noted in the second half of the paper.

i. Behavioral Biases and Use of Heuristics

The first critique is offered by Ye, Fitzsimmons, and Douglas (2008), who argue that effectual approaches lend themselves to a number of decision-making biases typical of human behavior when confronted with uncertain situations. In quoting Davidsson (2008), "the effectuation model may describe better what entrepreneurs do, but this does not prove that they are right in doing so. They might have been more successful with a different approach" (p. 82).

Of particular concern to the authors is the use of heuristics, commonly known as "rules of thumb," which are often employed in decision-making when people are confronted with decisions in new or unfamiliar situations. Use of heuristics involves simplification of otherwise complex situations. Examples of such heuristics relevant to effectuation theory include threats bias (where threats are disproportionately perceived relative to opportunities, leading to aversion behavior); a tendency to over-trust which may lead to increased commitment to sub-optimal partnerships; and a tendency of entrepreneurs toward overconfidence or over-optimism that causes them to underestimate levels of risk. The authors argue that entrepreneurs employing effectuation theory are disproportionately likely to fall victim to the use of heuristics due to the lack of analysis that characterizes effectual thinking.

ii. Relevant Considerations of Arend's Wide-Ranging Critique

A second, more wide-ranging critique was offered by Arend, Saroogi, and Burkemper (2015). YouthPower Learning will focus on the elements of the critique most relevant to practitioners. One concern expressed in the Arend piece is that effectuation theory ignores previous work that disconfirms effectual ideas, citing several works that support the use of planning in enhancing the performance of new companies. A second critique is that studies such as the Dew et. al (2009) study cited above that compared decision-making processes of expert entrepreneurs with those of M.B.A students didn't pay enough attention to other explanations for why expert entrepreneurs think differently (beyond "entrepreneurial expertise").

A third concern that the authors express is inadequate attention paid to competition/rivalry. A new product or service can thrive in the marketplace only because it offers a superior alternative to an existing product, which necessitates some consideration of competitive conditions. In addition, the authors question several assumptions in effectuation theory, including whether effectual entrepreneurs are truly able to build firms in multiple industries; that control is possible without prediction; and whether effectual ventures are sustainable without a clear defendable competitive advantage. Finally, the authors express concern about the usefulness of the theory to practitioners given that certain elements of effectual thinking (including the lack of a need for a business plan) come into conflict with the requirements of some partners as a pre-condition for committing resources.

iii. Assumptions Regarding the Sophistication of the Enabling Environment

The subjects of Dr. Sarasvathy's initial study all started their ventures within a sophisticated (U.S.) context. This gives rise to two important assumptions implicit in (and central to) effectuation theory. First, the theory assumes an enabling environment that promotes or supports rapidly changing markets. The entrepreneur's ability to be the "pilot in the plane" depends on an environment that is malleable and can be controlled. It is unclear that markets dominated by state-owned firms or by monopolistic or oligopolistic players or other entrenched interests demonstrate the level of requisite dynamism that allows entrepreneurs to carve out their own market space.

Similarly, the study's initial set of subjects also had access, at that time, to a far stronger entrepreneurial ecosystem than that offered by most countries. The entrepreneur's ability to create partnerships depends upon the entrepreneur's access to robust and well-placed networks with the knowledge and resources to make the entrepreneur's vision a reality. Entrepreneurs functioning within weaker or incomplete entrepreneurial ecosystems (as most do) may lack the networks relevant to their visions; as well as the infrastructure (incubators, meeting spaces, and so on) to develop those networks. In places where knowledge and resources are shallow and only a limited number of individuals "own" them, such infrastructure may determine an entrepreneur's ability to tap into relevant networks.

iv. Overly Simplistic Assumptions Regarding the Entrepreneur's Engagement with the Market

Effectuation theory assumes that the entrepreneur either employs causation in the market development process (works backward from a pre-determined target market) or effectuation (works forward from their resources toward a target market). In reality, many entrepreneurs do not solely employ one strategy or the other; but rather develop a preliminary notion of the market and subsequently refine their vision by engaging with early adopters. The former step looks perhaps more like causation but does not require extensive market research, nor does it imply dedication of significant resources. (In cases where entrepreneurs form their ventures within an industry with which they are already familiar, this process may have been informed by industry experience rather than formal study). While Sarasvathy and others note that entrepreneurs sometimes employ both effectuation and causation strategies, the implication is that this is often a function of an enterprise's stage of development (for example, they are more likely to employ effectuation at the venture's early stages and more likely to apply causal reasoning as the venture develops further). What YouthPower Learning describes here, by contrast, is more akin to toggling between approaches at a single stage of the venture and within a single activity.

v. Assumption of the Entrepreneur as a Single Individual

A third unstated assumption in effectuation theory is that the entrepreneur is a single individual. In fact, much recent research has stressed the importance of the entrepreneurial *team*. This is a relevant consideration for the entrepreneur when pursuing networking opportunities and partnerships. The literature on effectuation theory stresses the importance of such partnerships to the venture, but the discussion is inevitably limited to stakeholders *outside* of the entrepreneurial venture, disregarding the need to enlist individuals to become part of the venture (as co-founders, for example). This is a particularly relevant point in light of the fact that, in effectuation theory, the process of engaging external stakeholders involves both sharing the financial fruits of the venture as well as compromises, arrived at with invested stakeholders, in the vision of the enterprise (Sarasvathy and Dew 2005). However, the entrepreneur may not be prepared to make these compromises.

IV. BRIDGING THE THEORETICAL GAP: APPLYING EFFECTUATION THEORY TO YOUTH ENTREPRENEURSHIP EDUCATION AND TRAINING

Following the summary of the emergence and subsequent empirical testing of effectuation theory from an academic standpoint, this section of the report considers the relevance of the theory to youth, particularly as it relates to entrepreneurship education and training (EE&T) programs. As the majority of the literature has been academic in nature, with a dearth of empirical tests of the theory in developing country contexts or with young people, there are limited sources from which to extrapolate lessons relevant to youth EE&T programs from this source. However, there is a small, but growing knowledge base related to the application of effectuation theory within entrepreneurship education settings stemming from programs implemented globally that are "inspired by" effectuation. It is important to note here that academics and practitioners of effectuation theory remain largely disconnected. The definition and application of the theory across these contexts are similarly not aligned.

This section of the report begins with a brief discussion of EE&T and offers a summary of common methodologies used to prepare individuals for entrepreneurial success, including effectual approaches. YouthPower Learning then explores how effectuation theory-based approaches are being used globally to prepare young people for entrepreneurship and compare programmatic elements across contexts. Following a discussion on the identified benefits and challenges of using effectuation-based EE&T approaches for youth, YouthPower Learning makes several programmatic recommendations.

A. OVERVIEW OF ENTREPRENEURSHIP EDUCATION AND TRAINING (EE&T) APPROACHES

As the idea that entrepreneurs are made, not born, has become decidedly more mainstream in the past decades, so have EE&T programs proliferated, provided in formal education settings (e.g., universities) and offered by other market actors (e.g., incubators, NGOs). With the global expansion of EE&T programs has come the exploration of various pedagogies and methods to both teach entrepreneurship and develop entrepreneurial skills. An overview of common entrepreneurial methods is included in Annex III.

However, the evidence related to the effectiveness of effectuation theory as a teaching method within training settings is limited, though several academics have undertaken studies to compare various entrepreneurial methods, including effectuation theory, to inform educators, policymakers, and researchers on how to achieve desired EE&T outcomes. For example, Mansoori and Lackeus (2019) compare and contrast six methods (those starred in the table included in the annex) and found that scholarly-grounded entrepreneurial methods (i.e., effectuation, discovery-driven planning, and prescriptive

entrepreneurship) lack specific tactics and tools for implementation, while also noting the theoretical shortcomings of practitioner-grounded methods. They recommend that "entrepreneurs should reflect critically on advice given to them to decide if and when an entrepreneurial method is suitable for their purposes, taking into consideration development stage and context," noting the importance of raising awareness of the particular inadequacies of business planning. Yamakawa et al. (2016) similarly consider the merits and challenges of theoretical versus practical approaches to entrepreneurial education and conclude that there is value in "teaching effectuation while not discarding predictive approaches to business management."

Broadly speaking, when it comes to youth EE&T programming, the pedagogical approach can be complicated by the fact that youth EE&T programs often aim to do more than just create businesses. In the domain of youth development, EE&T programming is often used as a vehicle for broader developmental objectives, such as strengthening of soft skills, community engagement, and leadership development.⁹ As such, there can be incongruities in how the term "entrepreneurship" is used within youth contexts. Furthermore, there is no agreed upon set of "entrepreneurship skills." In reality youth EE&T programs often incorporate both entrepreneurial pedagogies as well as educational approaches related to soft skills and social and emotional learning (SEL) development.

The evidence is thin regarding the applicability of effectuation theory to youth EE&T programming contexts. Thus, the remainder of this paper, which focuses on this topic, relies almost exclusively on information collected by the YouthPower Learning team through KIIs with organizations using effectuation theory in their programming. The team notes that though the organizations interviewed for this paper have strong program models, which offer myriad lessons for USAID's programming consideration, the number of organizations currently applying effectuation theory to entrepreneurship appears to be small and therefore the evidence on this approach is limited. Thus, the discussion around benefits, challenges, and recommendations of effectuation theory's application in EE&T based upon highlighted program models should be seen as exploratory, which can only be confirmed with additional research and application in the field.

B. YOUTH EE&T MODELS USING EFFECTUATION THEORY

Globally, there are limited examples of organizations explicitly applying effectuation theory to youth EE&T programs. Those that do exist range from short-term entrepreneurship training programs developed for research purposes, university-affiliated entrepreneurship support programs, and entrepreneurship programs within the international development context. Though YouthPower Learning believes the latter category is the most relevant to USAID's target market, this section offers a summary of all program types identified. Table 2 offers a summary of EE&T programs incorporating effectuation, including those in Africa.

⁹ Psilos and Galloway 2018.

Table 4 Youth EE&T Programs Using Effectuation

Organization	Main Location	Program Summary	Target Beneficiaries	Use of Effectuation
Africa		•	•	•
Youth Empowerment for Life (YEfL) in partnership with Ghana Friends (see Annex I)	Tamale, Ghana	Select cohorts of 25 youth for their entrepreneurship program, which consists of villages savings and loan association (VSLA) formation, a five-day bootcamp, and follow-up training and mentoring	Targets literate youth ages 17–25	Their bootcamp is based significantly upon the five principles of effectuation theory and also includes the BMC
IdeiaLab (see Annex II)	Maputo, Mozambique	Offers programs along the entrepreneurship pipeline, starting from pre-incubation activities to ideation workshops and an incubator program (affiliated with the Orange Corners network of incubators) and supports development of the entrepreneurship ecosystem, offering linkages to financial service providers, market days, and partners, mentoring services, and technical assistance	Targets youth ages 18 to 35 (university students or recent graduates in particular for the incubator program)	Their pre-incubation, four-day #BAZA training program is based heavily on effectuation theory and also leverages the BMC
FATE Foundation	Lagos, Nigeria	Targets aspiring entrepreneurs with pre-incubator programs, in addition to offering training and mentoring programs for early-stage businesses and experienced entrepreneurs, hosting an Orange Corners incubator, and strengthening the ecosystem through policy-making and advocacy work	Engage youth ages 18– 35 in pre-incubation and early-stage business programs; targets older, experienced business owners for other programs	Relies primarily on design-thinking as the base for their programs, along with BMC and lean start-up, but also incorporate aspects of effectuation
University of Gaston Berger of St. Louis	St. Louis, Senegal	Developed an entrepreneurship promotion program, since closed, that Garcia-Rodriguez et al. (2017) used as a case study to understand how effective effectuation and bricolage approaches were in increasing participants' entrepreneurial intentions and attitudes. The program, conducted over a three-year period, consisted of three phases: motivation, implementation, and dissemination	Targeted university students	Curriculum based on an entrepreneurial bricolage approach and effectuation process in venture creation

Outside of Africa				
Aliança Empreendedora	Curitiba, Brazil	Offers several different entrepreneurship programs for individuals depending on their stage of entrepreneurial development (i.e., beginner, has a business, ready for acceleration).	Engages women, youth, formerly incarcerated individuals, homeless persons	Effectuation theory cuts across their programming but how the theory is applied differs by program; their "Go For It" program most heavily draws upon effectuation as well as principles of andragogy
AMAN Center for Entrepreneurial Development (AMAN-CED)	Karachi, Pakistan	Offers a variety of entrepreneurship support programs, including a three-month training course based on effectuation that also offers participants' access to mentoring and social media networking groups	Targets diverse populations, including youth, women, and those not attending the university	Uses the effectuation principles by name and explains them using indigenous storytelling techniques; also integrates concepts of selflessness and pro-social behaviors taken from Pakistani culture and religion
Entrepreneurship Development Network Asia (EDNA)-Myanmar	Yangon, Myanmar	Cohorts of 15-30 participants participate in six- month program that includes weekly classes and periodic mentoring sessions along with weekly "entrepreneur development days" focused on building the broader entrepreneurship ecosystem and fostering linkages	Engages marginalized populations such as women, youth, internally displaced persons, and returned migrants	Implicitly incorporates effectuation principles, along with elements from Buddhism, lean-start-up, and other philosophical and entrepreneurship theories
i.Lab	University of Virginia; Charlottesville, Virginia, USA	Competitively selects cohorts of 20–25 early- stage ventures into a ten-week incubator program comprised of training, mentoring, and a final "demo" night	Mostly individuals younger than the age of 30, including university students and community members	Explicitly mentions the five principles of effectuation by name and also integrates other entrepreneurship approaches (e.g., BMC, design-thinking, lean start- up)
Youth Business Trinidad and Tobago (YBTT)	Chaguanas, Trinidad & Tobago	Their ten-week Jump Start program helps youth to move from idea generation to minimum viable product (MVP); also offers e-Mentoring and linkages to other services	Targets youth between the ages of 18–35	Leverages effectuation theory along with design thinking and the BMC

C. KEY FEATURES OF YOUTH ENTREPRENEURSHIP PROGRAMS APPLYING EFFECTUATION THEORY

Despite the diversity of organizations that seem to be applying effectuation theory to youth entrepreneurship training, in terms of geographic scope, target populations, and program sophistication, there is a surprising amount of overlap in their programming models. This section synthesizes the common components across programs while also noting variances.

i. Participant Selection

The profile of participants across the highlighted programs varies, but the **majority either explicitly target youth or end up serving high numbers of youth by default**, based on demand for programming. Some programs target vulnerable populations (e.g., YEfL, EDNA-Myanmar, Aliança Empreendedora) while other programs reach out to the more privileged members of society (e.g., youth living in major cities, the university-educated). In addition, many of the organizations **intentionally specify the appropriate participant profiles for the different programs offered**, ensuring that selected participants are a good match for the program. For example, the target participant profiles for Aliança Empreendedora's various programs depends on what level they are at regarding business ownership and the needs of their business (i.e., has an idea, already running a business, looking to grow a business), and the FATE Foundation in Nigeria takes a similar approach. Similarly, YBTT seeks youth who have a business idea(s) and want to move to the MVP stage. In Mozambique, Ideialab's #BAZA program is open to anyone interested in exploring entrepreneurship, while their incubator program targets those who already have a business idea or a nascent business.

In terms of participant selection, organizations **carefully screen individuals for their training programs** using a variety of methods. Some programs require that interested individuals complete a written or verbal application process, such as YEfL in Ghana, to ensure that youth participants are literate and have the right motivation for participating in the program. Other programs require that participants pay an enrollment fee to show their commitment to participating in the program. As a respondent at AMAN-CED explained, this helps participants value the program instead of viewing it as a "free lunch." AMAN-CED's effectuation-based program costs \$600 (with scholarship support available), while YBTT's JumpStart program costs \$200. In Mozambique, their pre-incubation programs (e.g., #BAZA) cost 500 meticals (approximately \$8), while the six-month incubator is 7,500 meticals (approximately \$115); however, scholarships are also available to fund those in need. Those programs targeted towards bottom-of-the-pyramid populations do not charge for their programs.¹⁰

ii. Program Timing and Sequencing

Another similarity shared by many of the youth EE&T programs highlighted here is the overlap in program timing and sequencing. For program timing, many of the **cycles are long-term, taking place over multiple months, allowing for both in-classroom learning and application outside the classroom**. For example, the i.Lab incubator at UVA offers a ten-week incubator program, while IdeiaLab's incubator runs over six months (though their pre-incubation programs, such as #BAZA, usually run from two to four days). Similarly, EDNA Myanmar's program was born out of frustration with prior short-term programs, and offers a program cycle of six months. YEfL's effectuation-based bootcamp takes place only over five days, but the duration of the entire programming cycle (starting with the VSLA and followed by ongoing mentoring) is 12 months. Recognizing participants' other commitments, **some**

¹⁰ However, as part of their 2020 strategy, YEfL is considering charging a nominal fee for their youth entrepreneurship bootcamp in order to get youth participants to demonstrate a commitment to the program. The fees will ultimately be given back to the community to support development initiatives.

programs are also offered during off-hours (e.g., weekends) to flexibly meet the needs of their participants. AMAN-CED's program evolved from a four-month program to a weekend program offered on Friday evenings and Saturdays. YBTT also offers training on Saturdays, accommodating people who already have a job. In Ghana, YEfL's five-day bootcamp is conducted away from the community, at an off-site location (where lodging is provided), to give youth participants the opportunity to focus on training and to step away from their normal, familial obligations (though they welcome mothers with their children to attend).

iii. Program Components

The majority of the programs highlighted in this report do not offer solely entrepreneurship trainings. Rather, their **training programs are part of a wider suite of entrepreneurship support activities**, such as capacity building, mentoring, market linkages, and ecosystem development support. For example, EDNA-Myanmar's six-month program includes weekly classes, ongoing mentoring, and periodic Entrepreneur Development Days, during which guest speakers are invited to the classroom, regional networking events are held, and other ecosystem building activities occur. IdeiaLab in Mozambique offers a range of services to aspiring and current entrepreneurs, ranging from pre-incubation workshops to their intensive incubator program that includes one-on-one mentoring, with additional Master Classes available through their Orange Corners incubator. FATE Foundation has a similar model, offering numerous in-person and digital programs, along with mentoring and Master Classes. At the i.Lab incubator, mentoring is the core of their program, but there are also many workshops and training sessions held, along with weekly check-ins, and the program culminates in a demo night.

One common feature across highlighted programs is that **none provide any direct access to funding for participants**. In fact, several of the programs initially used training models that included a grant component, but this was dropped after these models failed. For example, AMAN-CED's initial program gave \$1,000 grants to graduates, but this approach did not result in many new businesses. They mention that "when you think that easy money is coming ... then people don't value it. This is the problem with funding all over the world; it's very important to have the right entrepreneurial mindset first." Aliança Empreendedora similarly does not incentivize individuals to get loans to start. Instead, they encourage participants to start with what they have. They do, however, provide participants with information on banks and are willing to make linkages as necessary. IdeiaLab presents a nuanced view of the finance question in relation to effectuation. Their respondent notes in general that entrepreneurship is not about the money. However, at some point, they wish they had access to a substantial youth fund, as they recognize that it ultimately takes youth a longer time to progress without this financial support. YEfL takes an innovative approach to address the reality that many youth do not have many financial "birds-in-hand." Six months prior to the start of their bootcamp, they form youth VSLAs to help them begin to accumulate financial resources that can be leveraged after entrepreneurship training.

iv. Program Facilitators

The profile of the trainers selected to facilitate youth EE&T programs applying effectuation varies between programs; facilitators may be young people themselves, such as recent university graduates, entrepreneurs, or experienced trainers. What is similar across programs is the care taken to **ensure trainers have an effectual mindset and are able to nurture a similar mindset, through facilitation and mentoring approaches, within program participants**. AMAN-CED looks for trainers who believe in entrepreneurship and "practice what they preach", noting the challenges of finding strong trainers as those formally trained in business have been taught primarily on causal methods. EDNA-Myanmar requires lengthy training for their mentors, but also intentionally draws in younger mentors with business experience who are fresh to teaching, thus in general open to new approaches. YBTT and IdeiaLab both

emphasize that their trainers facilitate a process, rather than "teach" entrepreneurship, and seek trainers comfortable with that approach who relate well with participants.

D. Use of Effectuation Theory in Program Models

All the aforementioned organizations have something in common: all are applying aspects of effectuation theory to parts or all of their programming, at minimum using the theory, often in conjunction with other business, philosophical, and religious approaches, as the theoretical basis of their programming. At its deepest application, some programs are fully incorporating the core tenets of the theory directly into their training and mentoring activities. The following section offers a discussion of how the organizations are using effectuation theory, in conjunction with other methodologies, in their programs.

i. Application of Effectuation Principles in Youth EE&T Programs

Though effectuation can be broadly seen as a *process* of entrepreneurship, in practice, many programs **rely heavily on the principles to transfer core effectual concepts to youth**, referring to the principles by name as a strategy for anchoring participants in common language and entrepreneurship ideas. For example, AMAN-CED mentions the principles by name, deepening their meaning through the use of complementary indigenous stories as well. YEfL similarly mentions all five principles by name on the first day of training, providing a reference point for future conversations during the rest of the bootcamp. The YEfL respondent notes that the principles are universal, easy to understand, and very intuitive for the youth participants.

Regarding the specific principles, **the bird-in-hand principle is the most commonly used in youth EE&T programs.** AMAN-CED's program facilitates a two-month "know yourself" module, in which students come up with business ideas based on the key questions of the bird-in-hand principle. YBTT takes a similar approach, using bird-in-hand to help participants get an understanding of how to assess feasibility of business ideas, offering participants a reality check and helping them think about how to start small. In their "Go For It" program, Aliança Empreendedora similarly relies on the bird-in-hand principle to incentivize participants to start with the money they have. During IdeiaLab's #BAZA training, participants spend a lot of time considering "who I am, what I can do, and who I know" (the core tenets of bird-in-hand) as a starting point for business idea generation.

"When you are training with an effectuation-based model, you are rich and nobody is poor. There are resources all around you, if you use your lens of effectuation to see them."

AMAN-CED representative

"When we are talking about things like who you are', participants don't see the connection right away. But when they get to weeks 2 and 3, they start to brainstorm ... and see it."

YEfL representative

Another highly cited principle by effectuation-based training programs is the crazy quilt. At UVA's i.Lab incubator, they consider crazy quilt, the idea of getting stakeholder commitments, to be crucial to the venture creation progress. In fact, if individuals are not able to make "asks" of stakeholders, it is a sign the venture is not moving forward. At YBTT, after first focusing on bird-in-hand, they invite participants to secure commitments from others, embodying the crazy quilt principle as well. Likewise, at Aliança Empreendedora, program participants identify "helpers" in their network while in IdeiaLab's #BAZA program, they introduce participants to a resource wall, upon which individuals can note the resources they have available to offer others and the resources they are seeking. The resource wall helps individuals find other stakeholders who can commit their resources to a new venture.

Regarding the remaining three principles, there was less convergence on the applicability of them to youth EE&T programs. Affordable loss, several respondents noted, was an effective way to help

participants consider how to make smart investments, though there was less emphasis on the principle in training programs. For example, AMAN-CED trains participants how to calculate their affordable loss in terms of time, money, and effort, and are encouraged to consider business ideas where they have less to lose. However, the respondent from EDNA-Myanmar noted that at least in that context, this way of thinking (considering what one is willing to lose versus what one might gain) is already inherent in the people living within that resource-poor environment; thus the principle is not emphasized as much. Both the pilot in the plane and lemonade principles can help participants take control of their business progress (i.e., be empowered) and develop resiliency in the face of challenges, but as one respondent noted, they are hard to grasp if participants have not yet experienced setbacks in business. Similarly, another respondent stated that pilot-in-the-plane is helpful as a worldview, but can be hard for youth to understand.

ii. Various Uses of Effectuation Theory in Youth EE&T Programming

As programs vary in their use of the effectuation theory and the principles in their youth EE&T programs, they also incorporate effectuation principles to achieve different training outcomes. Programs use effectuation theory, along with other entrepreneurship training approaches, to shift attitudes, develop entrepreneurial skills, help participants overcome constraints, and reinforce social and emotional learning and soft skills.

Use of Effectuation Theory to	Key Findings	Program Examples
Shift Youth Mindsets	Many of the programs highlighted here incorporate effectuation theory most fully in their "beginner" entrepreneurship courses, those trainings that come in the pre-incubation stage of their activity pipelines. These organizations rely on effectuation theory to shape participants' mindsets regarding entrepreneurship.	In Mozambique, entrepreneurship is quite new (the country only moved to a market economy in 1992), and many youth are not initially open to starting their own business, aspiring instead to a government job. IdeiaLab's #BAZA training, with the aid of effectuation theory, tackles this mindset challenge directly in a session called "breaking the myths of entrepreneurship", during which they reset participants' thinking related to entrepreneurship (e.g., don't need a business plan, don't need external funding, don't need formal education). Aliança Empreendedora's representative similarly notes how effectuation theory helps "identify the potential for entrepreneurship in anyone, through a process of self-discovery," serving as motivation for their participants. FATE Foundation staff also recognize that effectuation is a great tool to use to work with entrepreneurs, especially at the early stage, as it helps them understand deeply who they are, their values, and principles.

Table 5 Uses of Effectuation Theory in Youth EE&T Programs

Build	Organizations also leverage	YEfL representatives share that most of the
Entrepreneurial Skills	effectuation theory to help participants build an understanding of the entrepreneurial process, that is, the skills individuals need to replicate the business start-up process over time. These practitioners recognize that many youth businesses may indeed fail (overall, survival rates of new businesses are quite low), and thus participants need to be able to repeat the business venture creation process in the future. Effectuation theory is useful in this regard, as a set of heuristics (behaviors) that can be taught for lifelong application.	TEL Tepresentatives share that most of the graduates from their youth bootcamp leave with a business idea and a plan for how to move forward; however, some will fail when they get back to their communities. However, after the bootcamp, they have a better understanding of their means (i.e., their birds-in-hand) and are able to come up with a new idea in the future. IdeiaLab also notes that their program helps youth build the skills, both entrepreneurial and soft, they need in order to start not only the first business, but the next business, too.
Help Youth Overcome Constraints	Numerous EE&T programs rely on effectuation theory to help youth overcome constraints to entrepreneurship.	A common entrepreneurship perception is that one requires substantial levels of funding in order to start a business, a resource that most youth lack. Effectuation-based training programs instead invite participants to start using the resources they have on hand (i.e., bird-in-hand principle). Aliança Empreendedora's programs invite participants to test out ideas with the money they have; likewise, in both IdeiaLab's #BAZA and YEfL's youth bootcamp, youth are encouraged to take "baby steps" using the resources they have towards their larger business goals. Another constraint is the tendency towards inaction or inertia related to business development and livelihoods. For example, YEfL found in an upfront assessment that one binding constraint to youth entrepreneurship was that youth were "waiting for the rain," or were in a suspended state of helplessness and dependency, unable to achieve social markers of adulthood (e.g., independence, living wage, a family). ¹¹ As a result, their bootcamp program uses effectuation theory to help youth take action, move ahead, collaborate with others, and start saving what they

¹¹ Schmidt 2017.

Support Social and Emotional Learning (SEL) and Soft Skills DevelopmentMany of the youth EE&T programs incorporating effectuation theory go beyond the economic sphere and in fact, incorporate aspects of personal development. From YouthPower's perspective, "personal development" primarily involves the strengthening of key SEL and soft skills. A core tenet of effectuation theory is the bird-in-hand principle, which asserts that one's identity is a crucial aspect of the entrepreneurial process.Organizations make use of training activities that invite youth to identify their strengths and assets (i.e., positive self-concept), reflect on their dreams for the future (i.e., goal orientation), generate business ideas based on their birds-in-hand (i.e., creativity, critical thinking), and secure stakeholder commitments (i.e., taking initiative, persuasiveness, social skills). As the respondent from IdeiaLab shared, "You can't just work on the business side. It will probably fail and if they [youth] are not capable, ready, motivated, or confident, they won't start the next business."			have. ¹² They also leverage effectuation theory to
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iii. Complementary Methodologies Utilized in Conjunction to Effectuation Theory

None of the EE&T programs highlighted here use effectuation theory exclusively in programming; rather, all of the trainings also incorporate other complementary entrepreneurship, and sometimes philosophical and religious, approaches in tandem with effectuation. Most commonly, many of the training programs leverage the Business Model Canvas (BMC) as a way of mapping the outputs of an effectuation-based exploration process in a concrete manner. For example, a YBTT representative thinks the BMC dovetails nicely with effectuation theory, as "key resources and partners" link to the bird-in-hand principle, while "cost structure and revenue streams" link in to the affordable loss principle. Both Aliança Empreendedora's "Go For It" and IdeiaLab's #BAZA programs incorporate the BMC at the end of training, after participants have completed an effectual self-discovery process and tested their business idea outside of the classroom. For YEfL, they also leverage the BMC, introducing it during the five-day youth bootcamp but conducting a follow-on training on the tool several months after the bootcamp, once youth have some experience doing business.

¹² Ibid.

¹³ Nielsen and Lassen 2012.

Other organizations also **include aspects of lean start-up and design thinking in their program design**. EDNA-Myanmar utilizes elements of lean start-up, as does IdeiaLab. FATE Foundation relies less heavily on effectuation compared to other programs; their programs are more strongly rooted in design thinking, along with incorporating elements of lean start-up thinking and the BMC. However, they note that all of the theories are connected and symbiotic. At the UVA i.Lab, they give their participants as many tools as possible, including the BMC, user-centered/design thinking, and lean start-up, as in their opinion, no approach helps an aspiring entrepreneur with everything.

In addition to these complementary entrepreneurship approaches, some organizations also couple effectuation theory with concepts from other domains. Aliança Empreendedora uses "andragogy," an adult learning theory that taps into the experience of the learners.¹⁴ AMAN-CED distinctly pulls concepts from traditional Urdu poetry and religion, tying business development to social change.¹⁵ In a similar manner, EDNA-Myanmar's program incorporates elements from Buddhism, while drawing upon Heidegger and interpretive phenomenology for their program's philosophical underpinning.

E. PROGRAM MODEL RESULTS

The respondents from highlighted programs were very positive about the impacts of their effectuationbased youth EE&T programs; however, quantitative data detailing program results are somewhat limited. For those organizations that are measuring impact, most use venture creation as one measure of success but also consider indicators such as well-being and social capital. Furthermore, YouthPower Learning notes that these programs are applying effectuation differently. Some incorporate effectuation principles by name, while others are more "inspired by" an effectual approach, in addition to many combining effectuation with other complementary methodologies. Therefore, it is difficult to attribute any results specifically to the use of effectuation theory in training.

For AMAN-CED in Pakistan, they found that "effectual interventions can be successfully used to promote new start-ups in agriculture in the country."¹⁶ They offer case studies¹⁷ depicting how their participants have leveraged principles from effectuation theory to start businesses. In particular, in comparison with their previous model (e.g., during which students put together a business plan and a PowerPoint presentation), in which 90 percent of participants failed to start a new venture, their effectuation-based model has seen a venture creation rate of 80 percent.¹⁸ For EDNA-Myanmar, a randomized control trial (RCT) was conducted for their training program. Results showed positive results related to financial wellbeing, social capital, and psychological well-being. Furthermore, their program had relatively low drop-out rates and saw people starting businesses.

Results from Aliança Empreendedora's programs in Brazil (from 2016 and 2017) show that 75 percent started businesses, 71 percent are still in operation, 25 percent have hired other people, and 59 percent increased their incomes.¹⁹ Similarly, for YEfL's youth bootcamp, they found that 80 percent of their participants have started businesses and after a year, 75 percent were still in operation and 25 percent have employed others. This is in stark contrast to their prior model (different training model followed by individual grants) in which only 40 percent of youth started a business and only 30 percent had a business running after a year.

¹⁴ Barbosa and Boas 2018.

¹⁵ Sarasvathy and Glinska 2018.

¹⁶ Qureshi, Sheikh, and Israr 2016.

¹⁷ IBA 2016.

¹⁸ Sarasvathy and Glinska 2018.

¹⁹ Grauenkauer, Magan, and Paysan 2018.

YBTT, anecdotally, has seen entrepreneurs change behaviors based on their training. Entrepreneurs are innovating, exploring new services and delivery channels (e.g., through mobile applications), and others who have not yet started business have at minimum begun partnering with others and getting sector experience. For IdeiaLab in Mozambique, they do not collect quantitative data specifically on their #BAZA program, but likewise have anecdotal evidence to demonstrate impact. After the program, youth are more hopeful for the future, feel confident, and have a plan. In addition, they estimate that 10 percent of #BAZA participants continue in their entrepreneurship pipeline.

The one example of youth-focused effectuation training from the literature, the training program developed by the University of Gaston Berger of St. Louis, tested the application of effectuation and bricolage approaches and their effect on students' enterprise potential (measured using validated scales related to entrepreneurial intention, perceived desirability, perceived feasibility, and attitudes towards enterprise). The study found that the training program had "a positive and significant effect on young undergraduates' entrepreneurial potential,²⁰" though there was not a statistically significant effect regarding attitudes to creativity and intuition.²¹

F. BENEFITS AND CHALLENGES OF EFFECTUATION THEORY FOR YOUTH EE&T PROGRAMS

i. Benefits

Practitioners note numerous benefits of using effectuation-based youth EE&T approaches. To start, effectuation theory, as developed, is industry-agnostic. Practitioners have indeed found this to be the case, noting how effectuation theory is **applicable and useful across economic sectors**. No one has reported any challenges using an effectuation-based training model with any specific business types. Effectuation, as a teaching methodology, and in particular its principles, is also **simple and easy to understand across contexts**, as program respondents across organizations reported. Despite a paucity of tools available to educators who want to incorporate effectuation theory into their programs, the principles themselves are easily transferred to participants and allow for a shared vernacular of key entrepreneurial concepts.

Importantly, effectuation theory has a **bias towards action**, aligning with "learning by doing" approaches. Core to the theory is starting something with your available resources, rather than waiting for optimal conditions. In application, this concept pushes youth to get into the market, to engage with potential customers and seek stakeholder buy-in, and helps them not get stuck in activities that are not driving the business forward (e.g., designing market surveys, doing financial modelling). As a result, effectuation theory **helps youth get their businesses off the ground more quickly** and start doing business even when they do not have external resources available. By considering the bird(s)-in-[their]-hand along with the actions they control (pilot in the plane), youth learn to take healthy risks; the affordable loss principle also helps youth overcome the fear of failure. This effectual approach, the push for "doing," also lowers the cost of failure, as youth entrepreneurs fail more quickly when they start testing their business idea more rapidly.

Effectuation theory also addresses a core perceived constraint to entrepreneurship, particularly within developing country contexts: lack of financing and other resources. An effectual approach, particularly the bird-in-hand principle, **helps youth become aware of their resources** within their environment and supports them to see they already have what they need to get started. Using one's own resources, versus

²⁰ Study authors defined entrepreneurial potential as both one's entrepreneurial intentions and attitudes. They measured these variables using two validated scales.

²¹ Garcia-Rodriguez et al. 2017.

resources provided for free by a donor or program, can also motivate participants. By focusing youth on their available means, the concept is relevant to various local contexts, mitigating the disconnect that many approaches coming from developed country context create when applied to developing country settings. Effectuation theory also **recognizes that individual entrepreneurs need an ecosystem of support**; the bird-in-hand principle recognizes "who you know" is important, and the crazy quilt principle reinforces the need to focus beyond the individual. Crazy quilt also helps young people strengthen their social ties and build their networks.

Perhaps most relevant to the mission of YouthPower, that being supporting a Positive Youth Development (PYD) approach, **effectuation theory is a strengths-based approach**, which focuses on leveraging what resources are available to start doing business. Effectuation aligns closely with the four domains of PYD: assets, agency, contribution, and enabling environment.²² Effectuation-based youth EE&T programs are empowering, helping youth grow their confidence and skills as individuals and as entrepreneurs. Youth recognize their ability to create value based on who they are (their identity, skills, social network), the bird-in-hand principle, and are more aware of their own agency (the pilot-in-the-plane principle). Effectuation-based youth EE&T programs invite youth to take leadership in the business development process and also recognize the importance of a supportive environment of stakeholders. These aspects of effectuation theory are applicable beyond the business context and can be leveraged to solve individual and community challenges.

ii. Challenges

Practitioners noted some challenges applying effectuation theory to youth EE&T programs. Some youth learners, particularly those who have been progressed through a linear, causal education model (e.g., university students in the United States who have gone through the K-12 system), **can find effectuation a difficult mindset to adopt**. Effectuation requires flexibility, a comfort with uncertainty (as the theory is based upon the idea that the future cannot be predicted), and a willingness to get out into the marketplace and test ideas. With effectuation theory, there is no set formula for business development, and the comfort of a packaged business plan is missing; rather, the business venture creation process is iterative and ever-changing. For some participants, this way of learning can be hard. However, given that USAID's target youth population in Africa is less likely to have experienced a causal upbringing (in particular, out-of-school youth), the effectual mindset may indeed be easier for them to adopt.

In a similar manner, practitioners note the **challenge in identifying good trainers and teachers** to use the effectuation approach in EE&T. Many traditional educators and trainers have also been trained on a structured, causal approach, understanding entrepreneurship to mean fixating on idea generation and teaching individuals how to develop a business plan in order to seek financing. However, for the effectuation approach, programs require educators who have bought into the approach and ideally who have experience applying a similar mindset as well. They need to facilitate a learning process, rather than teach; they also need to know how to mentor participants on their entrepreneurial journeys. To respond to this challenge, many programs have sought out younger trainers. They may be less experienced as educators, but can draw upon personal entrepreneurial experience. They also ensure adequate training of trainers and mentors as well.

The most significant challenge cited by numerous respondents related to the **disconnect between the effectual approach and the broader ecosystem**. Most organizations shared that incorporating effectuation theory into youth EE&T programs itself was not challenging. In fact, most found the approach to be transformational in terms of impact in trainings. However, these organizations' note that the system around individual entrepreneurs is still based on the causal approach, and it is difficult to convince other

²² Hinson et al. 2016.

ecosystem players and stakeholders (e.g., financial institutions, universities, donors) to adopt a more effectual approach. Ultimately, banks and other financial service providers still require business plans in order for entrepreneurs to access credit, and many universities are still graduating students who only understand the causal approach to entrepreneurship. Even approaches such as mentoring can be innovative in many contexts and misunderstood by stakeholders. Practitioners applying effectuation to youth EE&T programs must find a balance between setting participants up to succeed in entrepreneurship using effectuation while also preparing them to navigate an entrepreneurial ecosystem that remains causal.

V. RECOMMENDATIONS FOR USING EFFECTUATION IN YOUTH EE&T PROGRAMS

Based on the findings from YouthPower Learning's exploration of effectuation theory from both an academic and practitioner perspective, YouthPower Learning offers the following recommendations:

i. Conduct further research on the effectiveness of effectuation-based youth EE&T programs

Evidence regarding the impact of effectuation-based training approaches is still limited. With that in mind, USAID and others should **proceed cautiously in adopting an effectual approach** in youth EE&T programs until more is understood about if and how these training models create impact. However, this approach does show promise and initially seems compatible with both African youth populations and the PYD approach. With that in mind, USAID should consider **supporting pilot testing of effectuation-based youth EE&T programs**, while including a substantive research component in order to advance the evidence base around this approach. In addition to support for pilot testing, USAID can commit funding for the development of effectuation-based training curriculum and tools, given that there are few resources currently available to organizations that want to explore this methodology. See the Training Guidance Note that accompanies this report for specific recommendations on the design of effectuation-based training curricula.

Furthermore, many training programs that are incorporating effectuation theory at some level are also integrating various other complementary approaches (lean start-up, BMC, design thinking). USAID should also seek to **learn more about the effectiveness of the combinations of different applied entrepreneurial methodologies** to ascertain the most effective programming design.

ii. Intentionally design EE&T programs to align with different youth segments

Recognizing that youth, and entrepreneurs for that matter, are not homogenous in terms of individual capacity, experience, and aspirations, the programs highlighted in this report have developed a series of activities relevant to different stages of the entrepreneurial journey (e.g., preincubation, incubation, acceleration) that cater to different market segments. YouthPower Learning recommends that **USAID take a similar approach to segmenting entrepreneurs when working with implementing partners to design and implement entrepreneurship programs**. Programs that aim to develop entrepreneurs should first be clear about intended programming outcomes (e.g., building entrepreneurial mindsets, using entrepreneurship as a vehicle for soft skills development, achieving specific business development targets) and ensure that intended outcomes match the participant profile the program targets. In particular, programs should consider youth's age/level of autonomy, education status, life and business experiences, level of family support, and access to resources, and design appropriate entrepreneurship interventions accordingly. The typology of youth entrepreneurs, developed as part of

YouthPower's What Works in Entrepreneurship Education and Training Programs for Youth? evidence report is a useful tool for program design.²³

Furthermore, USAID should **consider holistic approaches to effectuation-based training programs**, specifically by embedding it within a broader program. Results from this study show that practitioners incorporating effectuation theory into youth entrepreneurship training also include other interventions, such as mentoring, market linkages, and ecosystem development activities, in their programs. Offering a wider suite of entrepreneurship development activities in programming can help youth access the various supports they need, in addition to training, to start their own businesses. This approach to youth entrepreneurship programming also aligns with the PYD approach, which "builds skills, assets and competencies, foster healthy relationships, strengthens the environment, and transforms systems."

iii. Support broader entrepreneurial ecosystem development, including the adoption of new approaches to business development

One key finding that has emerged from this study is that increasingly, evidence is showing that the traditional, causal approach is less relevant and applicable to nascent and early-stage entrepreneurs. Though evidence shows that a mix of effectual and causal approaches can benefit entrepreneurs, and the causal approach is more useful as businesses grow, there is still an over-reliance upon the methodology in the field, and business plans and funding acquisition continue to be the primary avenue to business start-up in many contexts. Among ecosystem actors, USAID should promote the exploration of more innovative approaches to entrepreneurship through capacity building, learning visits to organizations employing innovative methods, and funding mechanisms that allow for the testing of non-traditional approaches.

In addition, supporting effectual training approaches alone is unlikely to have significant impact in the absence of a wider supportive ecosystem. Youth EE&T, effectual or otherwise, is necessary but not sufficient for successful venture creation by youth; an entrepreneurial ecosystem that fosters entrepreneurship development is also a critical determinant of success. **USAID should identify opportunities for ecosystem strengthening,** which may include entrepreneurship policy, the development of specialized support services often offered through incubators and accelerators, support to equity financing initiatives (such as the development of angel networks) for more advanced entrepreneurs, strengthening and research institutions, and shifting cultural norms related to entrepreneurship, including societal attitudes toward risk and failure as well as attitudes toward entrepreneurs themselves.

²³ Psilos and Galloway 2018.

ANNEX I: GHANA CASE STUDY VISIT REPORT: SUPPORTING RURAL YOUTH TO START BUSINESSES USING EFFECTUATION THEORY



YEfL Entrepreneurship Bootcamp training participants and facilitators

E. INTRODUCTION

YouthPower Learning conducted two case study visits with organizations that are actively using effectuation theory in youth entrepreneurship training programs. The main objective of site visits was to better understand each organization's process of incorporating effectuation principles into their training program. This case study presents findings from a youth entrepreneurship program in Tamale, Ghana, implemented by Youth Empowerment for Life (YEfL) in partnership with Ghana Friends. YEfL is an NGO founded in 2010 with support from Denmark-based organization Ghana Friends and affiliated with Ghana Developing Community Association. YEFL's projects focus primarily on rural youth ages 15–35 in Northern Ghana with a focus on entrepreneurship, empowerment, and advocacy.

F. ENTREPRENEURSHIP TRAINING OVERVIEW

Since 2016, youth have engaged in YEfL's youth entrepreneurship program, which consists of village savings and loan association (VSLA) formation, a five-day bootcamp training, and follow-on training and mentoring. YEfL recruits participants via ten youth centers situated across ten districts. The program targets aspiring in- and out-of-school youth entrepreneurs interested in learning more about entrepreneurship. Youth who are literate and between the ages of 17–25 can apply by submitting an application that highlights their motivation for participating and any business history and experience. Next, YEfL selects cohorts of 25 youth participants from the same region and creates profiles for each youth, which serve as a method for

monitoring program progress. Participants also complete the Values in Action (VIA) test, which highlight top strengths (e.g., creativity, leadership, teamwork), and results are referenced during training.





During the bootcamp, staff revisit effectuation principles multiple times and build upon them across visual learning activities outlined in the organization's training manual. Starting one month after the bootcamp, program graduates map ideas on a Business Model Canvas (BMC) and participate in individual and group-based follow-on training related to branding, marketing, and financial management. Graduates continue to build and maintain networks with assigned technical mentor and via Mastermind groups, which are comprised of training participants from their communities. Training facilitators from youth centers conduct follow-up visits to mentor and collect data on training outcomes (e.g., business created, number of employees, income) at three, six, and twelve months post-training.

G. USE OF EFFECTUATION IN THE FIVE-DAY BOOTCAMP

During training, facilitators teach effectuation principles via an eight-module entrepreneurship and effectuation training model (see Figure 2 and Figure 3) of hands-on activities. Modulespecific activities (e.g., My Means: bird-in-hand) explicitly name and integrate principles via applied individual and group learning that emphasize entrepreneurial mindsets and building on personal strengths. On the first day of training, participants learn effectuation principles and an effectuationaligned definition of entrepreneurship: a social process based on the individual's own opportunities where ideas are discovered, created, and exploited to create value for others (Sarasvathy 2008). Facilitators give examples and instructions for applying each principle using the language below:

Principle	Description
Affordable loss	Evaluate opportunities based on whether the downside is acceptable rather than on the attractiveness of the preferred results (can you deal with it and move on—if you can't, then don't do it.
Lemonade	When life gives you lemons, make lemonade. Squeeze it and add ingredients (embrace surprises that come from uncertain situations, be flexible and not rigid)—how can you turn it to your favour?
Crazy quilt	Form partnerships with like-minded people, persons who will want to make your dream a reality (most young want to start alone, but if we work with other people with similar interests, someone also can mentor you).
Pilot-in-the plane	Focus on activities within your control, you must know that your actions will result in the desired outcomes—(imagine on a plane or even a driver collapses on a bus—do the things you can easily do, don't do things that you can't do or you will crash).
Bird-in-hand	Start with your means (don't wait for a perfect opportunity, start with what is already available)

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Training activities incorporate effectuation for each day of training and training module. Many activities also focused on skills not exclusive to effectuation (e.g., relationship-building, communication, and business

plan development). While most sessions did not explicitly name effectuation principles throughout, in general, training aligned with effectual approaches to entrepreneurship, with select activities noted below.



Figure 2. Select Activities from YEfL's Youth Entrepreneurship Program Training Modules 1-4²⁴

Figure 3. Select Activities from YEfL's Youth Entrepreneurship Program Training Modules 5-8²⁵



²⁴ Schmidt and Grauenkaer 2017.

H. STAKEHOLDER PERSPECTIVES OF EFFECTUATION

D.I Benefits of an Effectual Approach

During case study visits, training program staff and past and current bootcamp participants, offered their opinions on the effectiveness of YEfL's **effectuation-based** training. One staff member shared their experience teaching and incorporating **effectuation** into training, highlighting **bird-in-hand** components:

It is a program we try to bring ... young people to see as a mindset [and] as a way to leverage one's means ... to create opportunities. In societies ... we have things we can add value to as people and address disharmonies through our means ... in our societies and that can give us opportunities to create businesses.

D.I.I Feedback from Staff

Staff highlighted merits of an effectuation-based approach in helping youth understand their strengths:

Many think someone must push them to do things.... This model is to show people they can do something on their own ... shows them their potential ... [and] impact people in the business they are doing ... focus is on not waiting on the government or other people ... to do this thing that they can do on their own."

Trainers often emphasized how the **bird-in-hand** principle in particular resonated with them. In fact, **all staff identified bird-in-hand as the most powerful principle in training activities** because it is the easiest for youth to understand: "It is always easy for young people to practicalize ... because there's always something that they can do and they can hold on to, to start something."

Staff also shared the positive impact this principle can have beyond training program activities in terms of improving youth's self-efficacy and preparing them to engage in advocacy:

Effectuation ... is another stream of empowering people....**Effectuation** principles focus on yourself, all the events, models, activities are guiding and facilitating the individual to discover him or herself. [They are] able to use the strengths they have ... identify the resources available in their immediate environment. ... This is empowering. It's able to make young people come to the realization that I am worth something, I can make something of economic benefit from what I have ... As an entrepreneur doing business, you need to understand yourself, your abilities to withstand pressures, [and] to take risks.

D.I.2 Feedback from Participants

YEfL's training program graduates with successful businesses discussed starting small with business ideas within their means (bird-in-hand), addressing constraints (lemonade), and making network connections (crazy quilt). While graduates did not recall principles by name, they internalized effectual approaches, by choosing an idea "based on what they are good at (bird-in-hand)," and making friends business partners from other villages via training activities (crazy quilt).

Current participants perceived **effectuation** to contribute to learning and potential future business success. Most participants were in early business stages or interested in learning about entrepreneurship, thus their ability to apply **effectuation** to current business activities was limited. However, some participants changed business ideas to focus on ideas more **within their means (e.g., bird-in hand)** during training. Additionally, all participants had business action plans by the end of bootcamp. Businesses ranged from selling food and drinks to farming, mechanics, hairdressing, and education. One participant highlighted how trainings helped her look **within her means (bird-in-hand) and use social capital**

(crazy-quilt): [I] learned how to be creative, talk to other people, and bring some small thing to influence people to buy from me.

D.2 Challenges of an Effectual Approach

The only challenges cited by stakeholders were generalized obstacles to youth entrepreneurship, unrelated to the effectual approach. Participants and training staff alike shared concerns of lacking parental and financial support for youth business ideas, while mentioning how VSLAs addressed this common concern: Before the training, youth will say finance is a problem but with time, they are able to start something. Some staff perceived participant age was a primary reason for low parental support. But that could change once parents realize youth can help cover household expenses: They might get family support when they realize there will be economic benefits (paying medical bills, supporting siblings' school fees), [then] they are given more support.... At the tender age of 12–16, it's more difficult to do business all by yourself, even if you have the best idea. You will get some resistance from family.

Although program stakeholders did not highlight specific challenges of using effectuation in entrepreneurship training, staff in particular discussed how effectual concepts overlap with common concerns in business start-up that occur regardless of approaches to business development training. The majority of staff shared that many participants initially have unrealistic expectations and affordable loss addresses pre-conceived notions of entrepreneurship for participants who want to "start big" with their businesses. Staff expressed that is was crucial for youth to understand this principle to shift their mindset and make informed financially literate decisions about their business: For affordable loss, most people go and borrow money. … But because they don't have basic info, their business collapses and they are stranded. The affordable loss principle says do something that you can deal with.

Box I. Inclusion of Marginalized Groups in YEfL Programs In addition to focusing on rural youth of varying levels of income and education, YEfL staff noted the importance of targeted outreach to vulnerable subpopulations such as young women and people with disabilities (PWDs). Several staff shared that women participate at lower levels than men in training, but their participation rates are increasing and when they do participate, they are very successful and less likely to make risky business decisions: "As soon as they participate, they do very well with the businesses that they have... Women are not having collapsing businesses." Similar to recruiting women, staff emphasized challenges with engaging PWDs in training, because of their differing levels of ability. Staff stressed the need for targeted and intentional outreach and community engagement, sharing this process "has to be deliberate" with women's and PWD-related groups to increase involvement and build role model networks.

Despite discussions among stakeholders of finance concerns, staff shared effectuation's focus on working within an individual's means makes this approach uniquely suited to address financial challenges, prepare youth to address emerging business problems, and transfer lessons learned to other aspects of everyday life: Beyond just being an entrepreneur, once you get to understand the principle behind my means (bird-inhand), you can also easily apply it in other sectors of your life.

I. CONCLUSION

Throughout training activities, YEfL prepares participants for business development by emphasizing **effectual approaches**, highlighting

youth means (i.e., **bird-in-hand**) as the foundation for success, while incorporating soft skills. Training activities highlight youth agency and ability to make meaningful decisions to create the future they want by leveraging skills, networks, and collective resources. YEfL's effectuation-aligned training fosters support for youth changemakers to create an enabling environment for business growth that extends beyond training activities and participants. This sentiment was captured by one staff member's observation that expressed hope for the future of local youth: Those we are training will also pick up what they have learned and share [with others] ... they will also be the teachers.... Two girls ... they trained a few girls in Tamale ... to

start their business ... these people will train more ... people ... that are not part of catchment area will also benefit.

ANNEX II: MOZAMBIQUE CASE STUDY VISIT REPORT: DEVELOPING YOUTH ENTREPRENEURIAL MINDSETS USING EFFECTUATION THEORY



IdeiaLab #Baza Entrepreneurship Training participants and facilitators

A. INTRODUCTION

YouthPower Learning conducted two case study visits to organizations actively using **effectuation theory** in their youth entrepreneurship training programs. The main objective of the site visits was to better understand each organization's process of **incorporating effectuation principles** into their training program models. This case study presents findings from the youth entrepreneurship program in Maputo, Mozambique implemented through the Orange Corners incubator by IdeiaLab.

B. ENTREPRENEURSHIP TRAINING OVERVIEW

Founded in 2010 by two Mozambican women, IdeiaLab is a social enterprise fostering an enabling environment for entrepreneurs and micro, small, and medium enterprises. IdeiaLab offers training for individuals at all stages of business development pipeline (see Figure 1). The **effectuation-based** fourday #Baza (slang for the "Let's go!") training program supports individuals at the pre-incubation stage via the Dutch government's Orange Corners incubator, while ideation, incubator, and acceleration programs are offered for entrepreneurs who are ready to expand and further pilot their businesses. IdeiaLab facilitates additional entrepreneurship support including access to mentoring, finance, marketing, and technical assistance as well as Women Entrepreneurship and Demo Days to give participants business exposure. Although IdeiaLab is based in the urban capital of Mozambique, Maputo, the organization also works in rural areas of Mozambique and partners in Angola, Zimbabwe, and Tanzania. Participants are primarily urban and peri-urban youth and women and must be 18–35 years old and be enrolled in or finished with university. Several program staff run businesses and frame their entrepreneurial approach as a peer-learning model. Youth participants often learn about and are recruited for IdeiaLab programs via social media accounts, WhatsApp, and word of mouth. #Baza participants are not required to have a business idea to enroll, but all participants map ideas on a BMC, develop business pitches, and present orally at the training's culmination. #Baza participants can also access Orange Corners' training facilities and resources six months post training. While many participants complete multiple programs at IdeiaLab, program outcomes are only captured six months and one-year post training for later stage programs (e.g., incubation).



Figure 1. IdeiaLab Entrepreneurship Development Programs

C. USE OF EFFECTUATION THEORY DURING #BAZA

The #Baza program is composed of entrepreneurship and soft skills training activities based on various approaches including effectuation, lean start-up, andragogy, group dynamics, and humanistic psychology. Training activities are introspective and collaborative and focus on participants' experiences and group work to create organic networking opportunities, while targeting personal and business development.

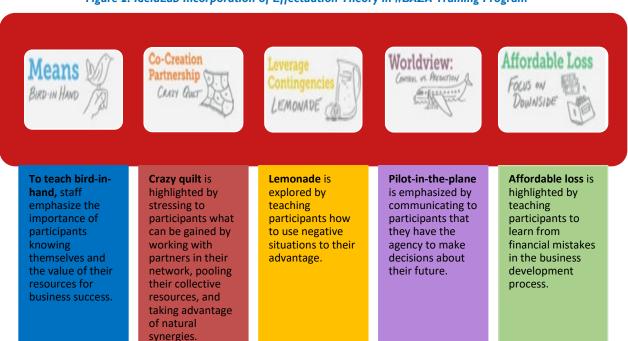


Figure 2. IdeiaLab Incorporation of Effectuation Theory in #BAZA Training Program²⁶

²⁶ Society for Effectual Action n.d.a.

Mention of **effectuation principles** were not always explicit in activities, and approaches to training were not unique to **effectuation-based** principles, although activities generally supported an **effectual approach** to entrepreneurship. **Effectuation principles** were implicit in the first three days of #Baza, while the fourth day consists of a graduation celebration and presentation with a certificate of training completion. The following sections highlights the use of **effectuation** in select training program activities.

Figure 3. IdeiaLab Incorporation of Effectuation Theory in #BAZA Training Program²⁷



Day 1: Introductions, Introspection, and Interests

In the Linha da Vida Activity, participants make a life timeline to identify the moments that brought them to where are today (bird-in-hand).

In the **Inventario Pessoal activity**, participants outline their skills, interests, and dreams (**bird-in-hand**) via an informal CV of personal and professional experiences and connections.



Day 2: Effectuation, Entrepreneurship Realities, and Collaborative Engagement

Effectuation principles are introduced, which participants explore via myths and realities of entrepreneurship in the **Empreendedoris mo o que e empreendedorismo activity.**

Participants create a **Sociogram** of network member closeness and influence (**bird-in-hand**) and assess their means with other participants via the Contrucao do Persona activity (**bird-in-hand; crazy quilt**).



Day 3: Idea Generation, Pitching, and Test Driving

Participants outline business ideas, customer base, resources acquired and needed in the Idealoop activity (bird-in-hand, crazy quilt).

For their one minute business pitch, participants solicit peer feedback on business ideas and come up with a business plan in the **Action Plan activity**, in preparation to test-drive their ideas and share their experiences (**bird-in-hand; crazy quilt**).



Day 4: Business Model Planning and Development

Participants report back on their experiences testing business protypes and revisit Action Plans to identify areas of improvement while seeking peer feedback (bird-in-hand; crazy quilt, lemonade, afforable loss, pilot-in-the-plane).

Participants map experiences onto a **Business Model Canvas** and discuss lessons learned via test drive experiences as well as next steps in business growth (**bird-in-hand; crazy quilt, lemonade, affordable loss, pilot-in-the-plane**).

D. STAKEHOLDER PERSPECTIVES OF EFFECTUATION

D.I Benefits of an Effectual Approach

Program stakeholders shared feedback on the utility of integrating **effectuation** into training activities, often highlighting how **effectuation is suited for individuals who feel entrepreneurship is not a viable career pathway** and how it "activates" them to think differently about their resources (**bird-in-hand**):

Most people think they cannot do entrepreneurship, because they do not have ... resources ... With effectuation, they realize they can start small (**bird-in-hand**). This theory is good to help youth to deal

²⁷ Fakir and Pereira 2018.

with acceptance ... it's also mindset ... how we can use effectuation to push people towards commitment? For example, millennials like quick wins ... effectuation says start small, learn from process, enjoy your ride.

D.I.I Feedback from Staff

Staff often mentioned strengths of **effectuation-aligned** youth entrepreneurship training and its ability to challenge participants' expectations of necessary finance for start-up for business development:

People have few resources [and] think about financial support. To be entrepreneurs, you have to be smart [and] aware that you need only a little money ... you can do a lot with the little ... you have (**bird-in-hand**).

In general, the **effectuation principles** are novel to participants and aspects of the theory, such as **pilotin-the-plane**, forces participants to think about their own agency and autonomy:

They are the owners of their lives; they should set goals and seek to achieve them. There are already fixed ideas, the families get you into that, they lose the feeling that **they own their future** (**pilot-in-the-plane**); it's important for us to reinforce in the training.

Through training exercises, participants' reevaluate their perceptions of their strengths:

People tend to not value enough **the assets** that they have ... you could see that everyone was surprised to recognize they have **assets**...even when they have CVs, they put academic experience on there but not ... **strengths** that can help them advance. They ... look at, "what are my **resources** (bird-in-hand)?"

D.I.2 Feedback from Participants

Past #Baza program participants included individuals who pursued businesses in food, alcohol, leadership, and skill development, who continued to apply **effectuation-aligned approaches**. Although graduates did not explicitly name principles, their reflection on training experiences highlighted their internalization of principles, **bird-in-hand**, in particular:

BAZA gathered all the factors . . . that were useful. I discovered that to be an entrepreneur, [I] didn't need money, [I] could start with what I have (**bird-in-hand**). They taught us that we could use our contact with the people close to us.... I didn't need to rent or hire a system, I would start with writing letters [requesting] places for our seminars. For example, we are lucky that [local organization] gave us the space for free [for recent business-related activities]. They provided notebooks [and] the other person paid for certificates. They liked our training so much, they said "anytime you want to do something, the room is already available." I started not thinking about costs but just solutions instead (**lemonade**).

Participants mentioned the **value of knowing themselves** and **using their own network** to facilitate business development (**bird-in-hand**). Participants also expressed the novelty of finding business partners and value of co-creation (**crazy quilt**) via training activities:

What was surprising to me was the idea of collaborators. I'd never thought to pay attention to those who support me. I understood this only as "help," but not people that are actually working with me.

D.2 Challenges of an Effectual Approach

Challenges noted by stakeholders were not specific to an effectual approach, but were rather frequently cited barriers to youth entrepreneurship. One commonly cited obstacle related to financial resources and management. In regards to **effectuation**, staff emphasized that while the theory suggests it's "not about money," entrepreneurs need the financial support to grow their businesses:

It is not easy to get financial support for them. [There are] very few financial products that are targeting young entrepreneurs. You can find finance for later stage businesses, but, if they need capital to start.

Staff shared that participants have trouble getting financial support as well as saving, because they lack financial literacy and understanding of sales, revenue, and profits. Thus, financial decisionmaking was a commonly cited issue relating to **affordable loss**:

I had a business advisor, when he gets paid, he will share all profits with the other person in the business, but he should put money aside for reinvestment. We tell participants to define their salary from the getgo and then just take that and keep the rest of the money for reinvestment.

Stakeholders highlighted lack of social support in youth business pursuits and "social pressures" encouraging them "to get formal corporate jobs," even when they have successfully established businesses. Staff and partners alike said that **neither the entrepreneurial nor the effectual mindset is embedded in Mozambican culture**, thus creating difficulties in identifying role models for youth:

[There are] networking challenges – people need a proper contact to get into new sectors. [They need] to listen and to be interested and to give opportunity and advice. We push this a lot with them and we give them contacts that they can explore for mentoring and business advisors.

Despite these challenges, stakeholders expressed that effectuation resonates with youth because there is a strong focus on starting small with resources within youths' means. Staff perceived an effectual approach as well suited to meet participants' business needs while also addressing emerging challenges in business start-up as evidenced by a resilient participant who applied effectuation to move his business forward and embrace issues of partner buy-in (lemonade):

I entered with a team of five outside, but now they do not manifest any interest in the project. This is challenging, to find people that are aligned, yes I think now I am a team of one ... I'm learning to deal with the unforeseen. If they are not interested, I cannot stop it, since they don't want to be part of it. This is my baby, my dream. I have to continue to find a way out to find a solution.

E. CONCLUSION

Throughout training activities, IdeiaLab staff highlighted participant **assets** by acknowledging via **effectual approaches** that their **strengths** (i.e., **bird-in-hand**) are the fundamental building blocks for business success. Youth are challenged to identify their **assets** to increase their autonomy and support business growth. Facilitators emphasized youth's potential to serve as changemakers directly responsible and capable of bringing about positive change beyond their businesses in the local community and in society as a whole. IdeiaLab's **effectual approach** harnesses the collective capacity of their participants by fostering a network of interconnected youth entrepreneurs that support shared success among peers in business development. Facilitators and participants alike shared how they find meaning and satisfaction in the training activities that "fill you with purpose" and how you become "family" with participants who openly share achievements, challenges, and dreams with fellow participants, who often become friends and business partners. The power of this approach and its impact was expressed by one participant who

left training activities with a renewed passion to pursue her dreams for her business: With this program, I have learned more than just I am fine—they woke up something that was sleeping in me.... I did not know it was here and ... now I am waking up for life. If I want something, I will fight for that, and I will fight for what I want.

ANNEX III: OVERVIEW OF COMMON EE&T METHODS

Entrepreneurial Method	Description
Bricolage	Appropriated by Baker and Nelson (2005) from the field of sociology, bricolage is a methodology based on the idea that entrepreneurs make do by applying combinations of the resources at hand to new problems and opportunities.
Business Model Canvas (BMC)	Developed by Alex Osterwalder, Yves Pigneur, and Tim Clark (2008), the BMC is a template for developing new or documenting existing business models and is comprised of nine building blocks.
Business Planning*	Business planning is "a process of ascertaining a series of potential courses to be taken by the firm, determining the firm's position as a result of each potential course, comparing and weighing this position for all actions, and, on the basis of the evaluation, selecting the course of action to be followed." ²⁸
Design Thinking*	"Design thinking is a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity." ²⁹
Discovery-driven Planning*	Conceived by Rita McGrath and Ian MacMillan in 1995, discovery-driven planning consists of a set of disciplines and tools "to systematically uncover, test, and (if necessary) revise the assumptions behind a venture's plan." ³⁰
Effectuation*	Developed by Saras Sarasvathy in 2001, effectuation is a logic of entrepreneurial expertise that posits that successful entrepreneurs start with their means; in the process of deploying them, goals gradually emerge. Consisting of five principles, effectuation rests on the premises that the future is unpredictable and entrepreneurs actively engage in a process of market creation. ³¹
Lean Start-up*	Created by Eric Ries (2011), lean start-up is a methodology for business and product development that emphasizes fast iteration and customer insight.
Prescriptive Entrepreneurship [*]	Proposed by James O. Fiet (2008), prescriptive entrepreneurship provides guidelines on what entrepreneurs should do to increase their chances of successful venture creation. ³²

Table 6 Overview of Common Entrepreneurial Methods

* Denotes methods studied by Mansoori and Lackeus (2019)

²⁸ Steinhoff 1971.

²⁹ Brown 2008.

³⁰ Gallo 2017.

³¹ Society for Effectual Action n.d.b.

³² Fiet 2008.

ANNEX IV: EXTENDED RESEARCH METHODOLOGY

Prior to research activity implementation, YouthPower Learning developed protocols to guide data collection activities. The following section includes in-depth background regarding the technical approach to completion of the literature review, KIIs, and case study visits.

A. LITERATURE REVIEW METHODOLOGY

This section of the report details the guiding research questions of YouthPower Learning's study, an overview of the literature methodology, and a description of the decision-making process for selecting relevant sources for review and inclusion. While programmatic definitions of youth served in training programs varied, this study focused on the USAID definition of youth (ages 10–29). Literature reviewed spanned the years of 2001–2019, following the release of Sarasvathy's first article on effectuation theory in 2001.

YouthPower Learning was tasked with answering the following research questions to inform the scope of this report:

- How is effectuation theory currently being used in preparing young entrepreneurs globally?
- Is effectuation-based youth programming being used in Africa? If so, what are key program models?
- What are the benefits and challenges of using effectuation theory in programming? Are there benefits to using this model versus others?
- How is effectuation theory being used in training and what are the results of integrating this model into youth entrepreneur training programs?
- Does effectuation theory in entrepreneurship training help to promote access of youth to start-up resources? What are key strategies that the theory promotes to link youth to start-up resources?

The SOW prioritized identifying programs implemented in developing countries, particularly Sub-Saharan Africa, through the peer-reviewed literature or KIIs with effectuation practitioners. Throughout the research process, YouthPower Learning collaborated with USAID/Africa Bureau to discuss the applicability and alignment between findings from the peer-reviewed literature and feedback from representatives in ongoing training programs informed by effectuation principles. Literature review activities and KIIs were completed simultaneously and YouthPower Learning determined these questions were addressed most comprehensively through KIIs, reports in the grey literature, and reports from organizations participating in KIIs. These results supplement the findings of the literature review and capture issues related to program capacity, skills, and time management that may not be otherwise highlighted in the peer-reviewed literature. Findings from primary data collection activities include program results and discussions regarding program stakeholder and participant experiences covered in peer-reviewed literature.

In reviewing potential sources for inclusion in the literature review, YouthPower Learning focused on effectuation theory as it applies to entrepreneurship. Those not directly related to entrepreneurship were not included in the final list of references. Greater emphasis was placed on more widely cited articles, unless they specifically focused on applications of effectuation theory in an African context. Google was used as the primary search engine for identifying appropriate sources, which directed YouthPower Learning to various relevant articles, reports, and presentations. Terms used during key word searches included the following: "effectuation," "effectuation theory," "effectuation theory entrepreneurship," "effectuation theory Africa," "effectuation theory youth," "effectuation theory students," and "effectuation theory new ventures." Bibliographies of sources were also reviewed for relevant literature, in addition to

a list of published research papers on effectuation theory on effectuation.org, a site curated by the Society for Effectual Action. This site was reviewed by YouthPower Learning and key word searches were applied to the list of articles; however, the majority of sources on this site were not relevant to the focus of this review. Reports related to the use of effectuation theory models in youth entrepreneurship training were also included in the review, as were reports shared by youth-serving organizations that participated in Klls on their experiences incorporating and implementing effectuation theory models in youth entrepreneurship programs. Relevant references were tracked and reviewed by YouthPower Learning as well as effectuation theorist, Dr. Saras Sarasvathy, to ensure all appropriate sources were included.

B. KEY INFORMANT INTERVIEW METHODOLOGY

This section of the report includes the KII facilitation guide used for structuring in-depth discussions with researchers and practitioners working with youth entrepreneurship training programs that incorporate elements of effectuation theory. Interviews were completed remotely by YouthPower Learning from July through September of 2019. A list of KII participants is detailed in Annex IV of the report.

C. CASE STUDY VISITS METHODOLOGY

During the case study visits, study research questions were addressed through the following activities:

- KIIs with program staff, to understand how the organization is using effectuation theory in their youth entrepreneurship programs and the successes and challenges of the approach;
- KIIs with program stakeholders (e.g., business mentors, private sector partners), to ascertain how successfully the youth entrepreneurship program is supporting youth to start businesses;
- KIIs with current youth entrepreneur training program participants and program graduates, to understand their entrepreneurial journeys and determine the extent that entrepreneurship training based on effectuation theory and its core principles has helped them be successful in business; and
- Observations of entrepreneurship trainings based upon effectuation theory.

Protocols for the case study visit activities with relevant stakeholders are detailed in Annex V.

ANNEX V: RESEARCH ACTIVITY RESPONDENTS

Organization	Participant Name	Location
Alianca Empreendedora	Helena Casanovas Vieira	Sao Paolo, Brazil
AMAN-Center for Entrepreneurial Development	Shahid Qureshi	Karachi, Pakistan
Entrepreneurial Development Network Asia-Myanmar	Jarrod Ormiston	Maastricht, Netherlands
FATE Foundation	Oge Nnaife	Lagos, Nigeria
Ghana Friends	Lise Grauenkaer	Aarhaus, Denmark
IdeiaLab	Manuel Rego	Maputo, Mozambique
Ulster University	Steve Pollard	Belfast, Northern Ireland
University of Canterbury Business School;	Mary Barrett,	Wollongong, Australia,
University of Wollongong NSW	Nadeera Ranabahu	Christchurch, New Zealand
University of Virginia Incubator Lab	David Touve	Charlottesville, Virginia
University of Virginia Incubator Lab	Jason Brewster	Charlottesville, Virginia
Youth Business International	Chris Massey	London, England
Youth Business Trinidad and Tobago	Jonathan Khan	Chaguanas, Trinidad

Table 7 Key Informant Interview Participants

Table 8 Case Study Visits: Key Informant Interview Participants

Key Informant Interviews	YEFL/GDCA	IdeiaLab	Total
Training Program Staff	8	4	12
Program Partners	0	2	2
Past Program Participants	2	3	5
Current Program Participants	5	5	10
Total	15	14	28

ANNEX VI: RESEARCH PROTOCOLS

A. Key INFORMANT INTERVIEW PROTOCOL

KII INFORMATION		Date://
Name of Facilitator:		
Name of Recorder:		
Name of Respondent:		
Respondent's Organization:	Respondent's Locatio	n:

INTRODUCTION

Hi! Thank you so much for agreeing to talk with us. I am [NAME] and this is [RECORDER'S NAME] and we work for Making Cents International, the implementer of USAID's YouthPower Learning project. YouthPower Learning is a global activity that generates and disseminates knowledge about the implementation and impact of positive youth development (PYD) in international youth development. We are leading research, evaluations, and events designed to build the evidence base and inform the global community about how to transition young people successfully into productive, healthy adults.

USAID has asked us to conduct a study to support its education programs seeking to prepare and mentor youth in effective entrepreneurship skills. Specifically, they have asked us to look at a particular entrepreneurship theory called effectuation theory. We're looking to understand how effectuation theory is currently being used to prepare young entrepreneurs globally and in Africa, and what are the benefits and challenges of using effectuation theory in programming.

We understand that your organization has considered using, or is currently using, effectuation theory as part of your youth entrepreneurship programming, and we are looking forward to learning from your organization's experience. During this interview, I will be asking you a series of questions related to the successes and challenges of your organization in incorporating effectuation theory into your programs, while my colleague [RECORDER'S NAME] will be taking notes. We will use the information you provide us to generate a report and recommendations for USAID regarding how effectuation theory is currently being used in preparing young entrepreneurs globally and to raise awareness among USAID Washington staff, Africa Missions, and implementing partners on effectuation theory.

Thank you for agreeing to speak with us. Do you have any questions for us before we start? [Record both questions raised by the informant as well as responses] If not, then let's get started!

KEY INFORMANT INTERVIEW GUIDE

- I. To start, could you tell us about your organization and how you currently serve youth?
 - Briefly describe the services your organization provides.
 - What location(s) does your organization cover (e.g., countries, regions)?
 - What is your organization's definition of youth?
- 2. Briefly describe how your organization is supporting youth entrepreneurship.
 - What are the components of your youth entrepreneurship training and/or mentoring program?
 - Can you please describe the average young person who participates in your program (age, gender, education status, work experience, rural vs. urban)?
 - In your organization's entrepreneurship program, do youth start businesses as individuals, in teams, or a mix of the two?
- 3. Has your organization integrated effectuation theory into your youth entrepreneurship programs? [Yes or No only]
 - If Yes, continue to question 4
 - If No, continue to question 9
- 4. How did your organization find out about effectuation theory and why did you decide to integrate it into your youth entrepreneurship program?
 - Did your program receive technical assistance or capacity building related to effectuation theory (e.g., from Youth Business International or another organizations)?
 - Before using effectuation theory in your entrepreneurship training, were you basing your training on any other theories?
 - Did your organization consider other models before choosing effectuation theory? Why did you choose this theory over others?
- 5. What have you found to be the benefits and challenges of using effectuation theory in programming for young entrepreneurs? Are there benefits to using this model versus others?
 - What aspects of effectuation theory did your organization choose to include in your program? Are there particular components of the theory that are more useful than others?
 - How well did it go training the trainers and other program staff on the theory (or your entrepreneurship program with the theory integrated in)?
 - Did your organization use a formal Training of Trainers (TOT) approach to onboard trainers and staff to the theory? If so, what has worked well in the TOT setting?
 - Does entrepreneurship training based on effectuation theory overlap with soft skills training programs? If yes, how?

- 6. In addition to providing entrepreneurship training based on effectuation theory, is your organization supporting youth entrepreneurs to access start-up resources? If so, how?
 - Does entrepreneurship training based on effectuation theory support youth entrepreneurs to access start-up resources?
 - To what extent is entrepreneurship training based on effectuation theory compatible with formalized the business plans required to access finance from financial institutions?
- 7. What results, if any, has your organization seen of integrating this model into youth entrepreneur training programs?
 - How does your organization measure the impact of its youth entrepreneurship programs?
 - Do results of the program vary based on gender, age, work experience, education status, or other factors? [probe according to the typologies of youth entrepreneurs as presented in the YouthPower Action evidence report: "What Works in Entrepreneurship Education and Training Programs for Youth?"]
- 8. Is there anyone you would recommend we talk to, to learn more about effectuation theory and how it is being used to support youth entrepreneurs globally and in Africa? Are there any relevant documents you could share about your organization's entrepreneurship program and its results or on effectuation theory?

• Ask for contact information or an email connection to relevant people

Skip to Question 11 to conclude the interview.

- 9. How did your organization find out about effectuation theory and why did you decide <u>not</u> to integrate it into your youth entrepreneurship program?
 - Did your program receive technical assistance or capacity building related to effectuation theory (e.g., from Youth Business International)?
 - Has your organization considered other entrepreneurship models? Which do you think is most helpful for your program?
 - Are there specific aspects of effectuation theory that make it challenging to implement?
- 10. What challenges do you see about using effectuation theory as part of youth entrepreneurship programs?
 - Probe for any challenges related to:
 - Inapplicability to particular context (e.g., rural, non-dynamic economies) or industries (e.g., agricultural commodity production, manufacturing)
 - Inapplicability to youth (broadly) or specific youth subgroup (e.g., survival entrepreneurs, uneducated youth, resource-poor youth)
 - \circ $\;$ Lack of practical training tools and resources for implementation
 - Incompatibility with organization's trainers
 - Lack of focus on accessing start-up resources

II. Do you have any questions for us?

[Record both questions raised by the informant as well as responses]

Thank you for taking the time to speak with us today. We greatly appreciate your openness in sharing your organization's experience with effectuation theory for youth entrepreneurship programming. We have learned a lot from you, and the information you shared will be helpful for our final report.

As we continue our study, would you be willing to answer any follow-up questions via email?

When the final report is published, we will send it to you.

B. CASE STUDY VISIT: TRAINING PROGRAM STAFF KEY INFORMANT INTERVIEW PROTOCOL

KII INFORMATION	Date://
Name of Facilitator:	
Name of Recorder:	
Respondent Name:	
Respondent's Organization:	Respondent's Location:
Observations / comments:	

INTRODUCTION

Hi! Thank you so much for agreeing to talk with us. I am [NAME] and this is [RECORDER'S NAME] and we work for Making Cents International, the implementer of USAID's YouthPower Learning project. YouthPower Learning is a global activity that generates and disseminates knowledge about the implementation and impact of positive youth development (PYD) in international youth development. We are leading research, evaluations, and events designed to build the evidence base and inform the global community about how to transition young people successfully into productive, healthy adults.

USAID has asked us to conduct a study to support its education programs seeking to prepare and mentor youth in effective entrepreneurship skills. Specifically, they have asked us to look at a particular entrepreneurship theory called effectuation theory. We're looking to understand how effectuation theory is currently being used to prepare young entrepreneurs globally and in Africa, and what are the benefits and challenges of using effectuation theory in programming.

We know that your organization is using effectuation theory as part of your youth entrepreneurship programming, and we are looking forward to learning from your organization's experience. During this interview, I will be asking you a series of questions related to the successes and challenges of your organization in incorporating effectuation theory into your programs, while my colleague [RECORDER'S NAME] will be taking notes. This interview is completely voluntary and you are not required to answer any questions you do not feel comfortable discussing. You may discontinue participation in this interview at any time without penalty. We will use the information you provide us to generate a report and recommendations for USAID regarding how effectuation theory is currently being used in preparing young entrepreneurs globally and to raise awareness among USAID Washington staff, Africa Missions, and implementing partners on effectuation theory. Thank you for agreeing to speak with us. Do you have any questions for us before we start? [Record both questions raised by the informant as well as responses] If not, then let's get started!

- I. To start, could you tell us what your role is at [NAME OF ORGANIZATION]?
 - Could you describe your role at [NAME of ORGANIZATION]?
 - How long have you worked at [NAME OF ORGANIZATION]? How long have you been doing this training?
 - How do you find young people to participate in these trainings?
 - What is your district? How many youth are there? How often do you do training? How many youth have gone through the boot camp and in what years? Are you on an area council and if so which one? How do you select youth to participate?
- 2. Briefly describe how your organization is supporting youth entrepreneurship.
 - What are the components of your youth entrepreneurship training and/or mentoring program?
 - Can you please describe the average young person who participates in your program (age, gender, education status, work experience, rural vs. urban)?
 - In your organization's entrepreneurship program, do youth start businesses as individuals, in teams, or a mix of the two?
 - In terms of the overall programming, what comes before this and what comes after this training?
- 3. Why did [YOUR ORGANIZATION] integrate effectuation theory into your youth entrepreneurship program?
 - Did your program receive technical assistance or capacity building related to effectuation theory (e.g., from Youth Business International or another organizations)?
 - Before using effectuation theory in your entrepreneurship training, were you basing your training on any other theories? Were you involved in the older models of the training?
 - Did your organization consider other models before choosing effectuation theory? Why did you choose this theory over others?
- 4. How has [YOUR ORGANIZATION] integrated effectuation theory into your youth entrepreneurship program?
 - Describe how your youth entrepreneurship program incorporates effectuation theory.
 - Does your program couple effectuation theory with any other entrepreneurship approaches (e.g., lean start-up, business model canvas)?
 - Did [YOUR ORGANIZATION] create or adapt new training curriculum integrating effectuation theory? If so, can you please describe how this was done? [As possible, look through training curriculum together]
 - Did [YOUR ORGANIZATION] create or adapt a new mentoring approach integrating effectuation theory? If so, can you please describe how this was done? [As possible, look through mentoring toolkit together]
 - What do you think about effectuation as a theory? Do you think it is important to have in training? What do you think about how this program incorporates effectuation?

- 5. How well has the process gone with integrating effectuation theory into your youth entrepreneurship program?
 - How well did it go training the trainers and other program staff on the theory (or your entrepreneurship program with the theory integrated in)? How were you trained on this model?
 - Did your organization use a formal Training of Trainers (TOT) approach to onboard trainers and staff to the theory? If so, what has worked well in the TOT setting?
 - What costs, if any, have been associated with using this theory in your training?
- 6. What have you found to be the benefits and challenges of using effectuation theory in programming for young entrepreneurs? Are there benefits to using this model versus others?
 - What aspects of effectuation theory did your organization choose to include in your program? Are there particular components of the theory that are more useful than others? [Probe for application of the five principles: affordable loss ('focus on downside'), co-creation partnership ('crazy quilt'), leverage contingencies ('lemonade'), worldview ('control vs. prediction'), and means ('bird-in-hand')]
 - How does entrepreneurship training based on effectuation theory align with soft skills and other training programs you also offer?
- 7. In addition to providing entrepreneurship training based on effectuation theory, is your organization supporting youth entrepreneurs to access start-up resources? If so, how?
 - Does [YOUR ORGANIZATION] provide youth entrepreneurs with any start-up materials or link them to funding organizations (e.g., microfinance institutions)?
 - To what extent is entrepreneurship training based on effectuation theory compatible with formalized business plans required to access finance from financial institutions?
- 8. What results, if any, has your organization seen of integrating this model into youth entrepreneur training programs?
 - How does your organization measure the impact of its youth entrepreneurship programs?
 - Do results of the program vary based on gender, age, work experience, education status, or other factors? [probe according to the typologies of youth entrepreneurs as presented in the YouthPower Action evidence report: What Works in Entrepreneurship Education and Training Programs for Youth?]
 - How many trainings have you done? Would you be willing to share your training guide with us?
 - Where do you see these trainings going in the future in terms of scaling up and supporting this model? Do you have any advice for other people trying to implement effectuation?
- 9. Are there any relevant documents you could share about your organization's entrepreneurship program and its results or on effectuation theory?
 - [Ask for soft or hard copies of training curriculum, mentoring toolkit, program descriptions, and/or program reports with results]

- 10. Are there any other people involved in your youth entrepreneurship program that you would recommend we talk to while we are here (e.g., business mentors, private sector partners)?
 - [Get contact information for individuals as necessary]
- II. Do you have any questions for us?

[Record both questions raised by the informant as well as responses]

Thank you for taking the time to speak with us today. We greatly appreciate your openness in sharing your organization's experience with effectuation theory for youth entrepreneurship programming. We have learned a lot from you, and the information you shared will be helpful for our final report.

As we continue our study, would you be willing to answer any follow-up questions via email?

When the final report is published, we will send it to you.

Bring a USB drive to collect any digital materials they may be willing to share.

C. CASE STUDY VISIT: PROGRAM PARTNER KEY INFORMANT INTERVIEW PROTOCOL

KII INFORMATION		Date://
Name of Facilitator:		
Name of Recorder:		
Respondent Name:		
Respondent's Organization:	Respondent's Locatio	n:
Observations / comments:		

INTRODUCTION

Hi! Thank you so much for agreeing to talk with us. I am [NAME] and this is [RECORDER'S NAME] and we work for Making Cents International, the implementer of USAID's YouthPower Learning project. YouthPower Learning is a global activity that generates and disseminates knowledge about the implementation and impact of positive youth development (PYD) in international youth development. We are leading research, evaluations, and events designed to build the evidence base and inform the global community about how to transition young people successfully into productive, healthy adults.

USAID has asked us to conduct a study to support its education programs seeking to prepare and mentor youth in effective entrepreneurship skills. Specifically, they have asked us to look at a particular entrepreneurship theory called effectuation theory. We're looking to understand how effectuation theory is currently being used to prepare young entrepreneurs globally and in Africa, and what are the benefits and challenges of using effectuation theory in programming.

We understand that you are affiliated with [NAME OF ORGANIZATION], which is using effectuation theory as part of their youth entrepreneurship programming. We are looking forward to learning more about how you collaborate with [NAME OF ORGANIZATION] as part of that program. During this interview, I will be asking you a series of questions related to this topic, while my colleague [RECORDER'S NAME] will be taking notes. This interview is completely voluntary and you are not required to answer any questions you do not feel comfortable discussing. You may discontinue participation in this interview at any time without penalty. We will use the information you provide us to generate a report and recommendations for USAID regarding how effectuation theory is currently being used in preparing young entrepreneurs globally and to raise awareness among USAID Washington staff, Africa Missions, and implementing partners on effectuation theory. Thank you for agreeing to speak with us. Do you have questions before we start? [Record questions raised by the informant and responses] If not, let's get started!

- I. To start, [if unknown] could you tell us where you work and what your job title is?
 - Could you describe your role at [NAME of ORGANIZATION]?
 - How long have you worked with [NAME OF ORGANIZATION]?
- 2. Briefly describe how you are collaborating with [NAME OF ORGANIZATION] to support youth entrepreneurship.
 - How are you linked with [NAME OF ORGANIZATION] on youth entrepreneurship? What is your connection to each other on this issue?
 - How familiar are you with [NAME OF ORGANIZATION'S] youth entrepreneurship program? [Probe for level of familiarity with training curriculum and/or mentoring toolkit, overall programmatic model]
- 3. How familiar are you with effectuation theory, and how [NAME OF ORGANIZATION] has incorporated it into their youth entrepreneurship program?
 - Do you know how their youth entrepreneurship program incorporates effectuation theory?
 - What is your understanding of effectuation theory?
- 4. What have you found to be the benefits and challenges of using effectuation theory in programming for young entrepreneurs? Are there benefits to using this model versus others?
 - In your opinion, how well does effectuation theory work to train youth entrepreneurs?
 - What do you see as the strengths and weaknesses of the theory?
 - Are there particular components of the theory that are more useful than others? [Probe for usefulness of the five principles]
 - How does entrepreneurship programming based on effectuation theory compare to other entrepreneurship theories you may be familiar with?
 - How does entrepreneurship training based on effectuation theory align with other training programs you're involved in at [NAME OF ORGANIZATION] or others you've been involved with previously?
- 5. Are you supporting youth entrepreneurs to access start-up resources? If so, how?
 - Do youth entrepreneurs need to mobilize start-up resources when trained using effectuation theory?
 - Does [NAME OF ORGANIZATION] provide youth entrepreneurs with any start-up materials or link them to funding organizations (e.g., microfinance institutions)?
 - To what extent is entrepreneurship training based on effectuation theory compatible with formalized business plans required to access finance from financial institutions?

- 6. What results, if any, have you seen related to using effectuation theory in youth entrepreneurship programs?
 - Have you seen any youth entrepreneurs successfully start businesses based upon [NAME OF ORGANIZATION'S] youth entrepreneurship program? What do you think have been their keys to success?
 - Have you seen that results of the program vary based on youth's gender, age, work experience, education status, or other factors? [probe according to the typologies of youth entrepreneurs as presented in the YouthPower Action evidence report: What Works in Entrepreneurship Education and Training Programs for Youth?]
- 7. Are there any other people involved in your youth entrepreneurship program that you would recommend we talk to while we are here (e.g., business mentors, private sector partners)?
 - [Get contact information for individuals as necessary]
- 8. Do you have any questions for us?

[Record both questions raised by the informant as well as responses]

Thank you for taking the time to speak with us today. We greatly appreciate your openness in sharing your experience with effectuation theory for youth entrepreneurship programming. We have learned a lot from you, and the information you shared will be helpful for our final report.

As we continue our study, would you be willing to answer any follow-up questions via email?

When the final report is published, we will send it to you.

Bring a USB drive to collect any digital materials they may be willing to share

D. CASE STUDY VISIT: YOUTH ENTREPRENEUR KEY INFORMANT INTERVIEW PROTOCOL

KII INFORMATION		Date://
Name of Facilitator:		
Name of Recorder:		
Respondent Identification Number:		
Respondent's Organization:	Respondent's Locatio	n:
Observations / comments:		

INTRODUCTION

Hi! Thank you so much for agreeing to talk with us. I am [NAME] and this is [RECORDER'S NAME] and we work for Making Cents International, the implementer of USAID's YouthPower Learning project. YouthPower Learning is a global activity that gathers and shares information related to how to help young people successfully grow into productive, healthy adults.

USAID wants us to help them learn how best to prepare and mentor African youth to become entrepreneurs. Given your success as a youth entrepreneur, we wanted to talk to you to learn more about how you have been able to be successful, and the process you took to start your own business. We are looking forward to learning from your experience.

During this interview, I will be asking you a series of questions related to your entrepreneurial journey, while my colleague [RECORDER'S NAME] will be taking notes. People often say very helpful things in these discussions and we want to make sure we don't miss any of the important insights you will provide for us! You do not have to participate in the interview. Even if you agree to participate now, you may stop participating at any time or refuse to answer any question. Refusing to be part of the interview will not hurt you in any way and will not affect your participation in or the services you receive from [NAME OF ORGANIZATION]. We will not record or use your name for the purpose of this interview. Instead, we will use the information you provide us to generate a report and recommendations for USAID on how they can better support African youth to become entrepreneurs.

Will you join us today for this discussion? [Seek verbal consent from the participant before continuing.]

Thank you for agreeing to speak with us. Do you have any questions for us before we start? [Record both questions raised by the informant as well as responses] If not, then let's get started!

KEY INFORMANT INTERVIEW GUIDE

Demographic Information: We would now like to spend approximately 5 minutes collecting individual information from each of you. My colleague ______ and I will fill out an individual form for each of you that gives us a bit more detail about some of your basic background. [Complete the form individually, in a private place out of the hearing range of others.]

Sex: () Female () Male () Do not identify as male or female Age:

Marital status?

- () Married
- () Partnered (not married, co-habitating)
- () Unmarried / Unpartnered

If Unmarried, or un-partnered, have you been married/partnered previously? () Yes () No

Do you have children?

```
() Yes If yes, how many: () / () 2 () 3 () 4 or more
```

() No

What formal educational level have you completed?

```
(Grade)
```

Are you currently enrolled in a formal education program:

() Enrolled If enrolled, please provide grade level_____

() Not enrolled

Aside from this program, over the past two years have you been enrolled in another *non-formal* education program:

() Enrolled If enrolled, please describe program type _____

() Not enrolled

What is your employment status:

- () Formal employment If formally employed, list type of employment
- () Informal employment **If** *informally* employed, list type of employment
- () Not employed, Not looking for work

() Not employed, Looking for work

() Unable to work [please indicate reason why] _____

COMMENTS:

- I. To start, could you tell us a bit about yourself?
 - How old are you and where do you live (general)?
 - What level of education have you reached?
 - What has your work experience been to date?
- 2. How did you get involved with [NAME OF ORGANIZATION]?
 - How long have you been part of their programs?
 - What programs at [NAME OF ORGANIZATION] have you been part of?
 - What made you want to participate in [NAME OF ORGANIZATION'S] youth entrepreneurship program?
- 3. Tell me about your business when did you start it and what do you sell?
 - Can you please describe your product or service or ideas you have for your future business?
 - Who is your target market for your product or service?
- 4. How did you decide to start this business, and what steps did you take to start it?
 - Had you started any businesses before your current business? If you have not started a business yet, what steps are you planning to take first?
 - Why did you choose/why are you choosing this particular business to start?
 - Was your current business your original idea or did it evolve along the way? If so, how?
 - Describe the first step you took to start your business. Why did you start this way?
 - How did you find out if this was a viable business idea? [Probe for if a causation or effectuation model was used]
- 5. What support did [NAME OF ORGANIZATION] give to help you start your business? What support did you find the most helpful?
 - Did you participate in any entrepreneurship training? Did you participate in any training before this training?
 - What concepts during the entrepreneurship training were the most helpful to you? [probe for familiarity and useful of effectuation theory principles] Was anything surprising to you during the training? What are your opinions on the five principles (e.g. bird-inhand, lemonade, crazy-quilt, pilot-in-the-plane, affordable loss)? Were any of these particularly helpful for your learning?)
 - Did you receive any business mentoring support? What kind of business mentoring support do you think would be helpful?
 - What advice did business mentors provide that was the most helpful? [probe for use of effectuation theory principles] What kind of advice do you think would be helpful?

- 6. Did you initially have the resources you needed to start your business? If not, how did you access the resources you needed for your business?
 - Were you able to start your business with the resources you had on hand?/How do you think the training will help you start a business with your resources on hand?
 - Did [NAME OF ORGANIZATION] provide start-up materials or link you with organizations (e.g., financial institutions, vendors) to help you access the resources you needed?
 - Was there anything in your social, religious, or societal structure that created barriers you had to overcome when starting a business?/Is there anything in your social, religious, or societal structure that you think will create barriers you will have to overcome when starting a business?
 - What are your community's perceptions about young people? How were these perceptions helpful or challenging when you started a business?/How will these perceptions be helpful or challenging when you start your business?
- 7. Have you faced any unpredictable situations in your business? If so, how did you react in that situation?
 - How easily were you able to adapt your business to the unpredictable situation?/How easily do you think you will be able to adapt your business to unpredictable situations?
 - Were you able to leverage the situation to your advantage?/Do you feel you will be able to leverage the situation to your advantage? Why or why not? What additional training and support do you need?
- 8. Describe how you have collaborated with other people in your business. Did you draw upon your network when starting your business? If so, how?
 - Do you work independently or are you a member of team (or do you have any business partners)?/Have you talked to anyone about your business idea? If so who? What support do you think you can get from these individuals?
 - How have you been able to leverage support from people in your network?/Who in your network do you think you will be able to leverage support from for your business?
 - What support have you received from connections in your network when starting your business?/What support do you think you will receive from connections in your network when starting a business?
- 9. What are your future plans for your business and how do you hope to achieve them?
 - Do you anticipate that your business will remain the same in the future, or will it evolve as you get access to other resources?/What are your long terms plan for your business (e.g. timeline, partners, reach, etc.)?

- 10. If you were going to give advice to another young person interested in starting a business, what would you say to them regarding the best way to start a successful business?
 - What have been the keys to your success in starting your business?
 - What would you advise the young person to do first when starting a business?/What advice would you like to hear from other young people who have started a business?
 - How could [NAME OF ORGANIZATION] and USAID support other young people to become entrepreneurs like you?/What additional support could [NAME OF ORGANIZATION] and USAID offer to support other young people like you to become entrepreneurs?
- II. Do you have any questions for us?

[Record both questions raised by the informant as well as responses]

Thank you for taking the time to speak with us today. We greatly appreciate your openness in sharing your business experience with us. We have learned a lot from you, and the information you shared will be helpful for our final report.

E. CASE STUDY VISIT: YOUTH ENTREPRENEUR TRAINING OBSERVATION GUIDE

Session Number	Date	
Session Title	Setting/Environment	
Trainer(s)	Duration	
Guest speakers/ stakeholders involved in session		
Materials/Tools Used		

Session Methodology

Session Objectives

Skills Focus of Session

Session Activities/Flow

Use of Effectuation During Session	□ Low	Medium	🗆 High
Other Observations/Comments			

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