

YOUTH ENTREPRENEURIAL READINESS: ENTREPRENEURIAL SELF-EFFICACY  
AND THE MODERATING ROLE OF ENTREPRENEURIAL TRAINING

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A Dissertation Submitted in Partial Fulfillment  
of the Requirements for the Degree of Doctor  
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Omega Graduate School, 2023

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## **Abstract**

Entrepreneurial education and training are components of an entrepreneurial ecosystem that increase youth entrepreneurial readiness. This quantitative comparative study examined the difference between youth readiness to start or develop a business based on entrepreneurial self-efficacy of those who have taken Entrepreneurship Development Institute entrepreneurship training and those who have not. The theoretical framework for the study is social learning/cognitive theory, which shows how cognition, behavior, and environment are interrelated, having cause-effect relations. Grounding in this theory, the conceptual model that combined personal psychological factor (entrepreneurial self-efficacy) and a process of learning in a social context (training) factor was tested by examining the link between the independent variables (EDI trained and not trained) and the dependent variable (entrepreneurial readiness through the five entrepreneurial self-efficacy sub-constructs) of trained and not-trained research participants. The study used a non-experimental research design, selecting 126 (62 EDI-trained and 64 not-trained) research participants and collecting data using Survey Monkey. The research answered, “What differences exist in youth entrepreneurial readiness based on entrepreneurial self-efficacy related to EDI entrepreneurship training?” The Mann-Whitney U test was conducted to compare whether the groups differed significantly, and the results indicated that entrepreneurial self-efficacy significantly predicts youth entrepreneurial readiness. The moderating variable, training, played a critical role in influencing the strength of the relationship between the independent variable – EDI-trained/not trained, and the dependent variable - youth entrepreneurial readiness. As measured by the entrepreneurial self-efficacy scale, entrepreneurial training enhances youth readiness to start or develop their business. The evidence from this study also shows the need to promote entrepreneurial self-efficacy so that youth can be confident

enough to engage in entrepreneurship. The study recommends policymakers stimulate entrepreneurial mentality, using higher learning institutes as a strategic position to address entrepreneurial education and training by facilitating the entrepreneurial self-efficacy of students, especially graduates. The results of this study may also help policymakers address national unemployment issues through entrepreneurial training, boost economic growth, and curb unemployment. In addition, future studies may use comparative frameworks, longitudinal designs, and qualitative methods to understand better the dynamic link between youth entrepreneurial self-efficacy, training, and entrepreneurial readiness.

Keywords: entrepreneurship, entrepreneurial self-efficacy, youth entrepreneurial readiness, entrepreneurial training.

## **Dedication**

I offer this research to honor an exceptional individual who devoted her life to Ethiopia. In the 1980s, she pioneered psychological therapy when it was not widely known. Although she came as a missionary with her husband, she went beyond preaching the Good News and became my teacher, mentor, therapist, friend, and confidante. She gracefully passed the baton to me, and now, as I finish my Ph.D., she remains by my side. Dr. Barbara Singleton, you deserve all the best! Your legacy will outlive you.

In addition, I would like to dedicate this research to the youth of Ethiopia, who have endured the hardships of civil wars and political and economic instability. Despite these challenges, I have faith that you will use your creative potential and unwavering commitment to work to transform the future of your country. My prayers are with you.

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I want to thank my Chair, Dr. McClane, for being willing to take on the challenges of chairing the committee through the transitions. Let me copy and paste your sentence: "My word



of encouragement for you is that we know God has special plans for your life, and we want to be the "wind beneath your wings" to help you follow those plans. ... All of us are vested in journeying with you as you complete your degree; we believe God will help you see it through!" Thank you, Dr. McClane, for fulfilling your promises and helping me through the finish line!

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## **Epigraph**

He who began a good work in you is faithful to complete it.

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## **CHAPTER 1: INTRODUCTION**

This chapter introduces the research problem, background of the problem, purpose statement, research question, hypothesis, scope and delimitation, significance, and operational definitions of the study. The second chapter is devoted to the literature review, followed by chapters on research design and methodology, results, discussion, conclusion, and recommendations.

The concept of an entrepreneur includes having entrepreneurial skills, identifying opportunities, gathering the necessary resources, and taking a risk to create a successful endeavor (Lilia et al., 2022). Kallas (2019) explained that entrepreneurial readiness has individual, social/environmental, and institutional components, and the personal aspect is determined by one's attitude, motivation, and competencies. This study investigated whether differences exist between youth entrepreneurial readiness based on entrepreneurial self-efficacy related to entrepreneurship training conducted by the Entrepreneurship Development Institute (EDI) in Addis Ababa and those who have not.

EDI was established following the latest government restructuring, bringing together two entities: the UNDP-supported Entrepreneurship Development Center (EDC), established in February 2013, and the World Bank-financed Women Entrepreneurship Development Project, inaugurated in December 2012. EDI aims to assist the emergence of a competitive and innovative private sector driven by a dynamic, vibrant, and growth-oriented small and medium enterprise (SME) sector. The new mandate includes playing a pivotal role in the entrepreneurial ecosystem, especially in self-employment, with a strategic shift from direct service providers to building the capacities of other public and private institutions. In addition, two EDI programs target women and youth who wish to start or develop their businesses. The programs include

training, business development services, a forum for networking innovative services, and establishing the center of excellence in selected universities (EDI, 2022).

Zhartay et al. (2020) defined *youth entrepreneurship* as "a tool to ensure the growth of employment, the involvement of young people in economic activities, their socialization, and self-realization" (p. 1190). Macrotrends (2022) estimated that the unemployment rate for Ethiopia in 2021 was 3.69%, and the youth unemployment rate was 5.72%. At the same time, the Central Statistics Authority labor force and migration survey provided information on the nation's labor force, which indicates the economic performance through the employment and unemployment rate. The survey results revealed that the jobless rate in Ethiopia is 8.0%. Despite efforts to improve the economic conditions of Ethiopia, youth unemployment remains one of the significant challenges. The result also shows that the youth unemployment rate in the urban setting is estimated to be 23.1% (Central Statistics Agency, 2022).

Creating an enabling environment in which the youth engages in entrepreneurial training and education is one of the ways to curb the challenges of youth unemployment and take entrepreneurship as a career option (Akubo, 2021). In this research, a non-experimental research design was used to examine whether there were significant relationships between a group that had the training and a group that did not.

### **Background of the Problem**

According to the United Nations, in 2015, countries adopted 17 goals to end poverty, protect the planet, and ensure prosperity for all as part of a new workable development agenda, with 169 sub-targets to be achieved by 2030 (Weiland et al., 2021). This global agenda promoted an integrated approach to achieving sustainable development that tackles the interwoven issues of multidimensional poverty, inequality and exclusion, and sustainability while enhancing

knowledge, skills, and production technologies to reduce risks and sustain development gains. The National Planning Commission (2016) described that Ethiopia developed the Growth and Transformation Plan (GTP), which aligned with the world agenda of sustainable development.

EDC, now transformed into EDI, was established to realize Ethiopia's vision of GTP in response to the growing role the private sector can play in achieving the plan. The Ethiopian government established the program in partnership with the United Nations Development Program (UNDP) Ethiopia and launched it in February 2013. The program was designed to foster a robust and competitive private sector by developing the micro and small enterprise sectors. Based on that, entrepreneurship training is provided by the United Nations Development Program for one week for those who want to start a business or strengthen an existing one (Ministry of Trade and Industry & United Nations Industrial Development Organization, 2019).

Describing the impact, as of May 2022, the EDI report showed that 244,459 new jobs were created, 20,819 new businesses were established, 29,378 firms were expanded, 20,757 businesses were formalized, and 70,391 existing companies were supported. In addition, 112,163 training sessions were provided in ten regional states, instrumental in creating the needed impact (EDI, 2022).

### **Problem Statement**

Entrepreneurial initiatives, including training, are believed to curb unemployment problems by grooming the youth for entrepreneurial endeavors (Olayinka & Sulyman, 2022).

Boris and Parakhina (2022) stated that youth entrepreneurship is a neglected yet important sector of the economy, exacerbated by the unstable post-COVID pandemic economic conditions.

Ahmed and Ahmed (2021) pointed out the challenges of the young generation in finding a decent

job in African countries, including Ethiopia, due to their lack of skill and experience and because of negative attitudes among potential employers toward youth in the workplace.

The alarming unemployment rate in Ethiopia is worth noting so that entrepreneurial interventions can be strategized. According to the Ethiopian Statistics Service and International Organization for Migration (2021), the published statistical report of the employment-to-population ratio was 59.5%, with 69.0% males and 50.2% females. In contrast, the employment-to-population percentage of youth 15-29 was 57.4% nationally. The rate of youth employment to population ratio in rural areas was 64.9% and 50.6% in urban areas.

Adeniyi et al. (2022) related entrepreneurial readiness to entrepreneurial skills, business opportunities, entrepreneurial self-efficacy, and opportunity identification. Since studies show that youth entrepreneurship contributes to economic development, it is essential to know how one acquires entrepreneurial thinking, reasoning, making decisions, planning and goals setting, and uses the potential to create jobs, expand existing businesses, increase the possibility of business startups, and maximize opportunities to curb developing countries' unemployment issues by utilizing the youth potentials (Global Entrepreneurship Monitor [GEM], 2023).

A study on the relationship between micro-enterprises targeting youth and socio-economic development showed that employing youth significantly reduces poverty in Ethiopia (Kidane et al., 2015). In addition, entrepreneurship was acknowledged as one of the stimulating factors for economic growth in developing countries (Muhammad & Ahmad, 2020). Ahmed and Ahmed (2021) cited the barriers that may prevent youth entrepreneurship in Ethiopia. These include (a) the lack of a conducive policy environment, (b) limited access to finances, markets, and business assistance, and (c) the need for entrepreneurial education and training. Recognizing the positive role of youth in economic development is essential to prepare the youth for such

engagement (Chernova et al., 2020). Despite the growing interest in entrepreneurship as a means of economic development and poverty reduction, the influence of entrepreneurial self-efficacy and entrepreneurship training on entrepreneurial readiness among Ethiopian youth is unknown.

### **Purpose Statement**

This study examined the difference between youth readiness to start or develop a business based on entrepreneurial self-efficacy of those who have taken EDI entrepreneurship training and those who have not to determine whether there is a significant difference in youth entrepreneurial readiness.

### **Research Question**

What differences exist in youth entrepreneurial readiness based on entrepreneurial self-efficacy related to EDI entrepreneurship training?

### **Hypothesis**

H<sub>0</sub>: No statistically significant difference exists in entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy between those who received entrepreneurship training and those who did not.

H<sub>a</sub>: A statistically significant difference exists in entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy between those who received entrepreneurship training and those who did not.

### **Scope and Delimitation of the Research**

The study is delimited to youth aged 18 to 35, whom EDI trained from January–March 2023, and who were willing to participate in the study. Another group that had not taken the EDI training was selected, and the same tools were administered to determine if there was a significant difference between the two groups.

## Significance of the Research

This research shows that training moderates new venture creation or business development. Therefore, training activities will be scaled up to meet the needs of the nation's millions. This includes strategizing to engage the youth in entrepreneurial training so that they are active in income generation and economic development. In addition, higher learning institutes can serve as incubation centers, where students get entrepreneurial education and incubate their innovative ideas into business. Those who graduate with academic credentials will have added skills to create jobs in their areas of expertise, thereby contributing to curbing unemployment. At the national level, the research has valuable practical implications for policymakers and providers of informal entrepreneurial education, for they will be encouraged to introduce policies that provide a secure environment for individuals to start their ventures after investing in suitable candidates for training.

## Operational Definitions

This research adopted the following operational definitions for the study.

*Entrepreneurial Self-Efficacy:* Entrepreneurial self-efficacy (ESE) is one's ability to start and successfully manage a venture with required entrepreneurial skills in planning, marshaling, managing ambiguity, and financial literacy (Moberg, 2012).

*Entrepreneurial Readiness:* This research has taken Darmasetiawan's definition (2019) and Coduras et al.'s (2016) definition of entrepreneurial readiness, which is determined by a person's ability or willingness for entrepreneurial activity to take entrepreneurial action.

*Entrepreneurship:* Essential ingredients include the willingness to take calculated risks—in terms of time, equity, or career; the ability to formulate an effective venture team; the creative skill to marshal needed resources; the fundamental skill of building a solid business plan; and



finally, the vision to recognize opportunity where others see chaos, contradiction, and confusion (Kuratko & Hodgetts, 2004, p. 30).

*Self-efficacy*: Self-efficacy is an individual's cognitive estimate of their "capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over events in their lives" (Wood & Bandura, 1989).

*Youth*: The UN defines *youth* as between 15 and 25, but the African Union defines *youth* as between 15 and 35. Additionally, some previous entrepreneurship research extended the age range of youth to 35 (Delmar & Davidsson, 2000; Mehari & Belay, 2017; Storey, 1994). Therefore, in this study, the term *youth* refers to individuals between the ages of 18 and 35.

## **Summary**

This chapter introduced the research problem that investigates the effects of entrepreneurial self-efficacy and EDI training on entrepreneurial readiness. The research examined the difference between youth readiness to start or develop a business based on entrepreneurial self-efficacy of those who have taken EDI entrepreneurship training and those who have yet to participate in the training. In addition, the scope and delamination of the research were stated. The significance of the research and the operational definitions of the study were described at the end.

## CHAPTER 2: REVIEW OF LITERATURE

The literature review is divided into five sections: (a) a literature search strategy, (b) identifying a gap in the literature, (c) describing the theoretical/conceptual framework, (d) a topical literature review, and (e) providing a background for the instrument and variables. The chapter includes an in-depth review of current, peer-reviewed journals published between 2019 and 2023. The background of entrepreneurial theories and the reason for selecting social learning theory as the theoretical, conceptual framework underpinning the study are discussed in detail. In addition, six relevant topics that give context to the study are included: (a) the historical background of entrepreneurship, (b) entrepreneurial ecosystems, (c) entrepreneurial policy, (d) youth entrepreneurship, (e) entrepreneurial readiness, and (f) the Ethiopian entrepreneurial context.

### Literature Search Strategy

The literary search began with exploring the definition or meaning of entrepreneurship in the work of economists like Smith (1776), who wrote *An Inquiry into the Nature and Causes of the Wealth of Nations*, Ricardo (1817), the author of *On the Principles of Political Economy and Taxation*, Schumpeter (1934), who penned *The Theory of Economic Development*, Glancey and McQuaid (2000), authors of *Entrepreneurship and Market Dynamics - Entrepreneurial Economics*, and Simpeh (2011), who wrote *Entrepreneurship Theories and Empirical Research: A Summary Review of the Literature*. These publications laid the groundwork for understanding entrepreneurship from classical, non-classical, and Australian economics perspectives.

The literature search revealed that economic theories are insufficient to explain entrepreneurship fully. Psychological theories highlighted four distinct components of successful entrepreneurship.

Rotter (1996) described *Generalised Expectancies for Internal Versus External Control of Reinforcement*, and along with Şahin et al.'s (2019) *Big Five Personality Traits, Entrepreneurial Self-efficacy and Entrepreneurial Intention: A Configurational Approach* postulated that individual inborn personality traits, such as locus of control, strongly influence entrepreneurial success.

McClelland's (1961) *The Achieving Society* and Johnson's (1990) *Toward a Multidimensional Model of Entrepreneurship* focused on the individual's need for achievement as a stimulus for successful entrepreneurship.

The capacity for emotional intelligence was correlated with entrepreneurial efficacy by Wen et al. (2020) in *The Relationship between Emotional Intelligence and Entrepreneurial Self-Efficacy of Chinese Vocational College Students* and Fatoki (2019) in *Emotional Intelligence and Success of Immigrant-Owned Small Businesses in South Africa*.

Bandura's (1971) *Social Learning Theory* and (1982) *Self-efficacy Mechanism in Human Agency* emphasized self-efficacy as an essential entrepreneurial trait. This concept was also explored by Chen et al. (1998) in *Does Entrepreneurial Self-Efficacy Distinguish Entrepreneurs from Managers?* DeNoble et al. (1999) in *Entrepreneurial Self-efficacy: The Development of a Measure and Its Relationship to Entrepreneurial Action*, McGee et al. (2009) in *Entrepreneurial Self-efficacy: The Measure*, and Kare Moberg (2012) in *An Entrepreneurial Self-Efficacy Scale with Neutral Wording*.

In addition, the literature search strategy was far-ranging, reviewing and citing more than 150 journals. Specifically, relevant articles that added broader context to topics such as entrepreneurship, entrepreneurial ecosystems, entrepreneurial policy, youth entrepreneurship, entrepreneurial readiness, and Ethiopia's entrepreneurial setting were reviewed.

## Identification of Gaps in the Literature

Social scientists disagree on what makes an entrepreneur, but research delineates individual, environmental, and institutional factors (Kallas, 2019) that create readiness to start an enterprise. A great deal of attention is given to entrepreneurial intention (Aleksandrova et al., 2019; Saptono et al., 2019), the impacts of entrepreneurship training (Efobi & Orkoh, 2018; Rahim et al., 2022), the effect of entrepreneurial education programs (Hernández-Sánchez, et al., 2019; Paray & Kumar, 2020); the role of entrepreneurial self-efficacy (Darmanto & Yuliari, 2019; Newman et al., 2019), psychological dispositions that predict entrepreneurial success and factors that determine entrepreneurial success (Salisu et al., 2020), and entrepreneurial behavior (Ho et al., 2021).

Reflecting on the past five years, from 2014 to 2019, Chan and Mustafa (2021) created an overview of published articles on entrepreneurship and innovation in emerging economies. They pointed out that entrepreneurship requires different skills in emerging and developed economies. Therefore, factors for entrepreneurial practices at the individual, societal, and organizational levels must be understood considering contexts. Numerous surveys have shown that entrepreneurial self-efficacy positively affects entrepreneurial intentions and behaviors (Barbosa et al., 2007; McGee et al., 2009; Zhao et al., 2005).

The concept of an entrepreneur emerged from economic theories. This made it necessary to explore the background of entrepreneurship and its evolving multidisciplinary nature over the past three centuries. However, no study was found on economic entrepreneurship theories that addressed youth's entrepreneurial readiness. Reviewing contemporary literature led to exploring how psychological aspects of an individual's entrepreneurial self-efficacy can contribute to youth readiness to start or develop a business.

## **Theoretical Framework**

Researchers have identified several theories to explain the topic of entrepreneurship. Ahmed and Ahmed (2021) demonstrated that the multidisciplinary nature of entrepreneurship theories is rooted in disciplines such as applied economics, psychology, sociology, anthropology, and management studies. McMullen et al. (2020) studied what makes an entrepreneurial investigation have a unified theory and identified five elements of entrepreneurial agency: ability, motivation, opportunity, institution, and process skills to transform social structures into action. The multifaceted aspect of entrepreneurship was examined in this study, and a theory that resonates with the purpose of the research and firmly explains the phenomenon of youth entrepreneurship and entrepreneurial training was selected.

Entrepreneurship has evolved significantly in the last two and half centuries due to the complexity and multidimensional notion of entrepreneurship, influenced by economic, social, psychological, ethical, religious, and cultural factors. The present study focused on youth entrepreneurial readiness from an entrepreneurial self-efficacy standpoint, using entrepreneurship training as a moderator.

Because many factors influence entrepreneurship, no single component can generate it independently. This study used social learning theory as a theoretical foundation to describe the different variables in the socio-demographic antecedent and explore the entrepreneurial self-efficacy related to youth entrepreneurial readiness as moderated by entrepreneurship training.

The EDI entrepreneurial training provided the context of social learning, and the individual-specific entrepreneurial self-efficacy was assessed to determine the entrepreneurial readiness of the youth by comparing those who took the six-day training and those who did not.

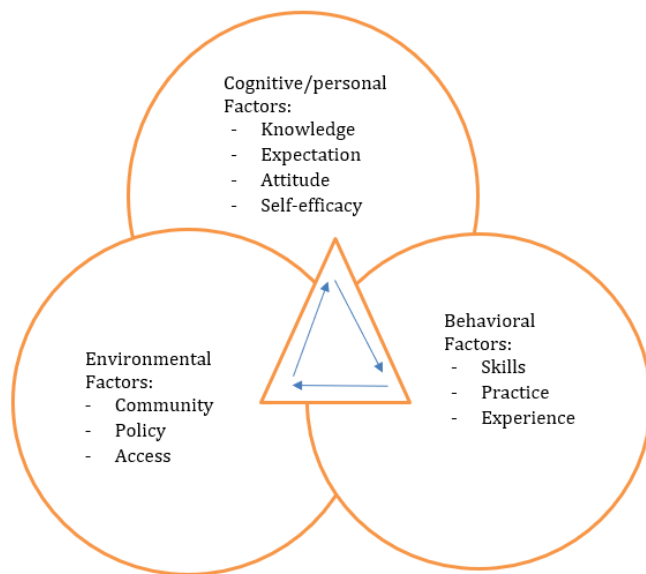
## ***Social Learning Theory***

Lyons and Berge (2012) stated that social learning theory is associated with Albert Bandura but was rooted two decades earlier in Rotter's social and clinical assertion that learning takes place in a social arena by observation and later by imitation. Chavis (2011) concurred with the idea that social learning theory is an approach that addresses human problems in a social context.

Albert Bandura theorized that learning might occur by observing others' behaviors and the consequences of those behaviors and that social learning reinforces behavior as people interact with their environment to determine their actions (Bandura, 1971). He expanded the social learning approach, adding the cognitive elements of learning, which occur through observation, imitation, and modeling, a sharp contrast with behavioral thinking of reinforcement and punishment (Bandura, 1977).

**Figure 1**

*Social Learning Theory's Cognitive/Personal, Behavioral, and Environmental Factors*



*Note:* Interaction of cognitive, behavioral, and environmental factors.

Entrepreneurs learn by observing their surroundings, including their parents, friends, partners, and competitors, as they interact with their environment (Fernando & Nishantha, 2019). Scherer et al. (1989) studied the background of entrepreneurs and non-entrepreneurs and found that many non-entrepreneurs did not have self-employed or entrepreneurial parents.

This implies that social modeling highly influences entrepreneurs in their entrepreneurial actions. Similarly, Drucker (1985) alluded to the fact that entrepreneurship can be a learned behavior, as entrepreneurs with different personalities are educated in social contexts and succeed. The concept of self-efficacy is also part of Albert Bandura's social learning theory, which addresses the ability of individuals to make judgments on decisive matters, effectively perform, and face challenges (Bandura, 1982). The concept further contributed to developing entrepreneurial self-efficacy to measure the person's entrepreneurial beliefs to start a business (Drnovšek et al., 2010).

Social learning theory shows how cognition, behavior, and environment are interrelated, having cause-effect relations (Wood & Bandura, 1989). Borhani et al. (2020) stated that socio-demography was the first factor that affected the attitude of the youth to accept agricultural entrepreneurship, with individuals aged 25-40 the most likely to start a new business.

Likewise, Fairlie and Holleran (2012) and Sakkthivel and Sriram (2012) deduced that individuals' socio-demographic and psychological stances are significant determinants of entrepreneurship. Similarly, Gibb and Ritchie (1982) identified that the entrepreneurial social process of a start-up is influenced in many ways by family, employment, training, and career patterns. Bouichou et al. (2021) showed that young people aged 20-25 positively correlated with entrepreneurial intentions to start a new business venture. However, as age increased to 41-45, they were less likely to start a business.

A comparative study by Alamineh (2022) on identifying influencing factors of university and technical and vocational education and training graduate students' intentions toward entrepreneurship concluded that socio-demographic characteristics such as age, gender, family income, educational background, and entrepreneurial attitude had a significant effect on the TVET students' intention toward entrepreneurship.

According to Udayanan (2019), training significantly develops transferrable business skills in graduate students' entrepreneurial self-efficacy. Entrepreneurial training provides the context of social learning, the individual psychological makeup, and the business ability to enhance the entrepreneurial readiness of the youth. This study used social learning theory as a theoretical foundation to describe the social background and explore the entrepreneurial self-efficacy of youth for entrepreneurial readiness as moderated by entrepreneurship training.

Bandura (1986) described that self-efficacy beliefs are multifaceted, as social cognitive theory identifies several conditions, which include “generic skills for diagnosing task demands, constructing and evaluating alternative courses of action, setting proximal goals to guide one’s efforts, and creating self-incentives to sustain engagement in taxing activities and to manage stress and debilitating intrusive thoughts” (p. 308). Self-efficacy measures a person’s belief in starting a business (Drnovšek et al., 2010). Similarly, Adeniyi et al. (2022) studied entrepreneurial self-efficacy for entrepreneurial readiness in developing countries, and the findings supported that ESE is helpful for the business creation process. Darmanto and Yuliari (2019) also concurred that entrepreneurial self-efficacy strongly predicts entrepreneurial readiness.

Using the social learning theory that encompasses the individual and social factors, entrepreneurship readiness is assumed to be described by incorporating the individual’s socio-

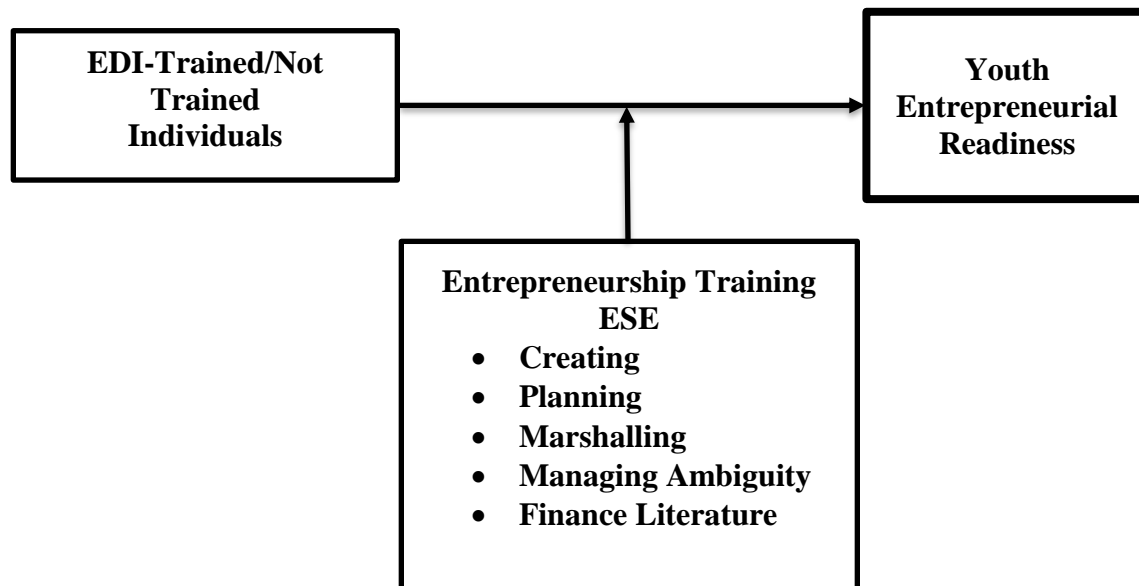


demographic background and measuring psychological self-efficacy and entrepreneurial self-efficacy, as moderated by entrepreneurial training (Hatos et al., 2022).

The conceptual framework is based on social learning theory, which states that learning occurs through observation and when the individual has self-efficacy, whereby they can master a particular task (Wood & Bandura, 1989). In this case, entrepreneurial self-efficacy moderated by entrepreneurial training may play a more significant role in entrepreneurial performance, whereby the readiness to start or develop a business is linked between the independent and dependent variables. The framework below shows how the independent variables of EDI-trained/not-trained individuals show youth entrepreneurial readiness, as moderated by EDI training using the entrepreneurial self-efficacy tool.

**Figure 2**

*Conceptual Model of Hypothesized Relationships*



### ***Entrepreneurial Self-Efficacy***

Self-efficacy can be applied to various domains if the efficacy measure is tailored to the tasks assessed (Bandura, 1982). Mauer et al. (2009) stated that the term *entrepreneurial self-efficacy* was coined by combining the psychological concept of task-specific self-efficacy and a package of tasks of entrepreneurship as a career choice.

Based on the conceptual framework of Albert Bandura, the social learning theory entrepreneurial tendency of college students' ESE tool was first suggested by Chen et al. (1998). Different constructs, such as risk-taking, innovation, management, financial control, and marketing, were assessed. McGee et al. (2009) complemented this, supporting ESE as a multi-dimensional construct and suggesting the four tasks — searching, planning, marshaling, and implementing — as valuable skills for entrepreneurial readiness, resulting in business creation orientation.

According to Moberg (2012), the entrepreneurial efficacy measure components start with the searching phase, which includes brainstorming a new idea for a product or service, identifying the need for a new product or service or a market, and designing a product or service that will satisfy customer needs and wants. The planning phase incorporates an assessment of demands, prices, and capital needed, designing a marketing strategy, and translating this into a business plan.

The marshaling phase focuses on determining the different resources needed to execute the plan. The last implementation phase involves using resources to execute the action plan (Adeniyi et al., 2022). Borhani et al. (2020) emphasized that education, opportunities, and financial support significantly impact young adults' career choices for startup businesses. Previous studies by Wadhwa et al. (2009) depicted that a lack of business and managerial skills

would be a barrier to effective startups, implying that the need to have business management knowledge and skills positively contributes to entrepreneurial readiness. Based on the social learning theory and the literature reviewed to construct ESE, Moberg (2012) updated the ESE variables by categorizing them into five domains: searching, planning, marshaling, implementing, and finance.

Ndofirepi (2020) indicated that it is essential to understand entrepreneurs' psychological makeup and ways of thinking and doing in order to design effective training programs. The psychological traits associated with entrepreneurs are an internal locus of control, achievement needs, and risk-taking behaviors. This is also supported by previous studies by Bygrave and Hofer (1991), which expanded the list of main psychological aspects associated with entrepreneurship: "need for achievement, locus of control, risk-propensity, self-efficacy, tolerance for ambiguity, innovativeness, independence and autonomy, and optimism." Alamineh's (2022) study concluded that the field of study, entrepreneurship course, entrepreneurship test score, locus of control, entrepreneurship education, subjective norms, and entrepreneurial motivation statistically affected university students' intention toward entrepreneurship.

In this research, the entrepreneurial self-efficacy of the EDI-trained and non-trained youth was investigated to determine if there was a difference in their readiness to start or develop a business and if training moderated readiness.

### ***Entrepreneurship Training***

Entrepreneurial training is intended to reinforce information, skills, and attitudes and has been utilized in different countries to influence entrepreneurial culture within a population (Wulandari et al., 2021). This study defined *entrepreneurship training* as "training to prepare

someone to have entrepreneurial skills so that they can create a business appropriately by using existing opportunities and providing job opportunities both for themselves and others" (p. 307). The current research used training as a moderating factor to assess youth entrepreneurial readiness.

Most economies support entrepreneurship education and training to achieve goals such as encouraging citizens to have a positive attitude toward self-employment, identifying viable business opportunities, demonstrating managerial skills for running successful businesses, and encouraging new startups and other entrepreneurial ventures (Alam et al., 2019; Cieslik et al., 2022). Coelho et al. (2018) studied and evaluated the impact of the entrepreneurship training program in Recife, Brazil. Such research helps to understand entrepreneurship education's ability to boost individuals' abilities to generate a new company. The findings support the claim that entrepreneurship education is becoming more significant in emerging nations, reshaping society by allowing individuals to advance in their careers and lives.

The UN program United Nations Conference on Trade and Development ([UNCTAD], 2018) developed entrepreneurship coined *Empretec* from the Spanish for *emprendedores* (entrepreneurs) and *tecnología* (technology). Empretec is a mechanism that instills behavioral change in a select group of promising entrepreneurs. It is dedicated to helping promising entrepreneurs put their ideas into action and helping fledgling businesses to grow. The course was developed by Harvard University to encourage entrepreneurial behavior and motivate learners to contribute to countries' economic prosperity by focusing on developing entrepreneurial competencies of entrepreneurs in emerging economies (UNCTAD, 2018). More than 31 years of experience have been analyzed since the UN implemented this program in 41 countries (UNCTAD, 2022). The program evaluation showed that trainees' success was linked to

their involvement in entrepreneurship education, and therefore, entrepreneurship training programs are to be designed to create access to training and assist trainees in developing their competencies.

The EDI (2022) uses the Empretec program to identify ten key areas of competencies related to entrepreneurial development. These include opportunity-seeking and initiative, persistence, fulfillment of commitments, demand for quality and efficiency, calculated risks, goal setting, information-seeking, systematic planning and monitoring, persuasion and networking, and independence and self-confidence. EDI trainees are given six practical days of training with a practical tool to help them assess their strengths and weaknesses. Trainees are required to demonstrate 30 behavioral traits of each they have practiced since they completed the training.

Abdullah and Latif (2014) evaluated Bangladesh's entrepreneurship development training program. They concluded that the country could take the initiative to develop an entrepreneurial environment to evolve the prevailing salient talent. Developing training and development programs for newcomers and existing entrepreneurs nourished the entrepreneurial system. The study also showed the evaluation's validity by addressing the training program's effectiveness.

Vega et al. (2016) studied the entrepreneurial aspirations of adolescents toward self-employment. They found that interest increased in three groups: foreigners, those who studied at state schools, and those with lower academic achievements. Education had a long-term effect on students' attitudes, and training had a practical short-term impact on preparing business plans and designing projects.

According to Chethan (2020), entrepreneurship training positively affects trainees by enhancing their confidence. Before training, participants were afraid due to lack of practical knowledge; however, their satisfaction level was drastically enhanced to start their business

enterprise after training. Similarly, Klinger and Schündeln (2007) investigated the effect of entrepreneurial training on enterprise outcomes, particularly whether training and business development programs in developing countries can help improve entrepreneurial skills and foster entrepreneurial activities such as creating and expanding businesses. The findings showed that business training significantly increases the probability that the trainee starts or expands an existing business. In addition, they suggest that entrepreneurial activities such as starting and expanding companies can be fostered by training.

Efobi and Orkoh (2018) mentioned that entrepreneurs who received formal evaluation training would retrain their colleagues, resulting in expanded human resources, increased innovation, and revenue for the company. Moreover, the author described how training within an entrepreneurial venture should be viewed as a 'two-sided coin' that empowers the trained employee and the transfer of knowledge by training other workers. Efobi and Orkoh also studied the impact of entrepreneurship training on firms' growth performance. They elaborated on entrepreneurship training programs as an essential catalyst for business growth and development. They compared the difference in revenue, innovation, and employee growth of firms where the entrepreneurs were trained and that set up in-house training for their workers with those in which the entrepreneurs were trained, but the firms did not create in-house training for their workers. The results imply that policies that encourage just the training of entrepreneurs may be limited in the scope of impact if steps are not taken to ensure that the trained entrepreneurs go further to retrain their workers in their businesses.

Entrepreneurial education and training equip students with abilities, skills, and knowledge, allowing them to spot opportunities, analyze the environment, and draft strategies to help the company succeed (Mack et al., 2021). Entrepreneurial education and training also

increase confidence in an individual's ability to start and run a company. In class, students are given exercises to develop business plans, perform feasibility studies for business opportunities, or participate in running simulated or real businesses (Thamahane, 2017).

Similar studies by Emmanuel et al. (2018) mentioned that entrepreneurial orientation caused by inadequate entrepreneurial education and training significantly influences entrepreneurial behavior among youths in the province. Cieslik et al. (2022) conducted a study on why sustainable development was not fulfilled as targeted and stated that it was not due to the defectiveness of entrepreneurship-based programs. Instead, broader job market policies must be assessed to complement training, education, and skill deficits.

Bouichou et al. (2021) studied entrepreneurial intention among rural youth in Moroccan agricultural cooperatives. They found that training is one of the factors that have a positive impact on the entrepreneurial intentions of young men and women. Similarly, Ndofirepi (2020) studied the relationship between entrepreneurship education and entrepreneurial goal intention and found that exposing students to entrepreneurial education positively impacts psychological development. Entrepreneurship training has been used as one of the driving forces to improve entrepreneurial capabilities (Zahra, 2011) that enhance knowledge, skills, and attitude (Seun & Kalsom, 2015), and research has shown entrepreneurship training moderates the relationship between entrepreneurial ability and readiness towards new venture creation.

## **Topical Review of Literature**

### ***Entrepreneurship***

Entrepreneurship and entrepreneur are defined differently depending on the theoretical orientation, model of what an entrepreneur is, and school of thought. For example, Akulava et al. (2020, p. 20) defined *entrepreneurship* as "a process of starting and running a new business,"

whereas Omoniyi and Bongani (2022) defined *entrepreneurship* as a necessary production component and a driving force behind any successful business. As a result, *entrepreneurship* is defined as the science of completing tasks with associated risks and rewards, with the entrepreneur serving as the organizer, innovator, and risk bearer in any commercial venture. The primary goal of entrepreneurship is to make money rather than lose money (p. 4.).

An entrepreneur precedes entrepreneurship. Joseph A. Schumpeter defined an entrepreneur based on one's innovation and creative capacity, leading to disequilibrium (Schumpeter, 1934). Gartner focused on a new business venture (Gartner, 1985); Peterson (1985) characterized an entrepreneur as a person who recognizes the opportunity and taps into a new endeavor; and for Garfield, it is identifying a market and developing a strategy to encounter the needs (Garfield, 1986). In contrast, Cantillon redefines an entrepreneur as someone "who works for a contract price and has uncertain future costs into a pervasive one who purchases inputs at market prices only to make sales in the future at uncertain market prices" (as cited in Thornton, 2019, p. 277).

Therefore, even though no consensus has been reached among academicians and researchers in defining entrepreneurship and entrepreneur, the broader concept entails taking the initiative, arranging, and restructuring social and economic mechanisms to put resources (labor, materials, and other assets) together in ways that increase their worth and situations to practical use, accepting risk or failure, and bringing change, innovation, and a new order into the world (Akulava et al., 2020; Cunningham & Lischeron, 1991; Steenekamp, 2013).

For Schumpeter (1934), *entrepreneurship* is a human activity and a creative act that involves creating something of worth from almost nothing. It is the pursuit of opportunity regardless of available resources or the lack thereof. It necessitates both a vision and a burning



desire. It also requires a readiness to take calculated risks. Conversely, Fuster (2022) acknowledged entrepreneurship as a dynamic process of accumulating wealth by producing value through capital, risk-taking, technology, and human talent.

For over two centuries, entrepreneurship has been explained in different fields of study, such as economics, sociology, and psychology. In the early eighteenth century, the French term *entrepreneur* was first used to designate a "go-between" or "between-taker." Many consider that Cantillon was the first to use the word *entrepreneur* to mean someone who adopted a proactive risk-taking approach to pursuing possibilities, giving us the present meaning of an entrepreneur (Parker, 2009). However, the popularity of entrepreneurial endeavors in the twentieth and twenty-first centuries has incorporated broader descriptions beyond innovation and startup businesses.

Entrepreneurship is a multi-component and multi-category dynamic system. It should be considered holistically as a “dynamic system of an individual's causally interrelated personality traits, motivation, cognition, needs, emotions, abilities, learning, skills, and behavior based on which an individual or a group of individuals interact with the context for identifying, generating, and realizing opportunities into new values” (Oganisjana, 2010, p. 54).

As the United Nations Sustainable Development Goals (SDGs) suggest, entrepreneurship is a vital driver of society's health and prosperity and a powerful engine of economic progress. It promotes innovation required to seize new opportunities, increase productivity, create jobs, and address some of society's most serious concerns (Bosma et al., 2020; GEM, 2022). Entrepreneurship is a dynamic process of vision, change, and creation. Creating and implementing new ideas and creative solutions requires energy and passion.

### ***Entrepreneurial Ecosystem***

Over the last decade, the concept of entrepreneurial ecosystems has exploded in popularity among researchers, policymakers, and practitioners, even though there has yet to be an agreed-upon definition and theoretical ground (Fubah & Moos, 2021). For example, Spiegel (2017) described entrepreneurial ecosystems as "a tool in the study of the geography of high-growth entrepreneurship, the union of localized cultural outlooks, social networks, investment capital, universities, and active economic policies that create environments supportive of innovation-based ventures" (p. 1). According to Spiegel, as these attributes produce resources for entrepreneurs, the interactions and relations create the entrepreneurial ecosystem.

Gueguen et al. (2021) described entrepreneurial ecosystems as providing a context for start-ups to access resources, networks of actors, and processes that link the entrepreneur with local resources. Entrepreneurial ecosystems reflect a growing interest in localized entrepreneurship settings and a focus on entrepreneurial actors' agency to build and modify their surroundings, which has contributed to developing a vibrant research landscape shaped by a legacy of various research traditions and new policies being implemented in several contexts around the world (Wurth et al., 2021).

Academic entrepreneurship and the entrepreneurial ecosystem in the project were investigated by (Hallam et al., 2017). They concluded that fostering, supporting, developing, and commercializing new technologies necessitates creating and maintaining a transformational and progressive entrepreneurial ecosystem within the university environment. The findings highlight the significance of company culture in the commercialization of technology.

Similarly, Yusof et al. (2009) investigated academic entrepreneurship as part of the larger ecosystem using a "triple-helix of government-university-industry relations" framework to create

a conducive entrepreneurial context. A transformational and progressive ecosystem within the academic environment is needed to foster support for the broader commercial context.

Bărbulescu et al. (2021) discussed the importance of focusing on information technology and having solid relationships with broader entrepreneurial ecosystems, particularly academia, the public and private sectors, and citizens in the post-COVID era. Because of the importance of collaboration in today's business world, collaborative networks play an essential role.

In addition, Lose (2022) alluded to the fact that standardized incubation programs support the entrepreneurial ecosystem across economies, accelerating entrepreneurship in sub-Saharan Africa and encouraging governments to promote incubation and entrepreneurship at local, national, and regional levels. For Aldrich, time is a factor in the entrepreneurial ecosystem, defined as "Systems of entrepreneurship as institutional and organizational as well as other systemic factors that interact and influence the identification and commercialization of entrepreneurial opportunities. Systems of entrepreneurship are geographically bounded (Audretsch et al., 2021, p. 4).

Chaarani and Raimi (2022) emphasized the positive role of NGOs in creating sustainable environmental and social solutions using business projects to meet societal needs in Lebanon, intersecting economic profit, environment, and society, and addressing the entrepreneurial ecosystem. The GEM 2021 assessed entrepreneurial environments for enterprises using nine entrepreneurship points: (a) ease of access to finance; (b) relevant government policies, affordable taxes, and bureaucracy; (c) government programs support new entrepreneurs at local, regional, and national levels; (d) adequacy of entrepreneurial education introduced at school and post-school; (e) transferring research and development to commercial ventures; (f) affordable professional services to support new experiences; (g) ease of entry into the market dynamics; (h)

availability and accessibility of physical infrastructures; and (i) normalizing entrepreneurship among communities. After introducing the entrepreneurial ecosystem index to enable entrepreneurial activities, Bloh (2021) also affirmed how GEM closed the gap between entrepreneurial ecosystem definitions and what it entails.

Therefore, a broader, friendly ecosystem must be assessed for successful entrepreneurship implementation in countries and actions taken to boost socio-economic development. The current study describes youth engagement in entrepreneurship and training within the Ethiopian ecosystem.

### ***Entrepreneurial Policy***

Bloh (2021) studied regional surveying entrepreneurs, economic development agencies or administrators, financial institutions, higher education institutions, political leaders, business incubators, and the media who would be stakeholders in entrepreneurial activities and suggested that a policy approach using entrepreneurial ecosystem stakeholders brings beneficial results. He concluded that policy approaches using entrepreneurial ecosystem stakeholders should yield more precise and effective results for policies. Entrepreneurial policies are designed to increase the quality of new firms or, more commonly, the number of new enterprises, as small company development and entrepreneurship are at the heart of many countries' economies. Any country that pays special attention to its entrepreneurs has a higher chance of improving its economy (Bramwell et al., 2019). As a result, many governments have established policies to support entrepreneurial activities in response to the demand for such policies.

In addition, several policies have been explicitly designed to encourage entrepreneurship. In developing countries, entrepreneurship policies have also been introduced to encourage entrepreneurial activity (Akinyemi & Adejumo, 2018), and they discovered that policy

parameters that promote entrepreneurial activity vary depending on the stage of entrepreneurship.

Entrepreneurship and innovation have been linked in the economic theory of market capitalist economies since (Schumpeter 1912, 1942). Modern policy frameworks hardly distinguish between the two, consistently incorporating entrepreneurship and innovation into broader public policy frameworks. Potts (2015) studied how national innovation policies interact strategically to create emerging de facto global entrepreneurship and innovation policies. Entrepreneurship policy is intrinsically linked to innovation policy, although innovation policy takes precedence in most countries. Improved innovation policies enable more effective entrepreneurial settings. Entrepreneurship and innovation policy must begin with a better understanding of national innovation policy's strategic global interactions (Potts, 2015).

### ***Youth Entrepreneurship***

Youth means a lifetime when someone is young and usually refers to the period between adolescence and adulthood or maturity. It is transitioning from babyhood reliance to adulthood independence (Mwampote, 2019). However, there has yet to be an agreement on the age span for the youth. Youth refers to the individual's development stage between adolescence and adulthood; as a result, juvenile learning is seen as a subset of adult learning and is described as a formative stage of adult learning (Pigozne et al., 2019). In many industrialized countries, entrepreneurship education is constantly promoted to raise awareness and encourage business start-ups in youth (Janissenova et al., 2021).

Youth entrepreneurship encourages youth to be innovative and resilient in pursuing new ideas and solutions. Moreover, entrepreneurship is critical to community peace and prosperity

and plays a role in poverty alleviation, wealth distribution, and self-sufficiency (Emmanuel et al., 2018; GEM, 2022).

Starting a business is a driver for economic development since it reduces unemployment; however, many countries' adoption of entrepreneurial education is not generating dividends in job generation, especially among youth (Cieslik et al., 2022). According to their research findings, the stalled progress in meeting the 2020 UN youth employment agenda was not because entrepreneurial training and education do not work; instead, they are not enough to address the structural nature of the unemployment crisis and factors such as socioeconomic dynamics and deficient governance should be studied in depth.

Adult learning is divided into two stages: youth learning and adult learning. Youth learning is regarded as an early stage of adult learning and is considered a part of adult learning. In Latvia, adult education is regulated by national law and is provided on three levels: national, local, and institutional (Pigozne et al., 2019). Additionally, adult learning means “the entire range of formal, non-formal, and informal learning activities undertaken by adults after a break since leaving initial education and training resulting in new knowledge. This includes university-level or higher education under-taken after a break (other than deferred entry) since leaving initial education and training.” Proactivity draws innovative change and moves society a step forward. Entrepreneurship, alongside other possible activities, such as volunteering, participating in social campaigns, and giving a hand to those in need, is a means to develop one's proactivity (Pigozne et al., 2019).

Ahmed and Ahmed (2021) stated that Ethiopia aims at youth entrepreneurship as a possible tool for poverty alleviation and economic development through job creation. According to Adenle's (2017) research, entrepreneurship education is critical for African economic progress

since it empowers young leaders for commercial and entrepreneurial activity. All study participants agreed that entrepreneurship education would be crucial in developing the next generation of young entrepreneurs to help the continent establish solid and competitive economies. Furthermore, developing new company strategies and leadership leaders is critical, given the need for more entrepreneurial capabilities.

In the study conducted by Pigozne et al. (2019) on promoting youth entrepreneurship and employability through non-formal and informal learning, the researchers found that young adults preferred experience sharing, collaboration with employers, doing internship projects, facilitating entrepreneurship experiences, and training that will help them learn practically and improve their life skills. Similarly, learning from good practices of training youth on entrepreneurship shows that training programs should never be a standalone agenda of youth employment but rather must be one aspect of a more extensive entrepreneurial ecosystem focusing on real examples from practicing entrepreneurs, entrepreneurial effectiveness, and personal transformation (Cooney, 2012).

Pigozne et al. (2019) emphasized working with employers to plan educational activities such as field trips, internships, projects, and meetings with entrepreneurs to learn about their experiences. Furthermore, the respondents recognized the value of collaboration in gaining first-hand work experience, facilitating their participation in entrepreneurship while boosting their professional self-determination, competitiveness, career advancement, and overall quality of life. According to this research, internships in a company or institution, projects, other people's experiences, success stories, and training enterprises are the most effective informal learning methods, forms, and initiatives to promote youth entrepreneurship and employability in Latvia.

Regarding the age of entrepreneurs, comparable findings show people establish their firm between the ages of 25 and 45 and mainly between ages 25 and 34 (Delmar & Davidson, 2000; Mehari & Belay, 2017; Storey, 1994).

### ***Entrepreneurial Readiness***

Individual readiness for entrepreneurship is the combination of personal characteristics that identify people ready to start a business. Entrepreneurs are particularly capable of observing and analyzing their surroundings to channel their highly creative and productive potential, so they may use their capacity to dare and desire self-achievement, according to (Coduras et al., 2016).

Young persons' entrepreneurial preparedness is defined by their ability to study various environmental options, apply their potential entrepreneurial ability based on available resources, and their motivation to achieve personal goals (Olugbola, 2017). In addition, entrepreneurship training is essential because it allows young people to develop their business talents (Coduras et al., 2016; Olugbola, 2017).

Raza et al. (2018) investigated the relationship between entrepreneurial readiness and entrepreneurial behavior across nations to see if formal institutions have a role in this relationship. The findings suggest that entrepreneurial readiness is linked to entrepreneurial behavior (as measured by entrepreneurial entry and opportunity-based entrepreneurship). This link strengthens as political democracy, government regulations, financial capital availability, and market liquidity improve. For policymakers, the findings demonstrate that when individuals have a high level of entrepreneurial preparedness, political democracy, and government laws, financial capital availability and market liquidity connect favorably with entrepreneurial



behavior. Therefore, policymakers should enact regulations that allow individuals to start their businesses in a safe atmosphere.

Mwampote (2019) studied factors in teenagers' entrepreneurial readiness and found that motivation, entrepreneurial skills, and perceived behavioral control were all statistically significant. On the other hand, the family background could have been more statistically unimportant concerning young entrepreneurial preparation. Furthermore, it was shown that young people confront various obstacles when they want to start a business. Lack of sufficient start-up funding, a lack of entrepreneurial education among the young, a lack of marketplaces to sell the products, and a lack of confidence among adolescents were identified as obstacles to youth readiness.

Wulandari et al. (2021) stated that entrepreneurial readiness can be cultivated informally and formally through training, coaching, seminars, and so on, providing a forum for entrepreneurs. Mack et al. (2021) concluded that there is a positive correlation between exposing students to entrepreneurial training and later engagement in entrepreneurial activities.

### ***Ethiopia's Entrepreneurial Setting***

Ethiopia's estimated population is 120.8 million (22.7% urban and 77.3% rural) (United States Agency for International Development [USAID], 2021), making it the second most populous country in sub-Saharan Africa after Nigeria. There are more than 80 ethnic groups with their own cultures and languages. Orthodox Christianity (43.8%) and Islam (33.3%) are the main religions.

Although Ethiopia is one of the fastest-growing economies in the world, with a 6.4% increase in 2021/2022, it is also among the poorest, with a per capita income of \$1020 per year (World Bank, 2023). As a result, the government launched a ten-year development plan from

2020/2021 to 2030 based on a *Home Grown Economic Agenda*, gravitating towards a private sector-driven economy. According to USAID (2017), Ethiopia's youthful population was estimated at 104 million; 41% were under the age of 15, and more than 28% were between the ages of 15 and 29. In addition, youth unemployment was estimated at nearly 27%.

According to the Global Entrepreneurship Monitor 2012 report, Ethiopia has few private enterprises compared to its population size. It has one of the lowest entrepreneurial activity rates in sub-Saharan African countries, with about 12% of the adult population (18-64) reporting establishing or running a business in the last 3.5 years. The average for countries in the sub-Saharan region is about 28% percent. Similarly, 8% of adults in Ethiopia run established businesses, while the regional average is 15% (Herrington & Kelly, 2012).

A study by Presler-Marshall et al. (2022) showed that Ethiopian youth have more significant challenges in accessing employment, which is unmatched by high population growth, suggesting a twin-track approach to invest in youth education and households to meet current needs. According to Sintayehu (2017), urban unemployment in Ethiopia is 29%, and the government has made several changes to address the issues of the youth generation. This included (a) formulating a national policy in 2005 to promote youth participation in all spheres of life, (b) developing a multi-sector strategy plan from 2006 to 2015, (c) implementing an adolescent development and participation strategy in 2013, (d) incorporating youth participation in the socio-economic and political activities in the ten-year Growth and Transformation Plan of the country, (e) promoting the SME to large scale by mainstreaming youth issues within other development programs, (f) increasing the number of youth centers, (g) strengthening youth associations, (h) encouraging youth entrepreneurship since 2014, and (i) preparing youth

development packages (Sintayehu, 2017). However, despite the efforts, youth unemployment remains high in the country.

According to the Central Statistics Agency (2022), critical findings about Ethiopia's labor force and migration indicate that the unemployment rate is 8% at a national level and 7.7% for youth aged 15-29. In a study conducted by Sintayehu (2017) on the challenges and opportunities faced by Ethiopian youth entrepreneurs, as well as roadblocks to the development of entrepreneurship in the country, he concluded that the most significant challenges are the absence of a culture of entrepreneurship, lack of technical and financial support to become an entrepreneur, burdensome administrative and regulatory framework, and poor access to infrastructures. Society's incorrect perception of job creation and society's lack of readiness and willingness to live a life apart from the traditional way of living are additional challenges.

Mehari and Belay (2017) studied the challenges and prospects of entrepreneurship development and job creation for unemployed youth in the Addis Ababa and Dire Dawa city administrations. They described how using *iqub*— a social network to which individuals or families contribute to meet the financial needs of a person or a family—is used as a substitute for microfinance credit to start-up businesses and has created a platform for start-ups without formal banks that avail credit only if there is matching collateral.

Sintayehu (2017) also stated that Ethiopia created holistic youth development opportunities in collaboration with UNDP by launching a system in which the youth would be engaged in entrepreneurship and enterprise formation programs to address youth unemployment of age 15-24, which was 24%. Investment in the youth development program was designed with development actors, such as UN agencies like UNICEF, UNDP, and Italian Cooperation.

Using government-led youth centers and developing the capacity of the youth by giving life skills training was one strategy. Another strategy to address employment needs was establishing EDI to increase employment by creating micro and small enterprises for youth and women.

According to the assessment report on the entrepreneurship ecosystem in Ethiopia by Mulu et al. (2018), the EDI has provided different types of training to entrepreneurship trainers selected from various public universities. For instance, by May 2015, the center had provided entrepreneurship training workshops to 306 university lecturers selected from 29 public universities. Addis Ababa, Bahir Dar, Mekelle, Wollo, and Hawassa University lecturers attended the training organized by EDI, representing 10.13%, 10.13%, 7.52%, 7.19%, and 6.21% of the total participants drawn from public universities. In a study by Ahmed and Ahmed (2021), out of eight potential constraints for youth entrepreneurial engagement in small and medium enterprises, the lack of unfavorable government policy was the first constraint identified and drew the government's focus on improving youth entrepreneurship.

## **Background of Instrument and Variables**

### ***Entrepreneurial Self-Efficacy Scale***

Moberg (2012) built a 20-item ESE scale based on three previously established 29-item scales from Chen et al. (1998), DeNoble et al. (1999), and McGee et al. (2009). He stated that the scale was tested in a survey that included 445 students from 12 programs in three universities in Denmark and one in Sweden.

Moberg (2012) used exploratory factor analysis to investigate the multidimensionality of the items and confirmatory analysis to investigate convergent, discriminatory, and nomological validity. Results show high predictive validity and reliability in entrepreneurial behaviors as the

items are comprehensive for lay people without entrepreneurial experience. He used maximum likelihood as the estimator and stated that the 5-factor model met Bentler's (1990) criteria for good fit indices with a Comparative Fit Index (CFI) greater than .90, a Root Mean Square Error of Approximation (RMSEA) below .06 and a Standardized Root Mean Square Residual (SRMR) below .08 (CFI = .92, RMSEA = .06 [.057-.071], SRMR = .06).

In addition, to test the construct validity of the ESE scale, Moberg (2012) stated that a known-groups validation was performed by dividing the sample into two groups. The first group included students who have operated a business, are operating a business, or are trying to set up a business ( $N = 175$ ). The baseline group included the rest of the students ( $N = 259$ ). T-tests were used to establish whether there was a significant difference in mean scores between the two groups. Results showed that the students with entrepreneurial experience showed higher mean values in all 20 items.

Morgan (2012) noted that the scale can be used to evaluate programs that include control groups. Correlation between constructs derived through confirmatory factor analysis showed all correlations were significant at  $p < .001$ . Pearson product-moment correlations between entrepreneurial behavior, attitude, and the five ESE constructs show that all are greater than .09 and are statistically significant at  $p < .05$ .

As far as the reliability of constructs was concerned, the items scored: creativity (Cronbach's  $\alpha$  .85), planning (Cronbach's  $\alpha$  .71), marshaling (Cronbach's  $\alpha$  .67), managing ambiguity (Cronbach's  $\alpha$  .77), and financial literacy (Cronbach's  $\alpha$  .85).

## **Summary**

The literature review section started with the introduction of the chapter, the literature search strategy, the identification of gaps in the literature to be filled by the study, followed by

the selected theoretical background to hypothesize a topical review of literature and background of entrepreneurial self-efficacy instrument and variables. The chapter includes an in-depth review of current, peer-reviewed journals regarding the background of entrepreneurial theories and the reason for social learning theory being selected as the theoretical underpinning for the conceptual framework of the research. The chapter concludes with the historical background of how the validity and reliability of the entrepreneurial self-efficacy tool was established.

### **CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY**

This chapter describes the methods and procedures used to conduct the study and answer the research question. Chapter Three begins with an overview that includes (a) the research objective; (b) the research design and rationale; (c) the research procedure, which includes the targeted population and sampling, instruments used to collect data, data collection procedures, selection of training participants, and statistical techniques used to evaluate data; (d) ethical considerations, and a (e) a summary of the chapter.

#### **Overview**

The Entrepreneurship Development Institute, in collaboration with UNDP, has been providing entrepreneurial training to realize the vision of Ethiopia's growth and transformation plan in response to the growing role of the private sector since 2013. The general purpose of the current research was to examine the difference between youth readiness to start or develop a business based on entrepreneurial self-efficacy of those who have taken EDI entrepreneurship training and those who have not to determine if there is a significant difference in youth entrepreneurial readiness.

#### **Research Design and Rationale**

Quantitative research was used to describe the socio-demography of research participants and examine the difference between youth readiness to start or develop a business based on entrepreneurial self-efficacy of those who have taken EDI entrepreneurship training and those who have not to determine if there is a significant difference in youth entrepreneurial readiness. The study used a non-experimental research design, including a group that had the training and a group that did not. The design was selected because the study used prior events and past experiences, and the researcher investigated what occurred in the selected group who already

have behaviors of interest. The comparative design was appropriate to determine the difference between the two groups by obtaining scores from each and answering the problem statement.

In addition, non-parametric data is used when the samples are not normally distributed, the sample sizes may not be equal, there is a small sample size, the samples are ordinal, and the data contains outliers. In this case, the Mann-Whitney test was chosen because the samples were from two unrelated groups, and the data were ordinal.

The research answered this research question: “What differences exist in youth entrepreneurial readiness based on entrepreneurial self-efficacy related to EDI entrepreneurship training?”

## **Research Procedure**

### ***Population and Sample Selection***

In this quantitative research, the EDI trainees in Addis Ababa, Ethiopia, who were youth aged 18-35 and trained in the first quarter of 2023, were selected. One hundred twenty-seven participants were trained from January–March 2023. Out of these, 75 were aged 18-35.

Convenience sampling was used with 95% confidence, and 63 sample sizes were selected using the sample formula  $n = N * [Z^2 * p * (1-p)/e^2] / [N - 1 + (Z^2 * p * (1-p)/e^2)]$ . Given population size,  $N = 75$ , critical value at 95% confidence level,  $Z = 1.96$ , and margin of error,  $e = 5\%$  or 0.05 (Andrews et al., 2012; Krejcie & Morgan, 1970).

### ***Instrumentation***

According to social learning theory, a perceived belief system regulates human motivation and actions (Bandura, 1977). Self-efficacy refers to one's self-perceptions of their abilities and skills to achieve in a given domain, which impacts thoughts, affect, and behavior



(Bandura, 1997). An entrepreneurial self-efficacy instrument was developed based on social learning theory to assess a particular entrepreneurial task.

### ***Entrepreneurial Self-Efficacy***

Bandura framed self-efficacy-specific domains related to entrepreneurship. Over a decade, initially, 29 items were derived from the three ESE scales developed by Chen et al. (1998), DeNoble et al. (1999), and McGee et al. (2009); Cronbach's alpha for all was  $> 0.72$ , and the total entrepreneurial self-efficacy (one dimension) = 0.89.

However, Moberg (2012) further revised the tool with five constructs, and 20 items with a 7-point Likert scale, ranging from Do Not Agree (1) to Agree (7), were selected. Reliability rates were reported for creativity (Cronbach's  $\alpha = .85$ ), planning (Cronbach's  $\alpha = .71$ ), marshaling (Cronbach's  $\alpha = .67$ ), managing ambiguity (Cronbach's  $\alpha = .77$ ), and financial literacy (Cronbach's  $\alpha = .85$ ). In addition, convergent validity of all items had significant loading above .50 on their constructs, and discriminant validity correlated above .80. Moberg also reported that the new ESE scale demonstrated good discriminant and nomological validity.

The revised ESE scale with neutral wording was used to assess the entrepreneurial self-efficacy of the trained EDI trainees. Approval was obtained from the author, Kåre Moberg, kaare@ffefonden.dk, by e-mail, Department of Strategic Management and Globalization Copenhagen Business School, and The Danish Foundation for Entrepreneurship – Young Enterprise. The two-part survey was comprised of 30 items, two sets of queries—10 demographic items, and 20 entrepreneurship self-efficacy scale items.

### ***Selection of Training Participants***

Those interested in taking entrepreneurship training completed application forms for EDI. The Ethiopian government and development partners proactively organized those qualified for

small and medium enterprises with the potential for EDI training. However, individuals who would like to take entrepreneurial training can also directly apply and pass through the screening process. Because EDI operates with the support of donors, funds are allocated to trainees who have the potential to start or develop their small and micro businesses.

After the applications were collected, pre-screening was conducted, and the application forms were scored based on intention, readiness, business startup, or expansion potential. Those who scored 50% were called for an interview by master trainers. The interview has two components. The first part focuses on assessing the motivation and clarity of their knowledge about business entrepreneurship and the resources it entails. The second component is a behavioral assessment focusing on the ten entrepreneurial competencies. Interviewees must score 60% to be eligible to take the six-day training.

The interview lasted between 45 minutes to an hour. Those who passed the screening test were enrolled in the training. Since EDI conducted the screening of trainees, the recruitment criteria for this study were youth (18-35) who took the EDI training in the first quarter of 2023 and were willing to participate in the research. The data were collected using ESE questionnaires completed by the respondents at EDI.

### ***Data Collection and Preparation***

The Omega Graduate School Institutional Review Board was contacted to obtain approval regarding the features and instrumentation of the study before data collection. After IRB's approval, a permission letter and a letter of cooperation were obtained from OGS about the study. EDI was asked to access the database to contact the participants through Survey Monkey.

Participants in the study were accessed from the EDI database, and a recruitment letter was sent to them. The survey provided the participants with a letter explaining the nature of the research, the security of their responses, and the anonymity of the respondents (Appendix B). Those who agreed to participate were also sent an informed consent (Appendix C).

The researcher chose Survey Monkey due to the ease of distributing the survey and collecting data electronically because Survey Monkey generated and customized charts and graphs based on the answers to the survey questions. It is also easy to conduct surveys and obtain responses. Survey Monkey allowed the researcher to ensure the anonymity of the participants by turning off the IP tracking devices.

At the end of the survey, the participants could withdraw from the study before submitting responses. Data were exported to Statistical Analysis Software (SPSS) 26, a statistical analysis program, upon survey submission. Participants were assured in the cover letter and at the beginning of the survey of their anonymity, the anonymity of their choices, and the security of the data collected. The participants were asked to complete the survey within two weeks. Reminder emails were sent to those who have not responded after the first week to encourage participation.

The questionnaire was given to a government-approving translation office to translate the instrument into one of the local languages, Amharic. The reason for this approach was to gain accurate information from participants and avoid language barriers in understanding the questions. The translation office had suitable qualifications, was approved by the Ethiopian government, and was eligible to translate documents. Survey Monkey had both English and Amharic versions, allowing the survey participants to understand the issue clearly.

The researcher collected data using Survey Monkey for two weeks. However, after collecting samples from the EDI-trained participants, an additional four weeks were needed to collect samples from non-trained participants to compare results. Therefore, additional time was required to collect data from EDI non-trained research participants to match the sample data of the trained participants. One hundred twenty-six respondents—60 men and 66 women—completed the survey.

### **Data Analysis**

Quantitative research methodology was selected because it was appropriate to address the research question, “What differences exist in youth entrepreneurial readiness based on entrepreneurial self-efficacy related to entrepreneurship training?”

The hypothesis was based on the literature reviewed on social learning theory and was tested for significant differences using the Mann-Whitney U test. The dependent variable of entrepreneurial self-efficacy was analyzed based on the individuals’ ratings on the survey. The test was chosen because the data were ordinal, two separate groups, and non-experimental. Research participants were the youth who had taken entrepreneurial training at EDI from January to March 2023, and the results were compared with those on the waiting list.

### ***Reliability***

The researcher calculated a Cronbach’s alpha score using SPSS for the ESE variables to measure the reliability of the ESE construct. The researcher added the scores for the 20 items for the five subscales to create a composite score that measured the construct of ESE and then used SPSS to calculate Cronbach’s alpha. Cronbach’s alpha for the ESE showed  $r = 0.957$ , which is considered a high level of reliability. The researcher then compared the Cronbach alpha for trained versus not-trained participants and compared it with the survey calculations of

Cronbach's alpha for the composite scores for ESE. Cronbach's alpha of the standardized items was greater than 0.9, while the researcher's alpha was 0.957; therefore, both scores were consistently high. As a result, the researcher found that the factors of entrepreneurial self-efficacy were reliable (Table 1).

**Table 1**

*Cronbach's Alpha of Entrepreneurial Composite Scores*

Reliability Statistics		
Cronbach's alpha	Cronbach's alpha based on standardized items	No. of Items
.957	> .9	20

The researcher compared the reliability of each sub-construct. The reliability of the creativity subconstruct was Cronbach's  $\alpha = 0.91$ , whereas, in the original reliability, the score of creativity was Cronbach's  $\alpha = .85$  (Table 2).

**Table 2**

*Cronbach's Alpha of Creativity Entrepreneurial Composite Scores*

Reliability Statistics		
Cronbach's alpha	Cronbach's alpha based on standardized items	No. of Items
.910	> .85	5

The original reliability item score of planning was Cronbach's  $\alpha = .71$ , whereas the present research showed 0.907 (Table 3).

**Table 3***Cronbach's Alpha of Planning Entrepreneurial Composite Scores*

Reliability Statistics		
Cronbach's alpha	Cronbach's alpha based on standardized items	No. of Items
.907	> .71	3

The researcher compared the reliability of the marshaling sub-construct. The original reliability item score of marshaling was Cronbach's  $\alpha = .67$ , whereas the present research showed 0.906 (Table 4).

**Table 4***Cronbach's Alpha of Marshaling Entrepreneurial Composite Scores*

Reliability Statistics		
Cronbach's alpha	Cronbach's alpha based on standardized items	No. of Items
.906	> .67	3

The researcher compared the reliability of managing ambiguity subconstruct. The original reliability item score of managing ambiguity was Cronbach's  $\alpha = .77$ , whereas the present research showed 0.931 (Table 5).

**Table 5***Cronbach's Alpha of Managing Ambiguity Entrepreneurial Composite Scores*

Reliability Statistics		
Cronbach's alpha	Cronbach's alpha based on standardized items	No. of Items
.931	> .77	5

The researcher compared the reliability of the financial literacy subconstruct. The original reliability item score of financial literacy was Cronbach's  $\alpha = .85$ , whereas the present research shows 0.889 (see Table 6).

**Table 6**

*Cronbach's Alpha of Financial Literacy Entrepreneurial Composite Scores*

Reliability Statistics		
Cronbach's alpha	Cronbach's alpha based on standardized items	No. of Items
.889	> .85	4

### ***Validity***

Similar to the original validity test from correlation between constructs derived through confirmatory factor analysis, all correlations were significant at  $p < .001$ . Convergent validity showed all items having significant loadings above .50 on their constructs, and discriminant validity showed none of the constructs correlated above .85 with another construct (Moberg, 2012). The ESE instrument was validated by demonstrating that the intercorrelations among the five ESE dimensions were all positive, and there was a high correlation at  $p < .001$  level (Table 7).

### ***Socio-demographic Data***

Kolvereid (2017) found socio-demographic factors, such as the role of family background, sex, and prior self-employment on employment status choice, indirectly influence entrepreneurial business activities. Several socio-demographic factors were included in the current study: gender, age, income level, educational level, work experience, entrepreneurial training/education, and if training helped them start or develop their business. A descriptive analysis of the two groups was conducted to identify similarities or differences between those

who took the EDI training and those who did not. In addition, these demographic data complemented the data collected by the researcher.

**Table 7**

*Correlation of ESE Constructs*

Correlations		Creativity ESE	Planning ESE	Marshaling ESE	Managing Ambiguity ESE	Financial Literacy ESE
Creativity ESE	Pearson	1	.693**	.562**	.569**	.570**
	Correlation					
	Sig. (2-tailed)		.000	.000	.000	.000
	<i>N</i>	126	126	126	126	126
Planning ESE	Pearson	.693**	1	.689**	.641**	.678**
	Correlation					
	Sig. (2-tailed)	.000		.000	.000	.000
	<i>N</i>	126	126	126	126	126
Marshaling ESE	Pearson	.562**	.689**	1	.614**	.626**
	Correlation					
	Sig. (2-tailed)	.000	.000		.000	.000
	<i>N</i>	126	126	126	126	126
Managing Ambiguity ESE	Pearson	.569**	.641**	.614**	1	.725**
	Correlation					
	Sig. (2-tailed)	.000	.000	.000		.000
	<i>N</i>	126	126	126	126	126
Financial Literacy ESE	Pearson	.570**	.678**	.626**	.725**	1
	Correlation					
	Sig. (2-tailed)	.000	.000	.000	.000	
	<i>N</i>	126	126	126	126	126

*Note*\*\* . Correlation is significant at the 0.01 level (2-tailed).

***Hypothesis***

H<sub>0</sub>: No statistically significant difference exists in entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy between those who received entrepreneurship training and those who did not.



H: A statistically significant difference exists in entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy between those who received entrepreneurship training and those who did not.

The hypothesis was analyzed using the samples to determine whether there was a statistically significant difference in entrepreneurial self-efficacy scores between those who had taken the EDI training and those who had not. The result was analyzed using the Mann-Whitney U test to determine if there was a significant difference between the groups. The Mann-Whitney U test compared the means of the two groups.

The scores of ESE served as the dependent variables (DV), and the participants' readiness to start or develop their business. The independent variable (IV) was categorical in a demographic question, whether or not the participants were EDI trained or not trained.

### ***Moderating Variable***

The entrepreneurship training was used to moderate whether or not those who had taken the six-day EDI training significantly differed in youth entrepreneurial readiness from those who had not. According to Cohen and Cohen (1983), moderation occurs when the independent variable and the moderating variable have mutual effects on a variance of the dependent variable than that explained by the direct effect.

All youth trained within the first quarter of 2023 and willing to participate in the study were assessed on entrepreneurial efficacy, and a similar assessment was given to those who had not taken the training to assess if entrepreneurial training made a significant difference. The different factors were examined to know the extent of the relationship, whether these factors had a differential or interactional effect on entrepreneurial readiness, and the moderating role of entrepreneurship training.

The researcher used SPSS 26 data analysis software to perform statistical analysis. The data analysis included simple descriptive statistics and Mann-Whitney U tests. Simple descriptive statistics, including frequencies and percentages, analyzed the respondents' backgrounds, and demographic data allowed for a comparison of the two groups.

The present study may fill the knowledge gap of how an individual's entrepreneurial self-efficacy contributes to entrepreneurial readiness as moderated by EDI training. This suggests the need to engage the youth and build entrepreneurial skills through training to start or develop businesses, thus contributing to employment creation and economic growth. The finding is also assumed to influence new business startups or those who build their business after participating in an entrepreneurship training program.

### **Ethical Compliance**

Ethical standards in research create professional accountability, protecting researchers and research participants. "The goal of the ethical researcher is to develop a fair, clear, and explicit agreement with the subject so that the subject's decision to participate in an experiment is made voluntarily, knowingly, and intelligently. The most fundamental ethical principles implied in the treatment of subjects involve non-maleficence, autonomy, and fidelity" (Heppner et al., 1992, p. 90).

In this research, participants were asked for their willingness to participate in the study, and if they were willing, they signed an informed consent form. The participants were not from vulnerable groups, and there was no potential harm in their participation in the study. In addition, the researcher indicated to research participants that there would not be preferred responses, that the responses would be anonymous, and that their participation would be voluntary with no conflicts of interest with the study-related groups and stakeholders. Approval to conduct the

research was sought and received from the Omega Graduate School Internal Review Board before the study began.

Data collection was done using Survey Monkey, which kept the participants' identities private and protected the research participants' confidentiality and anonymity. The electronic version of the completed questionnaires was secured against possible interference, damage, or deterioration. Participants completed the survey questions after completing the informed consent form, which included the purpose of the study, study procedures, risks, benefits, confidentiality, contact information, and voluntary participation in the study.

Survey Monkey allows all responses to be anonymous and users to withdraw from the survey at any time before submitting responses; two respondents withdrew from the current study. Moreover, to ensure participant anonymity and candid responses, the researcher limited demographic questions at the beginning of the survey. The researcher did not know the true identity of anyone participating in the survey.

### **Summary**

This study used quantitative research to describe the socio-demography of research participants and investigated the difference between youth readiness to start or develop a business based on entrepreneurial self-efficacy of those who had taken EDI entrepreneurship training and those who had not to determine if there was a significant difference. The study used a non-experimental research design, with a group that had the training and a group that did not. Sixty-three participants were selected from those trained from January to March 2023, ages 18-35, and ESE tests were self-administered using Survey Monkey. A similar number of participants who had not taken EDI training took the same tests. The Mann-Whitney U test was

conducted to compare whether the groups differed significantly. Ethical compliance and the limitations of the study were described.

## CHAPTER 4: SUMMARY OF RESULTS

Chapter Four summarizes the study's results on Youth Entrepreneurial Readiness: Entrepreneurial Self-Efficacy and the Moderating Role of Entrepreneurial Training. This study aimed to examine the difference between youth readiness to start or develop a business based on entrepreneurial self-efficacy of those who had taken EDI entrepreneurship training and those who had not to determine if there was a significant difference in youth entrepreneurial readiness. The chapter is comprised of an introduction, the preparation of raw data for analysis and tests assumptions, a summary of assumptions tests for the Mann-Whitney *U* Test, a descriptive summary of the participants and the ESE scale, hypothesis testing, and a summary.

The researcher first describes how the raw data were cleaned, the steps taken, the outcomes of the data cleaning, and the data preparation for analysis. Then, the researcher explains the assumption tests required for independent samples of the Mann-Whitney *U* Test and describes in narrative form how each assumption was tested and the outcome of each test is presented. A summary of the demographic data that describes and summarizes the general characteristics of the sample data is presented. Finally, the null hypothesis was tested, and the research question was answered.

### Introduction

This research study compared EDI-trained and non-trained individuals in entrepreneurship and was guided to answer the following research question:

RQ: What differences exist in youth entrepreneurial readiness based on entrepreneurial self-efficacy related to entrepreneurship training?

$H_0$ : No statistically significant difference exists in entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy between those who received entrepreneurship training and those who did not.

$H_a$ : A statistically significant difference exists in entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy between those who received entrepreneurship training and those who did not.

The hypothesis was analyzed using the samples to determine whether there was a statistically significant difference in entrepreneurial self-efficacy scores between those who had taken the EDI training and those who had not. The result was analyzed using the Mann-Whitney  $U$  test to determine if there was a significant difference between the groups. The Mann-Whitney  $U$  test compared the means of the two groups.

The 20-item entrepreneurial self-efficacy scale served as the dependent variables, comprising creativity (five items), planning (three items), marshaling (three items), managing ambiguity (five items), and financial literacy (four items). Respondents were asked to indicate their confidence level with each item on a scale of seven that included the options of not very confident, below average confident, slightly below average confident, average confident, slightly above average confident, above average confident, and very confident; and the values increased up to seven for very confident. The categorical variable of trained and not trained was the independent variable.

### **Preparation of Raw Data for Analysis**

After data were collected through Survey Monkey, the researcher imported the raw data into SPSS. Data cleaning took place to remove outliers and missing data. The researcher collected 132 responses; however, two participants did not consent and exited from the survey.

Four respondents' ages were above 35; therefore, they were removed because they did not meet the survey inclusion criteria. The final sample size in this study included 126 participants who submitted complete data sets that were used for data analysis: 62 were EDI trained, and 64 were on a waiting list.

### **Assumptions Tests for Mann-Whitney *U* Test**

The Mann-Whitney *U* test compares differences between two groups of rank-based nonparametric data to determine if the differences are significant on a continuous or ordinal dependent variable. It is often used when the independent samples *t*-test assumptions are unmet (Lund & Lund, 2023). The Mann-Whitney *U* test has four assumptions, and one has to check if the study design meets the assumptions' criteria. The researcher reviewed each assumption to determine if the Mann-Whitney *U* test was appropriate for analyzing the data.

Assumption 1: The dependent variable should be measured at the ordinal or continuous level. This study used a 7-point scale Likert items (7- *Strongly agree* to 1-*strongly disagree*) (Lund & Lund, 2023). Therefore, the assumption 1 criterion was fulfilled.

Assumption 2: The independent variable includes two categorical independent groups (Lund & Lund, 2023). This study used the entrepreneurial readiness *yes* and *no* categories and the *EDI trained* and *waiting list* categories for the moderating variables. Therefore, the assumption 2 criterion was fulfilled.

Assumption 3: The two groups should be independent, with no participant in more than one group (Lund & Lund, 2023). The two groups in the present study were mutually exclusive. Whether one is trained or on a waiting list was the moderating variable. Therefore, the assumption 3 criterion was fulfilled.

Assumption 4: The two groups are not normally distributed. If the two groups have the same or similar shape, we can use the test to compare the median of the dependent variables. Determining whether the distributions of scores for the two groups of independent variables have the same shape was conducted using SPSS. If the two shapes are not similar, we can compare the mean ranks, not the median (Lund & Lund, 2023).

**Table 8**

*Mann-Whitney Test of a Rank of Not-Trained and EDI-Trained Respondents*

ESE	Non-Trained Vs. Trained on Entrepreneurship	<i>N</i>	Mean Rank	Sum of Ranks
	Not Trained	64	51.88	3320.50
	EDI Trained	62	75.49	4680.50
	Total	126		

Table 8 shows the mean rank and sum of ranks for the two groups tested (i.e., the trained and not-trained groups). The group with the highest mean rank has higher readiness than the waiting list group.

**Table 9**

*Normality Test Statistics of the Grouping Variable <sup>a</sup>*

Normality Testing	Entrepreneurial Self-Efficacy Scale
Mann-Whitney <i>U</i>	1240.500
Wilcoxon <i>W</i>	3320.500
<i>Z</i>	-3.629
Asymp. Sig. (2-tailed)	.000

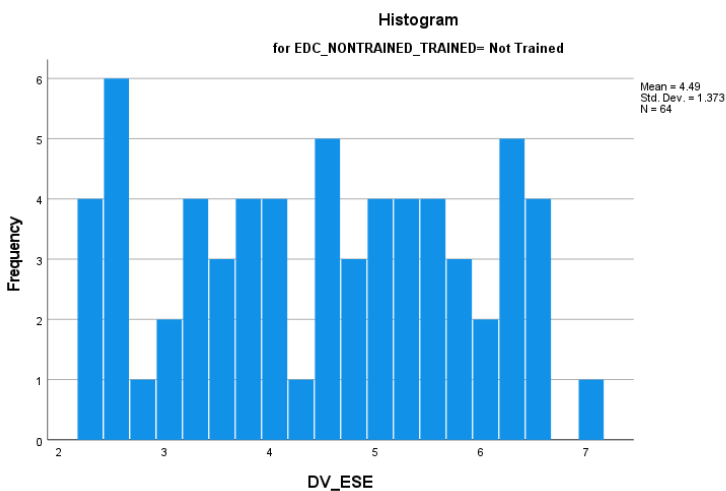
*a.* Grouping variable: Non-Trained vs. Trained in Entrepreneurship



Table 9 shows the actual significance value of the test. Specifically, the test statistics table provides the test statistic, U statistic, and the asymptotic significance (2-tailed)  $p$ -value. From these data, it can be concluded that entrepreneurial readiness in the trained group was statistically significantly higher than in the non-trained group ( $U = 1240, p = .000$ ).

**Figure 3**

*Histogram of ESE for EDI Not-Trained*



**Figure 4**

*Histogram of ESE for EDI-Trained*

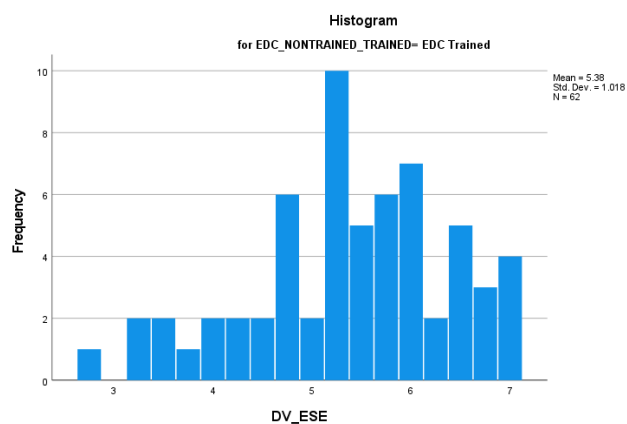
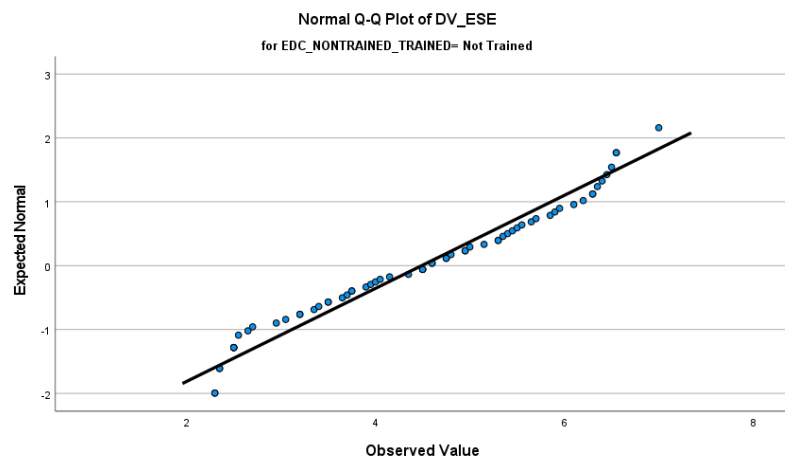


Figure 3 and Figure 4, the histogram shapes for the EDI not trained and trained on entrepreneurship, show non-similarity, implying the two groups were not normally distributed, fulfilling Assumption 4.

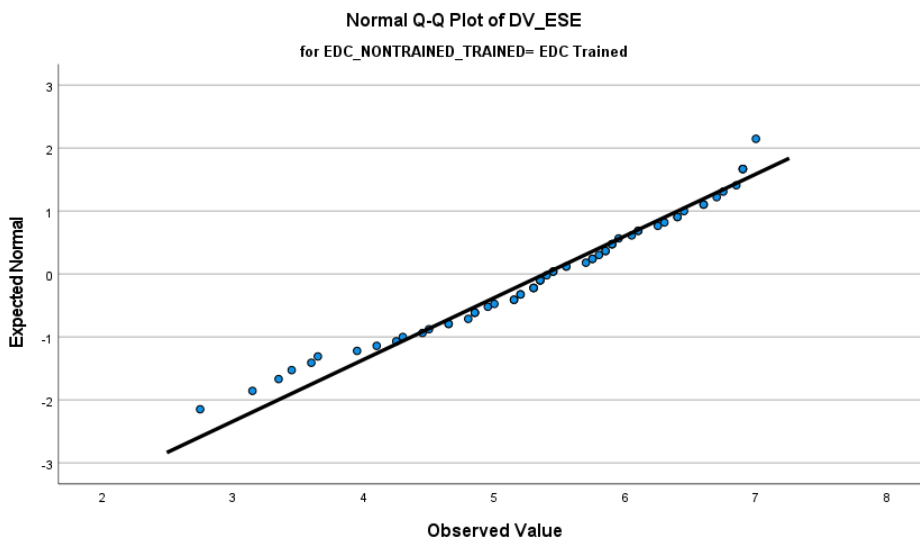
**Figure 5**

*Normal Q-Q Plot of ESE for Not-Trained*



**Figure 6**

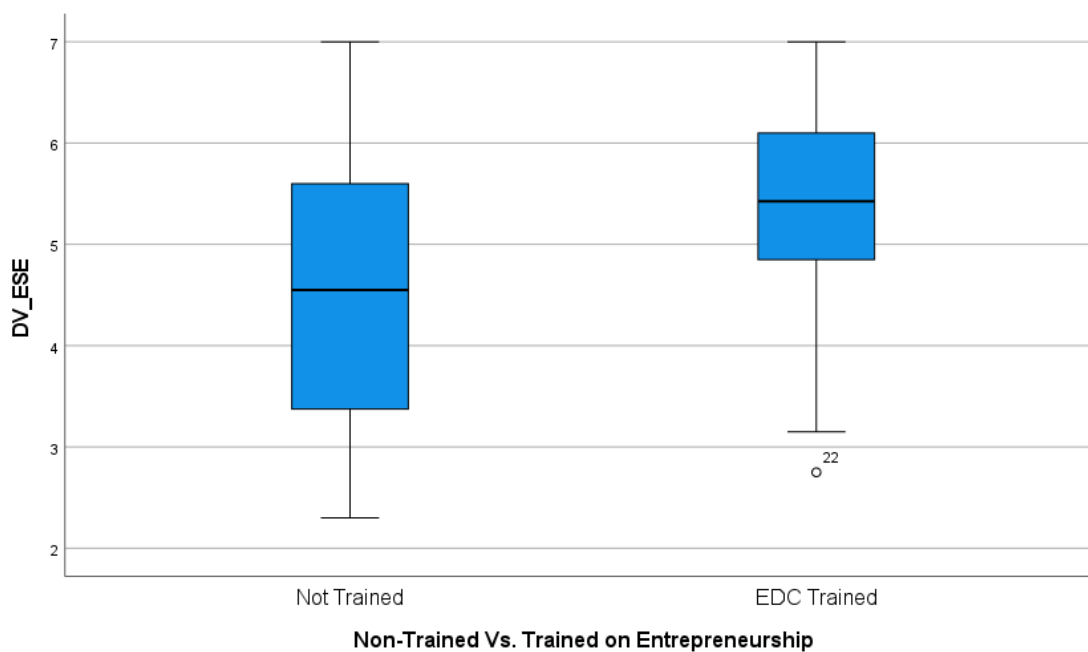
*Normal Q-Q Plot of ESE for EDI-Trained*



Similarly, Figure 5 and Figure 6 show the normal Q-Q plot of the dependent variable, entrepreneurial self-efficacy for not trained and trained on entrepreneurship. Most of the plots did not fall on the straight lines, implying the two groups were not normally distributed, fulfilling Assumption 4.

**Figure 7**

*Boxplot of EDI Not-Trained vs. Trained on Entrepreneurship*



The boxplot in Figure 7 also shows the dissimilarity of not trained and EDI Trained, fulfilling the Assumption 4.

### **Summary of Assumptions Tests for Mann-Whitney *U* Test**

The research study's design and data met the first three assumptions for the Mann-Whitney *U* test. Assumption 1 was one dependent variable measured at the rank level of ESE scores of trained and not-trained participants, so Assumption 1 met the criterion.

Assumption 2 was one independent variable consisting of two categorical, independent groups (those who answered *yes* or *no* to the readiness questions). The groups were EDI-trained and not-trained participants, so Assumption 2 was met.

Assumption 3 was independence of observations, which is met by having different participants in the two groups. EDI-trained participants were mutually exclusive groups from those on the waiting list, and those who expressed readiness differed from those who expressed non-readiness, so Assumption 3 was met.

Assumption 4 was the distribution of scores for both groups of the independent variable that have the same or a different shape. The researcher assessed the shapes of the independent variables via a population pyramid. While the shapes were not precisely the same, they were quite similar, so Assumption 4 was met. As a result, all four assumptions of the Mann-Whitney U test were met, so the researcher used this test to analyze if there were differences in ESE scores between EDI-trained and not-trained participants.

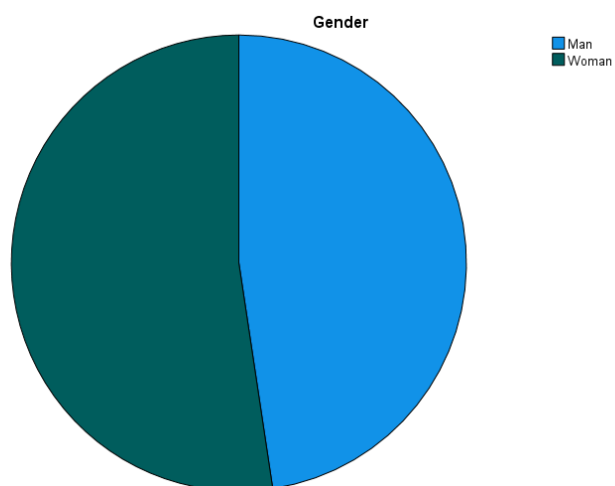
### **Descriptive Statistics of the Participants**

One hundred twenty-six participants completed the dataset for this research study. Table 10 shows 66 participants (28 EDI trained and 38 not trained) were women, representing 52%, and 60 (34 EDI trained, 26 not trained) were men, representing 48% of the sample (see Table 10 and Figure 8).

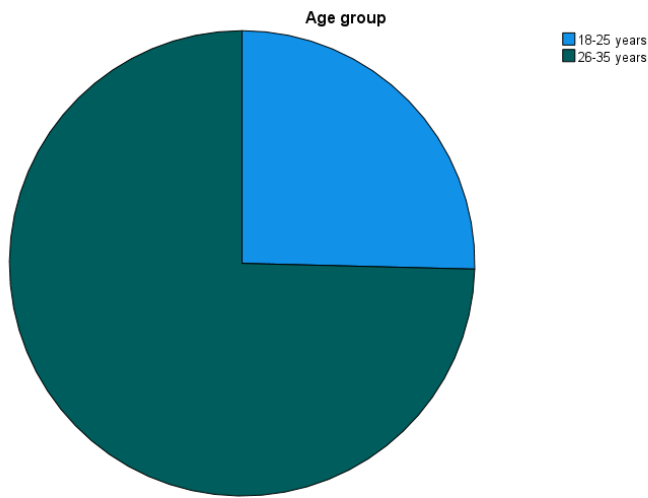
The largest group of respondents (94) was in the age category of 26-35 (54 EDI trained and 40 not trained), representing 75%, and 32 (8 EDI trained and 24 not trained) were 18-25, representing 25% of the sample (see Table 11 and Figure 9).

**Table 10***Respondents' Gender*

Gender	EDI Trained vs. Not Trained	<i>N</i>	%
Man	EDI-Trained	34	47.6%
	Not-Trained	26	
Woman	EDI-Trained	28	52.4%
	Not-Trained	38	

**Figure 8***Respondents' Gender***Table 11***Respondents' Age Group*

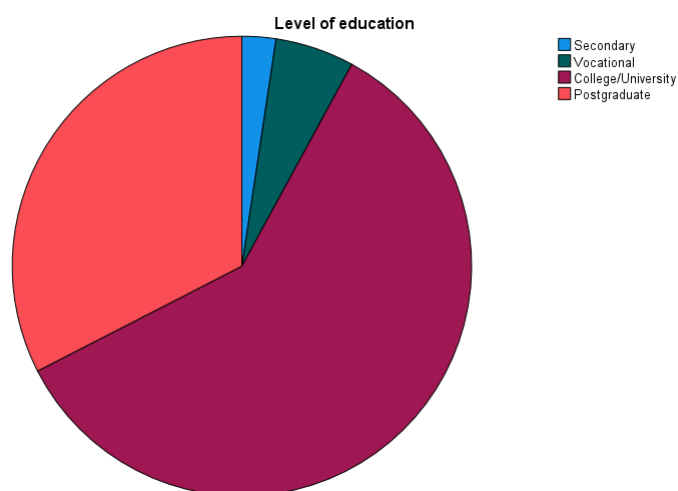
Age group	Trained vs. Not Trained	<i>N</i>	%
18-25 years	EDI-Trained	8	25.4%
	Not-Trained	24	
26-35 years	EDI-Trained	54	74.6%
	Not-Trained	40	

**Figure 9***Respondents' Age Group*

Respondents were asked to describe their level of education. The majority (75; 31 EDI trained and 44 not trained) were college/university graduates, representing 60%; 41 (30 EDI trained and 11 not trained) had done post-graduate studies, representing 33%; 7 not trained had done vocational studies representing 6%; and 3 (1 EDI trained and two not trained) had completed secondary school, representing 2% of the sample (see Table 12 and Figure 10).

**Table 12***Respondents' Level of Education*

Level of Education	Trained vs. Not Trained	<i>N</i>	%
Secondary	EDI-Trained	1	2.4%
	Not Trained	2	
Vocational	EDI-Trained	0	5.6%
	Not Trained	7	
College/University	EDI-Trained	31	59.5%
	Not Trained	44	
Postgraduate	EDI-Trained	30	32.5%
	Not Trained	11	

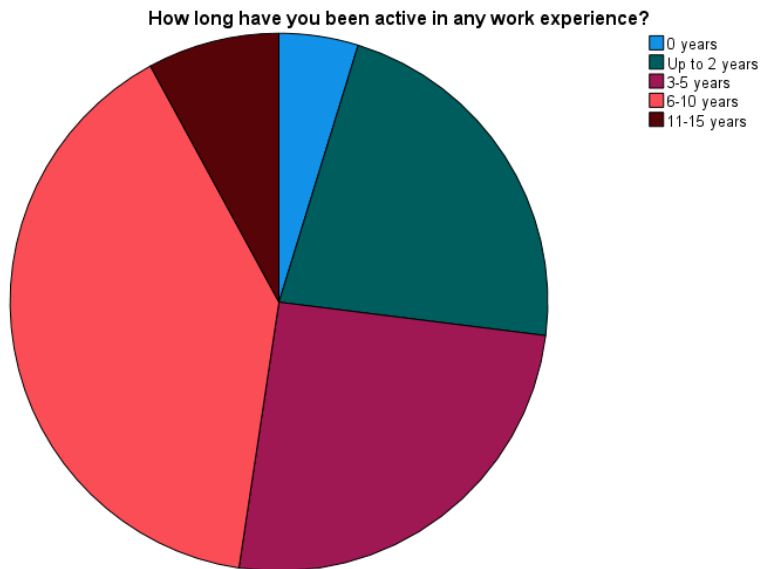
**Figure 10***Respondents' Education Level*

Respondents were asked how long they had been active in any work experience. Fifty (35 EDI trained and 15 not trained) had 6 to 10 years, representing 40%; 32 (14 EDI trained and 18 not trained) had 3 to 5 years, representing 25%; 28 (6 EDI trained and 22 not trained) had two or fewer years representing 22%, 10 (7 EDI trained and three not trained) had 11 to 15 years representing 8%, and 6 of not-trained had never had any work experience, representing 5% (see Table 13 and Figure 11).

Respondents were asked to rate their annual gross income level based on Ethiopia's average living standard. The majority, 86 (44 EDI trained and 42 not trained), reported being in the low or medium category, representing 68%, and 30 (10 EDI trained and 20 not trained) stated they were in a very low-income category, representing 24%. Ten (8 EDI trained and two not trained) reported a high or very high income level, representing 8% of the sample (see Table 14 and Figure 12).

**Table 13***Respondents' Work Experience*

Work Experience	Trained vs. Not Trained	<i>N</i>	%
0 years	EDI-Trained	0	4.8%
	Not Trained	6	
Up to 2 years	EDI-Trained	6	22.2%
	Not Trained	22	
3-5 years	EDI-Trained	14	25.4%
	Not Trained	18	
6-10 years	EDI-Trained	35	39.7%
	Not Trained	15	
11-15 years	EDI-Trained	7	7.9%
	Not Trained	3	

**Figure 11***Respondents' Work Experience*

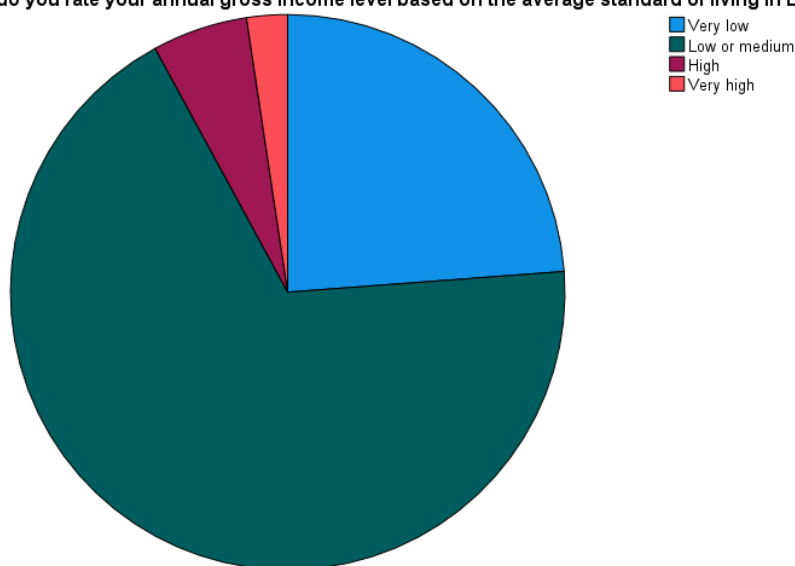


**Table 14***Respondents' Annual Gross Income Level*

Income Level Based on the Average Standard of Living in Ethiopia	Trained vs. Not Trained	<i>N</i>	%
Very low	EDI-Trained	10	23.8%
	Not Trained	20	
Low or medium	EDI-Trained	44	68.3%
	Not Trained	42	
High	EDI-Trained	6	5.6%
	Not Trained	1	
Very high	EDI-Trained	2	2.4%
	Not Trained	1	

**Figure 12***Respondents' Gross Income Level*

How do you rate your annual gross income level based on the average standard of living in Ethiopia?

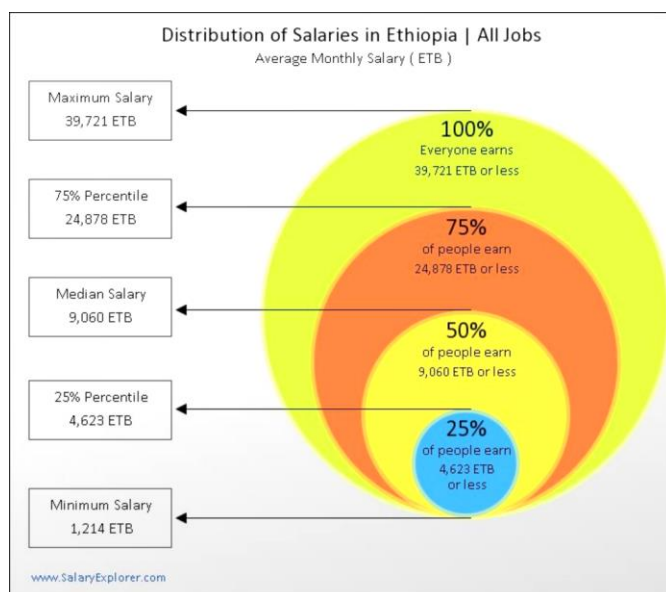


According to SalaryExplorer.com, Ethiopia's average monthly salary distribution shows that those who earn 4623 birr/month are in the 25% percentile low salary category. The median salary is 9060 birr/month, which is in the 50% distribution of salary, while those who earn

24,878 are in the 75% percentile, and those who earn 39,721 birr/month are in the maximum salary distribution of all jobs (see Figure 13).

**Figure 13**

*Distribution of Salaries in Ethiopia*

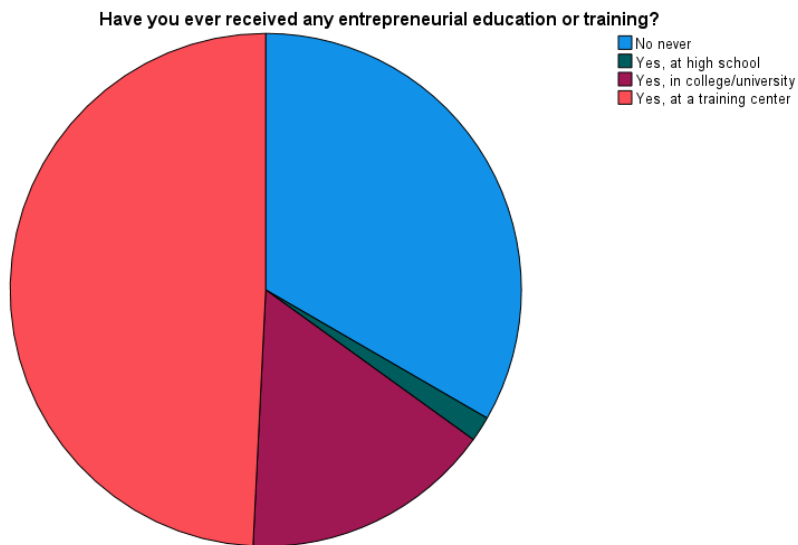


Respondents were asked if they had ever received any entrepreneurial education or training. About half of the study participants, 62 (49%), took the training at an EDI training center, 42 (33%) never had entrepreneurial education or training, 20 (16%) had taken some education in college/university, and 2 (2%) had it in high school (see Table 15 and Figure 14).

Respondents who took the EDI entrepreneurial training or had some education in entrepreneurship were asked to assess if the training they had taken resulted in starting or developing their business. Out of the 126 participants, the majority, 66 (56 EDI trained and 10 not trained), responded that they had either started or developed their businesses as a result of training, representing 52% of the sample.

**Table 15***Respondents' Entrepreneurial Education or Training*

Entrepreneurial Education or Training	Trained vs. Not Trained	<i>N</i>	%
No never	EDI-Trained	0	33.3%
	Not Trained	42	
Yes, in high school	EDI-Trained	0	1.6%
	Not Trained	2	
Yes, in college/university	EDI-Trained	0	15.9%
	Not Trained	20	
Yes, at a training center	EDI-Trained	0	49.2%
	Not Trained	62	

**Figure 14***Respondents' Entrepreneurial Training*

However, 18 (6 EDI trained and 12 not trained), representing 14%, stated that the entrepreneurial training/education they had received did not help them. Only 42 (33%) had never had training (see Table 16 and Figure 15).

**Table 16***Respondents' Training Outcome*

Outcome of training to start or develop your business	Trained vs. Not Trained	<i>N</i>	%
Yes	EDI-Trained	56	52.4%
	Not Trained	10	
No	EDI-Trained	6	14.3%
	Not Trained	12	
Did not take training		42	33.3%

**Figure 15***Outcome of Training to Start or Develop a Business*

In addition, out of the 20 participants who had entrepreneurial training in college/university, the majority 11(55%) stated their training at the college did not help them to start or develop a business, with a higher mean of 5.89 (see Table 17 and Figure 16).

There were two groups in this study for comparison: 62 individuals (49%) who received training at EDI and 64 individuals (51%) who were on the waiting list to be trained (see Table 18 and Figure 17).

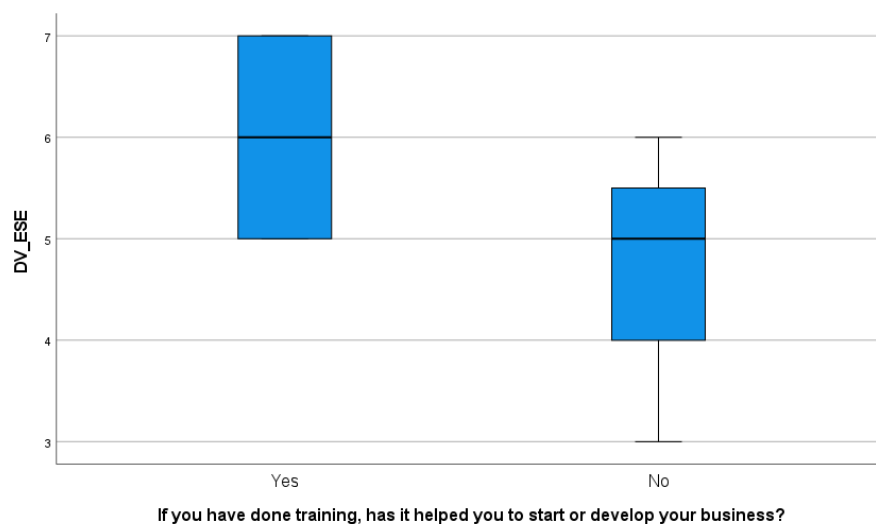
**Table 17**

*Outcome of College Entrepreneurship Training Outcome to Start or Develop a Business*

If you have done training, has it helped you to start or develop your business?	<i>N</i>	%	Mean
Yes	9	45.0	5.89
No	11	55.0	4.73
Total	20	100.0	

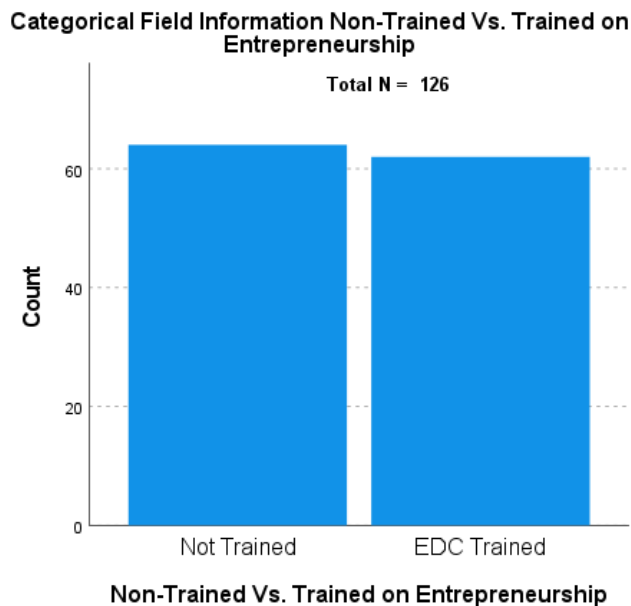
**Figure 16**

*Boxplot Outcome of College Entrepreneurship Training to Start or Develop a Business*



**Table 18***EDI-Trained vs. Not Trained*

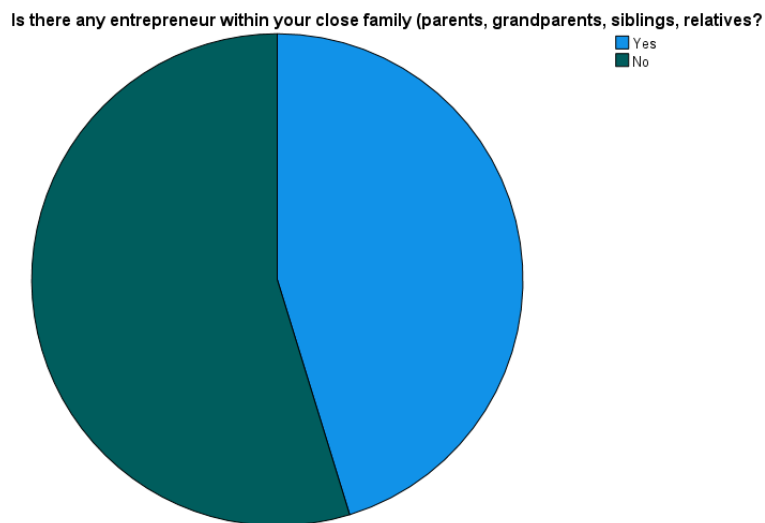
EDI Trained on Entrepreneurship Vs. Not Trained (Waiting List)	<i>N</i>	%
Not Trained	64	50.8%
EDI Trained	62	49.2%

**Figure 17***EDI Trained vs. Not Trained*

Respondents were asked if they had any entrepreneurs within their close family, such as parents, grandparents, siblings, or relatives. Sixty-nine (30 EDI trained and 39 not trained) responded that they did not have entrepreneurial family members, representing 55%, and 57 (32 EDI trained and 25 not trained) stated they have entrepreneurial relatives, representing 45% of the sample (see Table 19 and Figure 18).

**Table 19***Presence of Entrepreneur Family Member*

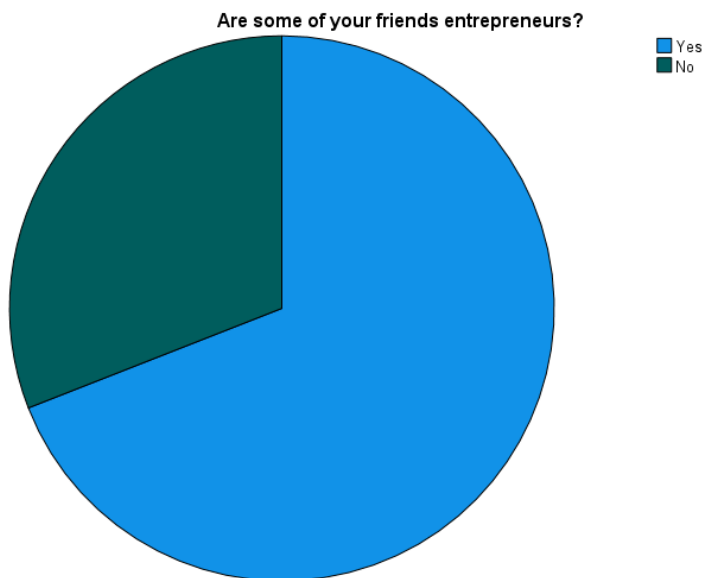
Entrepreneur family	Trained vs. Not Trained	<i>N</i>	%
Yes	EDI-Trained	32	45.2%
	Not Trained	25	
No	EDI-Trained	30	54.8%
	Not Trained	39	

**Figure 18***Presence of Entrepreneur in Family*

Respondents were asked if they had an entrepreneur in their friends circle. Eighty-seven (48 EDI trained and 39 not trained) responded that they have an entrepreneur friend, representing 69%, and 39 (14 EDI trained and 25 not trained) of them stated they do not, representing 31% of the sample (see Table 20 and Figure 19).

**Table 20***Presence of Entrepreneur Friend*

Entrepreneur Friend	Trained vs. Not Trained	<i>N</i>	%
Yes	EDI-Trained	48	69.0%
	Not Trained	39	
No	EDI-Trained	14	31.0%
	Not Trained	25	

**Figure 19***Entrepreneur Friend*

Respondents were asked if they believed entrepreneurial training would help the youth start or develop their businesses. The majority, 121 (62 EDI trained and 59 not trained), believed that training helps to start or develop a business, representing 96%, but 5 (4%) not trained did not believe training would help (see Table 21 and Figure 20).



**Table 21**

*The Belief that Training in Entrepreneurship Would Help Youth to Start/Develop Business*

Belief in Training for Youth Business	Trained vs. Not Trained	<i>N</i>	%
Yes	EDI-Trained	62	96.0%
	Not Trained	59	
No	EDI-Trained	0	4.0%
	Not Trained	5	

**Figure 20**

*Belief in Training for Youth Business*

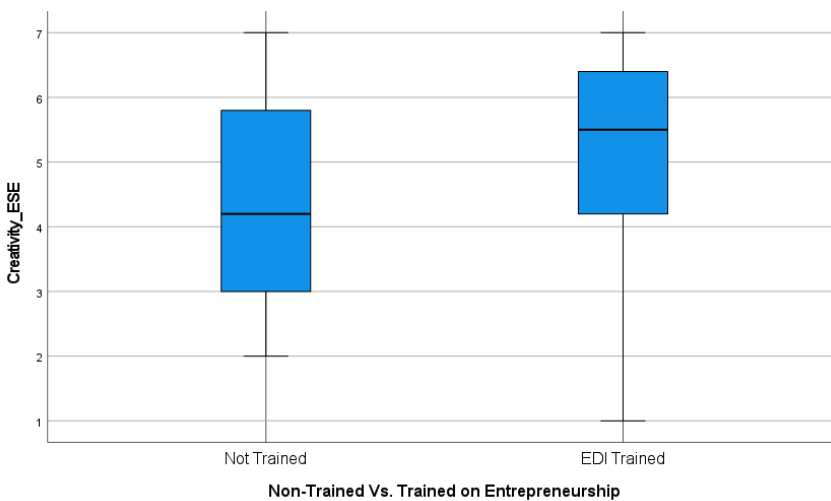


For the non-trained and trained, Table 22 presents descriptive statistics for the five cognitive process ESE variables. For each indicator, the average total entrepreneurial efficacy score of trained individuals was more significant than that of EDI not-trained individuals (see Table 22 and Figures 21-25).

**Table 22***Respondents' Description of Not Trained and Trained Statistics*

ESE Subscales	Not Trained vs. Trained in Entrepreneurship	Cases			
		<i>N</i>	<i>Mean</i>	<i>Median</i>	<i>SD</i>
Creativity	Not Trained	64	4.51	4.20	1.556
	EDI Trained	62	5.24	5.50	1.376
Planning	Not Trained	64	4.48	4.67	1.610
	EDI Trained	62	5.41	6.00	1.395
Marshaling	Not Trained	64	4.82	5.00	1.646
	EDI Trained	62	5.57	6.00	1.365
Managing Ambiguity	Not Trained	64	4.47	4.30	1.608
	EDI Trained	62	5.25	5.60	1.271
Financial	Not Trained	64	4.23	3.75	1.658
Literacy	EDI Trained	62	5.57	5.88	1.068

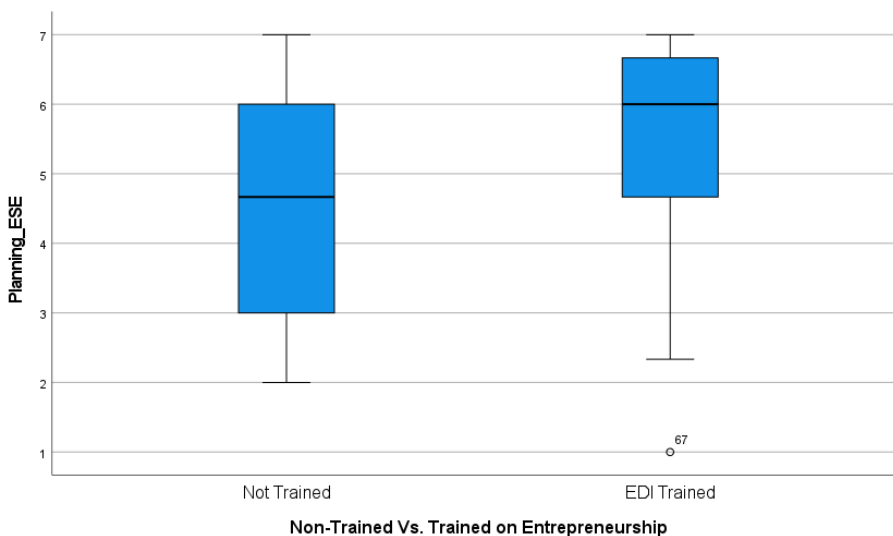
The average creative ESE score of trained individuals was significant compared to EDI not-trained individuals (see Figure 21).

**Figure 21***Creativity ESE Box Plot for Not Trained vs. EDI Trained*

The average planning ESE score of trained individuals was significant compared to EDI not-trained individuals (see Figure 22).

**Figure 22**

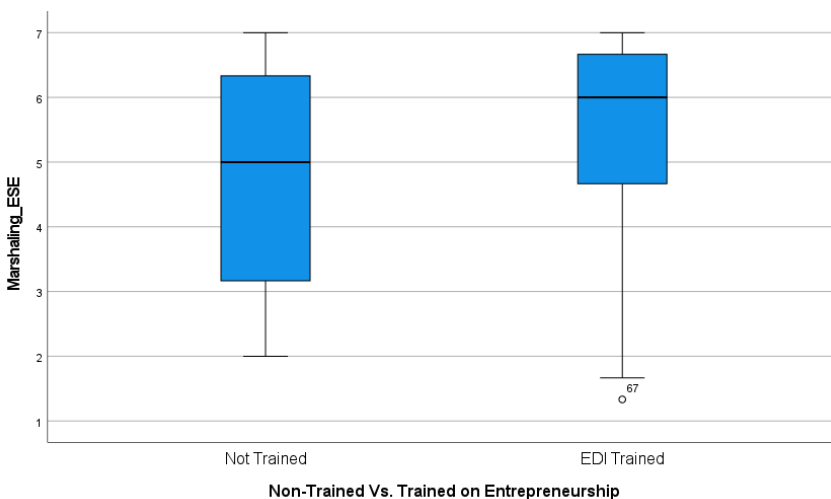
*Planning ESE Box Plot for Not Trained vs. EDI Trained*



The average marshaling ESE score of trained individuals was significant compared to EDI not-trained individuals (see Figure 23).

**Figure 23**

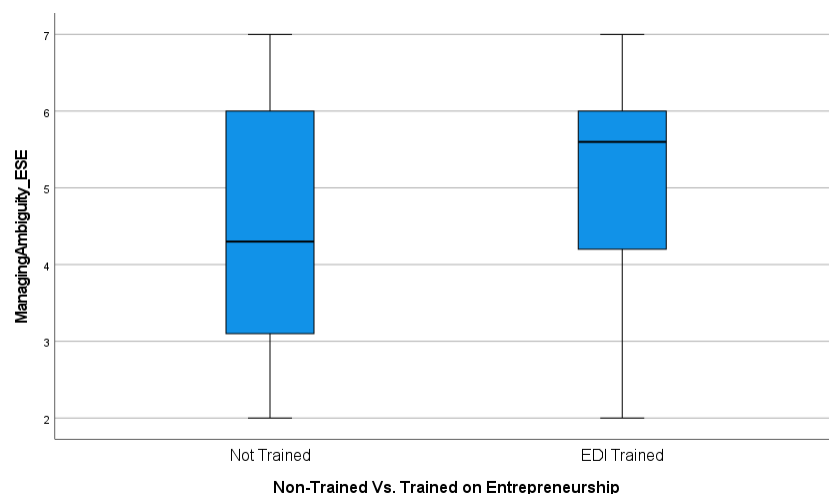
*Marshaling ESE Box Plot for Not Trained vs. EDI Trained*



The average managing ambiguity ESE score of trained individuals was significant compared to EDI not-trained individuals (see Figure 24).

**Figure 24**

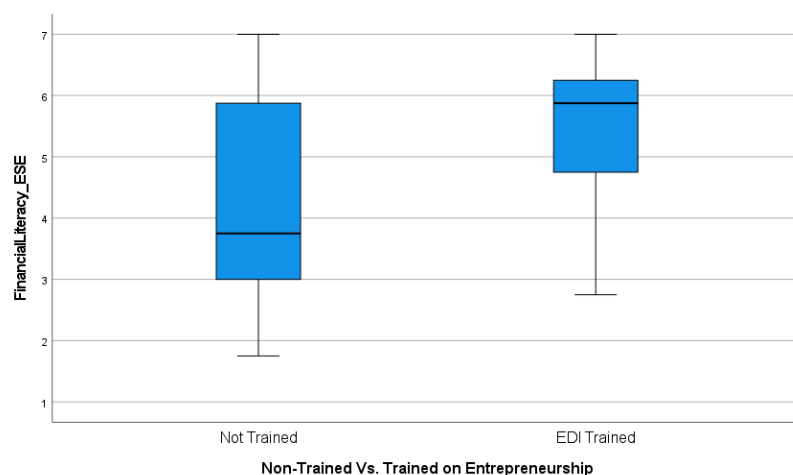
*Managing Ambiguity ESE Box Plot for Not Trained vs. EDI Trained*



The average financial literacy ESE score of trained individuals was significant than that of EDI not-trained individuals (see Figure 25).

**Figure 25**

*Financial Literacy ESE Box Plot for Not Trained vs. EDI Trained*



### Null Hypotheses Analysis

$H_0$ : No statistically significant difference exists in entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy between those who received entrepreneurship training and those who did not.

A Mann-Whitney U Test was applied to determine if there was a statistically significant difference in the entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy between those who received entrepreneurship training and those who did not. The null hypothesis was not accepted. A statistically significant difference ( $U = 1240$ ,  $p = 0.000$ ) existed in total entrepreneurial self-efficacy scale values among respondents in different trained and not trained categories (see Table 23).

**Table 23**

#### *ESE Hypothesis Test*

Mann-Whitney $U$	1240.500
Wilcoxon $W$	3320.500
$Z$	-3.629
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: Non-Trained Vs. Trained in Entrepreneurship

The mean rank for respondents in the not-trained category was 51.88, and for respondents in the EDI-trained category, it was 75.49 (see Table 24).

**Table 24**

#### *ESE Mean Rank in Not Trained and EDI Trained on Entrepreneurship*

Not Trained vs. Trained on Entrepreneurship		$N$	Mean Rank	Sum of Ranks
ESE	Not Trained	64	51.88	3320.50
	EDI Trained	62	75.49	4680.50
Total		126		

The hypothesis testing at the ESE subscales level also showed similar results in the five subscales. The distribution of creativity in entrepreneurial self-efficacy was the same across categories of those not trained and those who are not trained in entrepreneurship to start or develop a business, which was not accepted ( $U = 1424, p = 0.006$ ). The distribution of planning in entrepreneurial self-efficacy was the same across categories of those not trained and those who were not trained in entrepreneurship to start or develop a business, which was not accepted ( $U = 1325, p = 0.001$ ). The distribution of marshaling in entrepreneurial self-efficacy was the same across categories of those not trained and those who are not trained in entrepreneurship to start or develop a business, which was not accepted ( $U = 1473, p = 0.012$ ). The distribution of managing ambiguity in entrepreneurial self-efficacy was the same across categories of not trained and trained in entrepreneurship to start or develop a business was not accepted ( $U = 1431, p = 0.007$ ). The distribution of financial literacy in entrepreneurial self-efficacy was the same across categories of those not trained and those who are not trained in entrepreneurship to start or develop a business, which was not accepted ( $U = 1067, p = 0.000$ ). A statistically significant difference existed in creativity, planning, marshaling, managing ambiguity, and financial literacy of the entrepreneurial self-efficacy scale values among respondents in different trained and not trained categories (see Tables 25 and 26).

The mean rank for respondents in the ESE creativity subscale of the not trained category was 54.75, and for respondents in the EDI trained category was 72.53; the ESE planning subscale of the not trained category was 53.21, and for respondents in the EDI trained category was 74.12; the ESE marshaling subscale of the not trained category was 55.52 and for respondents in the EDI trained category was 71.74; the ESE managing ambiguity subscale of the not trained category was 54.86, and for respondents in the EDI trained category was 72.42; the

ESE financial literacy subscale of the not trained category was 49.18, and for respondents in the EDI trained category was 78.28 (see Table 27).

**Table 25**

*Mann-Whitney U Test Hypothesis Test Summary*

Null Hypothesis	Test	Sig. <sup>a,b</sup>	Decision
The distribution of creativity is the same across categories of not trained vs. trained in entrepreneurship.	Independent-Samples Mann-Whitney U Test	.006	Reject the null hypothesis.
The distribution of planning is the same across categories of not trained vs. trained in entrepreneurship.	Independent-Samples Mann-Whitney U Test	.001	Reject the null hypothesis.
The distribution of marshaling is the same across categories of not trained vs. trained in entrepreneurship.	Independent-Samples Mann-Whitney U Test	.012	Reject the null hypothesis.
The distribution of managing ambiguity is the same across categories of not trained vs. trained in entrepreneurship.	Independent-Samples Mann-Whitney U Test	.007	Reject the null hypothesis.
The distribution of financial literacy is the same across categories of not trained vs. trained in entrepreneurship.	Independent-Samples Mann-Whitney U Test	.000	Reject the null hypothesis.

**Table 26**

*Mann-Whitney Test Statistics of ESE Sub-Scales Between Respondents*

Test Stat of ESE	Creativity ESE	Planning ESE	Marshaling ESE	Managing Ambiguity ESE	Financial Literacy ESE
Mann-Whitney <i>U</i>	1424.000	1325.500	1473.000	1431.000	1067.500
Wilcoxon <i>W</i>	3504.000	3405.500	3553.000	3511.000	3147.500
<i>Z</i>	-2.736	-3.226	-2.504	-2.702	-4.482
Asymp. Sig. (2-tailed)	.006	.001	.012	.007	.000

*a. Grouping Variable: Non-Trained Vs. Trained in Entrepreneurship*

**Table 27**

*Mann-Whitney Test of the ESE Mean Ranks Between Groups that are Not Trained or Trained in Entrepreneurship*

ESE Subscale	Not Trained vs. Trained in Entrepreneurship	<i>N</i>	Mean Rank	Sum of Ranks
Creativity	Not Trained	64	54.75	3504.00
	EDI Trained	62	72.53	4497.00
	Total	126		
Planning	Not Trained	64	53.21	3405.50
	EDI Trained	62	74.12	4595.50
	Total	126		
Marshaling	Not Trained	64	55.52	3553.00
	EDI Trained	62	71.74	4448.00
	Total	126		
Managing Ambiguity	Not Trained	64	54.86	3511.00
	EDI Trained	62	72.42	4490.00
	Total	126		
Financial Literacy	Not Trained	64	49.18	3147.50
	EDI Trained	62	78.28	4853.50
	Total	126		

The creativity ESE subscale showed a statistically significant difference between EDI-trained and the not trained groups ( $U = 2544$ ;  $p = 0.006$ ) in creativity to start and develop a business (see Table 28 and Figure 26).

The planning ESE subscale showed a statistically significant difference between the EDI-trained and the not-trained groups ( $U = 2642$ ;  $p = 0.001$ ) in planning to start and develop a business (see Table 29 and Figure 27).



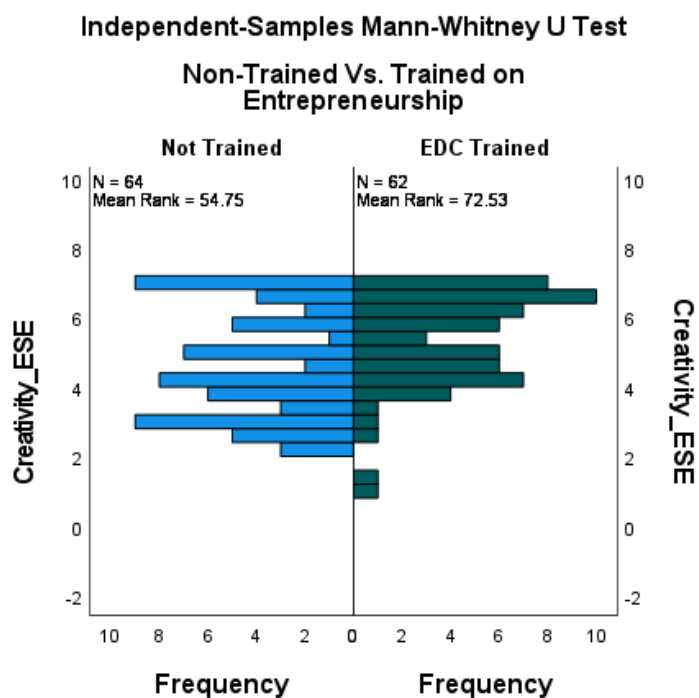
**Table 28**

*Creativity ESE Subscale Across Non-Trained vs. Trained in Entrepreneurship*

Independent Samples Mann-Whitney U Test Summary of Creativity ESE Subscale	
Total <i>N</i>	126
Mann-Whitney <i>U</i>	2544.000
Wilcoxon <i>W</i>	4497.000
Test Statistic	2544.000
Standard Error	204.649
Standardized Test Statistic	2.736
Asymptotic Sig. (2-sided test)	.006

**Figure 26**

*Creativity ESE Subscale Mean Rank for Not Trained vs. EDI Trained*



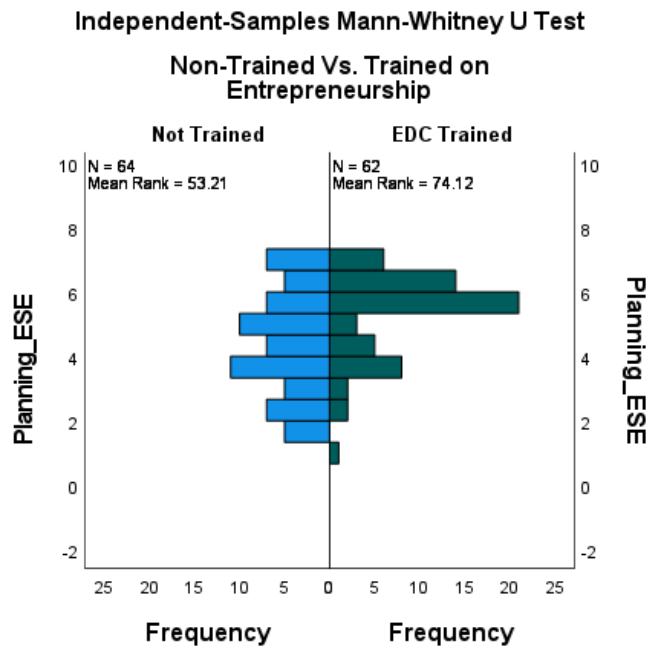
**Table 29**

*Planning ESE Subscale Across Not Trained vs. Trained in Entrepreneurship*

Independent Samples Mann-Whitney <i>U</i> Test Summary of Planning ESE Subscale	
Total <i>N</i>	126
Mann-Whitney <i>U</i>	2642.500
Wilcoxon <i>W</i>	4595.500
Test Statistic	2642.500
Standard Error	204.113
Standardized Test Statistic	3.226
Asymptotic Sig. (2-sided test)	.001

**Figure 27**

*Planning ESE Subscale Mean Rank for Not Trained vs. EDI Trained*



The marshaling ESE subscale showed a statistically significant difference between the EDI-trained and the not-trained groups ( $U = 2495$ ;  $p = 0.012$ ) in marshaling resources to start and develop a business (see Table 30 and Figure 28).

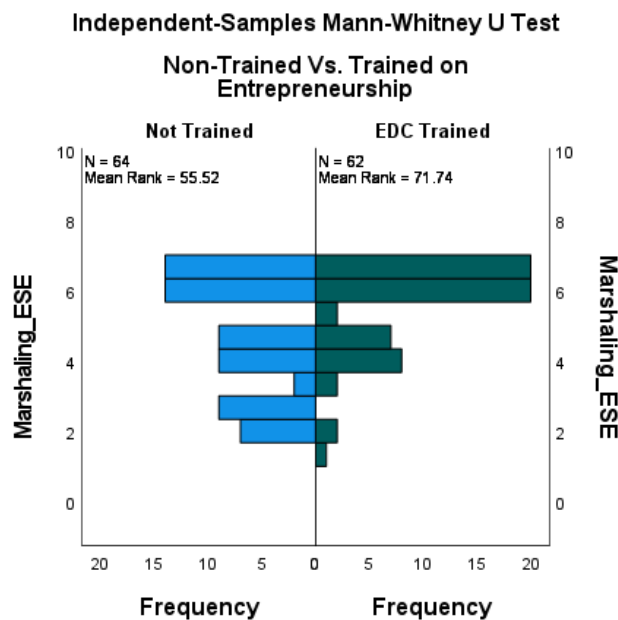
**Table 30**

*Marshaling ESE Subscale Across Not Trained vs. Trained in Entrepreneurship*

Independent Samples Mann-Whitney $U$ Test Summary of Marshaling ESE Subscale	
Total $N$	126
Mann-Whitney $U$	2495.000
Wilcoxon $W$	4448.000
Test Statistic	2495.000
Standard Error	204.043
Standardized Test Statistic	2.504
Asymptotic Sig. (2-sided test)	.012

**Figure 28**

*Marshaling ESE Subscale Mean Rank for Not Trained vs. EDI Trained*



The managing ambiguity ESE subscale showed a statistically significant difference between the EDI-trained and the not-trained groups ( $U = 2537$ ;  $p = 0.007$ ) in managing change and uncertainty in starting and developing a business (see Table 31 and Figure 29).

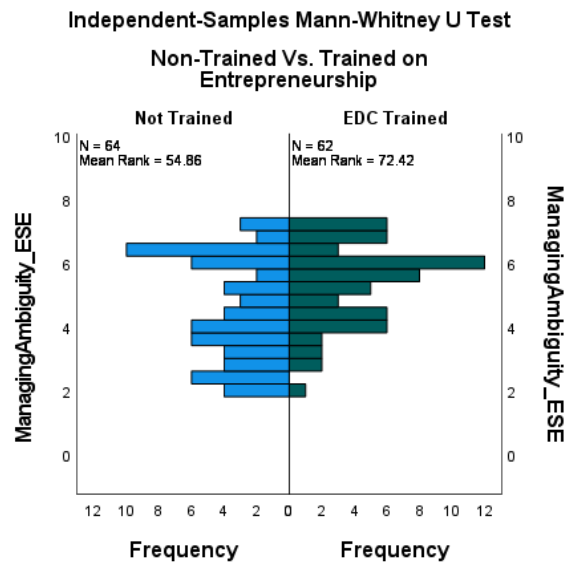
**Table 31**

*Managing Ambiguity ESE Subscale Across Not Trained vs. Trained in Entrepreneurship*

Independent Samples Mann-Whitney $U$ Test Summary of Managing Ambiguity ESE Subscale	
Total $N$	126
Mann-Whitney $U$	2537.000
Wilcoxon $W$	4490.000
Test Statistic	2537.000
Standard Error	204.637
Standardized Test Statistic	2.702
Asymptotic Sig. (2-sided test)	.007

**Figure 29**

*Managing Ambiguity ESE Subscale Mean Rank for Not Trained vs. EDI Trained*



The financial literacy ESE subscale shows a statistically significant difference between the EDI-trained and the not-trained groups ( $U = 2900$ ;  $p = 0.000$ ) in having financial literacy to start and develop a business (see Table 32 and Figure 30).

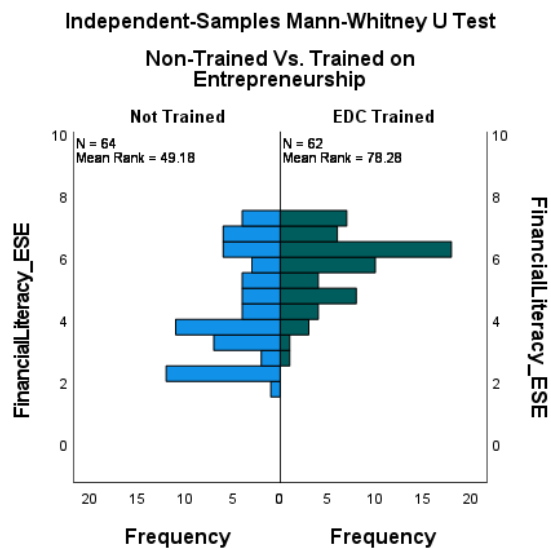
**Table 32**

*Financial Literacy ESE Subscale Across Not Trained vs. Trained in Entrepreneurship*

Independent Samples Mann-Whitney $U$ Test Summary of Financial Literacy ESE Subscale	
Total $N$	126
Mann-Whitney $U$	2900.500
Wilcoxon $W$	4853.500
Test Statistic	2900.500
Standard Error	204.489
Standardized Test Statistic	4.482
Asymptotic Sig. (2-sided test)	.000

**Figure 30**

*Financial Literacy ESE Subscale*



### Moderating Variable

The entrepreneurship training was used to moderate youth entrepreneurial readiness. Out of the 84 participants who had some training or education in entrepreneurship, 66 (79%) responded that they had either started or developed their business, whereas 18 (14%) stated that the training/education in entrepreneurship did not help them (see Table 33 and Figure 31).

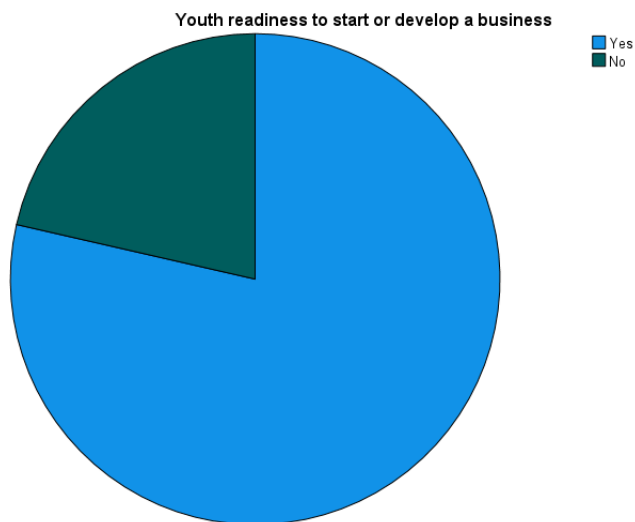
**Table 33**

*Respondents' Training Outcome*

If you have done training, has it helped you to start or develop your business?	<i>N</i>	%
Yes	66	78.6%
No	18	21.4%

**Figure 31**

*Training Outcome of Readiness to Start/Develop a Business*



The readiness mean scores of the 84 entrepreneurship-trained participants show above-average mean value in all the ESE subscales: creativity ( $\mu = 5.3$ ), planning ( $\mu = 5.34$ ),

marshaling ( $\mu = 5.54$ ), managing ambiguity ( $\mu = 5.2$ ), and financial literacy ( $\mu = 5.4$ ) (see Table 34).

**Table 34**

*Respondents' Readiness Statistics*

Readiness Stat	Creativity ESE scale	Planning ESE scale	Marshaling ESE scale	Managing Ambiguity ESE scale	Financial Literacy ESE scale
<i>N</i> Valid	84	84	84	84	84
Missing	0	0	0	0	0
Mean	5.30	5.34	5.54	5.1952	5.3958
Std. Deviation	1.339	1.422	1.350	1.31789	1.24681
Minimum	1	1	1	2	2
Maximum	7	7	7	7	7
Sum	445	448	466	436.40	453.25

In addition, the non-parametric Mann-Whitney  $U$  test shows a statistically significant difference ( $U = 289$ ,  $p = -0.169$ ) in the belief in entrepreneurial training for youth to start or develop their business values among respondents in different trained and not-trained categories (see Table 35).

**Table 35**

*Result of Belief if Entrepreneurial Training Results in Business Creation/Development*

Grouping Variable: Do you believe entrepreneurial training will help the youth to start or develop their business?	
ESE: Dependent Variable	
Mann-Whitney $U$	289.000
Wilcoxon $W$	7670.000
$Z$	-.169
Asymp. Sig. (2-tailed)	.866

An additional moderating test was conducted to determine if there was a difference in youth entrepreneurial readiness between entrepreneurial trained individuals to start and develop their business. Table 36 shows there was a significant difference among the ones that reported training helped them to start or develop their business and those who claimed training did not make a difference ( $p = .000$ ) (see Table 36).

**Table 36**

*Training Moderation Test*

Moderating Test: Do you believe entrepreneurial training will help the youth to start or develop their business?							
	Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Readiness to start or develop a business	-.985	.281	12.297	1	.000	-1.536	-.435
EDI_not trained trained =1]	.084	.488	.030	1	.863	-.872	1.040
EDI_not-trained_trained=2]	0 <sup>a</sup>	.	.	0	.	.	.

*Link function: Logit.*

*a. This parameter is set to zero because it is redundant.*

**Summary**

Quantitative research was used to describe the socio-demography of research participants and to investigate whether there was a significant difference between youth readiness to start or develop a business based on the entrepreneurial self-efficacy of those who had taken EDI entrepreneurship training and those who had not. The study used a non-experimental research design, non-parametric data, and the Mann-Whitney  $U$  test to examine the difference between the two groups. The null hypothesis was tested, and the assumption that no statistically significant difference exists in entrepreneurial readiness to start or develop a business based on



entrepreneurial self-efficacy between those who received entrepreneurship training and those who did not was not accepted. In addition, the training outcome of those trained was assessed if training resulted in either starting or developing their business, and results showed readiness exists in those trained. Therefore, the answer to the research question is that a difference exists in youth entrepreneurial readiness based on entrepreneurial self-efficacy related to EDI entrepreneurship training.

## **CHAPTER 5: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS**

Chapter Five includes an interpretation and discussion of the results related to the existing body of research about the socio-demographic data of the participants and the statistically significant difference that existed in youth entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy between those who had taken EDI entrepreneurship training and those who had not. The chapter is comprised of an introduction, a summary of the findings, results compared to other findings and the existing literature, implications, future research recommendations and applications, and a summary.

### **Introduction**

This quantitative comparative study examined the difference between youth readiness to start or develop a business based on entrepreneurial self-efficacy of those who had taken EDI entrepreneurship training and those who had not. The theoretical framework for the study was social learning/cognitive theory, which shows how cognition, behavior, and environment are interrelated, having cause-effect relations. Based on Albert Bandura's social learning self-efficacy theory, a research question was asked: What differences exist in youth entrepreneurial readiness based on entrepreneurial self-efficacy related to EDI entrepreneurship training? Primary data were collected from 126 participants (62 EDI trained and 64 on a waiting list.) A Mann-Whitney  $U$  test was employed to examine the difference between the two groups, and a statistically significant difference existed ( $U = 1240, p = 0.000$ ) in total entrepreneurial self-efficacy scale values among respondents in different trained and not-trained categories.

### **Summary of Findings and Conclusion**

This research compared EDI-trained and non-trained individuals in entrepreneurship self-efficacy, guided to answer what differences exist in youth entrepreneurial readiness based on

entrepreneurial self-efficacy related to entrepreneurship training. A quantitative comparative design was selected to address the problem and answer the research question. A quantitative methodology was the best fit for this study because the differences among the independent variables from pre-existing groups needed to be explored, which allowed the collection of numerical results via SurveyMonkey.

The study sample consisted of 126 participants (62 EDI-trained and 64 not trained/on a waiting list). The null hypothesis to address the research question is that no statistically significant difference exists in entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy between those who received entrepreneurship training and those who did not. A Mann-Whitney *U* Test was conducted, and the result showed a statistically significant difference in entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy between those who received entrepreneurship training and those who did not. The result suggests that entrepreneurship training increases the likelihood of youth readiness to start or develop their business. In other words, there was sufficient evidence to indicate that the independent variable (EDI trained/tot trained) had an effect on the dependent variables (youth entrepreneurial readiness) of the youth to start or develop their business. This, in turn, may inform future investment in youth entrepreneurial training.

### **Discussion of the Results Compared to Other Studies**

In this section, significant findings from this study are compared and contrasted, evaluated, and discussed in light of the existing body of knowledge. Though no study has compared entrepreneurship-trained and not trained outside the context of educational institutions, proxy studies are used to compare.

### ***Discussion and Conclusion of the Demographic Data***

The study described demographic variables comparing EDI-trained to not-trained participants without investigating their relationship with the entrepreneurial self-efficacy variable. Some of the biographic data was outside the scope of the present study, but it provides a richer profile of the participants.

There were two groups for comparison: 62 individuals (49%) who received training at EDI and 64 individuals (51%) who are on the waiting list to be trained. Of the 126 research participants, 66 (28 EDI trained and 38 not trained) were women (52% of the sample), and 60 (34 EDI trained, 26 not trained) were men, representing 48% of the sample. The number of men trained in entrepreneurship was slightly higher than women. In contrast, the number of women on the waiting list was higher than men.

The largest group of respondents (94) were aged 26-35 (75%), and 32 (25%) were 18-25. Shaheen and Al-Haddad's (2018) study to determine the influence of ESF on entrepreneurial behavior using the demographic factors (gender, age, and education) showed that none of these factors caused a significant statistical change in ESE.

Respondents' level of education and work experience showed that the majority, 75 (60%), were college/university graduates, and 41 (33%) had done post-graduate studies. In addition, their work experience showed that 50 (40%) had 6 to 10 years, 32 (25%) had 3 to 5 years, and 28 (22%) had up to 2 years. This indicates that those who want to be trained in entrepreneurship to start or develop their business are mostly college graduates with increased work experience.

Describing the annual gross income level of study participants based on Ethiopia's average living standard, the majority, 86 (68%), reported being in the low or medium category, and 30 (24%) stated they were in a very low-income category. According to the Salary

Distribution Ethiopia (2023), 92% of the respondents' salaries are categorized below the 25% percentile. The factors of low salaries and increasing inflation could be one of the influences that increase interest in youth entrepreneurial training to start or develop their business.

In relation to seeking entrepreneurial training, about half of the study participants, 62 (49%), took the training at EDI; 42 (33%) never had entrepreneurial education or training, and 20 (16%) had taken some entrepreneurial education in college/university. In addition, out of the 20 who received entrepreneurial education in college, 11(55%) responded that the entrepreneurial education did not help them to start a business. The fact that they decided to take additional training on entrepreneurship at EDI shows that focused training is needed to enable the youth to start their businesses, and general education about entrepreneurship may not be good enough to prompt the youth's readiness.

Out of the 84 participants who either took the EDI entrepreneurial training or had some education in entrepreneurship, 66 (56 EDI trained and ten not trained) responded that they had either started or developed their businesses due to training. Of the 62 EDI trained, 56 started or developed their business, accounting for 90%. However, 18 (14%) (6 EDI trained and 12 not trained) stated that the entrepreneurial training/education they had received did not help them. Apart from training-related issues, there are many factors for the non-readiness of the 14% of youth who claimed training/education had not prepared them to start or develop their business. Personal factors, the broader entrepreneurial ecosystem, a burdensome administrative and regulatory framework, or poor infrastructure access impact readiness (Sintayehu, 2017).

Respondents were asked if they had any entrepreneurs within their close family, such as parents, grandparents, siblings, or relatives. Fifty-seven (45%) responded that they have entrepreneurial family members or relatives, whereas 87 (69%) responded that they have an

entrepreneurial friend. Hatos et al. (2022) concluded that social support and having a role model in the social circle increase the likelihood of entrepreneurial intention. A study by Baron (2007) showed the significant association between social skills and social capital for venture creation and development, which also helps to acquire resources to start new firms. One of Bandura's (1977) entrepreneurship development processes is vicarious experiences that enhance self-efficacy. When entrepreneurial behavior is modeled, family members or friends unconsciously learn what works and are prompted to actualize what they learned.

Respondents were asked if they believed entrepreneurial training would help the youth to start or develop their business. The majority, 121 (96%), believed training would help start or develop a business. For the non-trained and trained descriptive statistics of the five cognitive processes, ESE variables indicated the average total entrepreneurial efficacy scores of trained individuals were larger than that of EDI not-trained individuals for all the sub-constructs.

### ***Discussion and Conclusion of ESE Sub-Constructs***

The present research was based on the social learning theory of Bandura (1977), which suggests that cognitive learning has four essential components: (a) abilities can be developed and mastered, (b) self-efficacy can be strengthened, (c) self-motivation can be enhanced, and (d) physiological arousal brings behavioral change. According to Bandura (1991), social learning is achieved through observation and direct experience when watching others behave and the consequences of the behavior. This theory was chosen because it incorporates the personal and social elements needed for entrepreneurial readiness.

Grounding in social cognitive theory, the conceptual model that combined personal psychological factor (entrepreneurial self-efficacy) and a process of learning in a social context (training) factor was tested by examining the link between the independent variables (EDI

trained and not trained) and the dependent variable (entrepreneurial readiness through the five ESE sub-constructs) of trained and not-trained research participants. Pfeifer et al. (2016) suggested that ESE predicted entrepreneurial success because it is inherently linked to positive outcome expectations.

McGee et al. (2009) supported a multi-dimensional construct of ESE composed of searching, planning, marshaling, and implementing skills needed for venture creation. Nowiński et al. (2019) demonstrated that all task phases of the ESE multi-constructs significantly impacted students' entrepreneurial intention in four countries (Czech Republic, Hungary, Poland, and Slovakia) but noted the direct impact of entrepreneurial education was significant only in Poland.

Concerning comparative studies, DeNoble et al. (1999) found that non-entrepreneurship students demonstrated low perceptions of the overall ESE construct in studies conducted on nascent entrepreneurs - TVET students vs. non-nascent. Darmanto and Yuliari (2019) indicated that ESE strongly predicted entrepreneurship readiness. Newman (2019) described ESE as a mechanism whereby subject matter and process knowledge were converted into new ventures. Similarly, Chen and He's (2011) study showed that ESE is linked to growth and venture creation.

Adeniyi (2022) stated that entrepreneurial readiness among youth has been a critical global concern because of the low business turnouts. Islami et al. (2017) concluded that higher self-efficacy can increase entrepreneurship readiness among students at vocational high schools in Indonesia. Memon et al. (2019) found a strong association between ESE and entrepreneurial readiness, which is composed of instrumental readiness, risk propensity, entrepreneurial knowledge, and entrepreneurial experiences. Adeniyi et al. (2022) showed how the cognitive

element of ESE can stimulate entrepreneurial readiness, describing ESE as the psychological factors that determine an entrepreneur's success.

**Creativity.** The role of creativity in entrepreneurial self-efficacy shows the belief in one's ability to come up with new ideas for addressing challenges and seeking business opportunities (DeNoble et al., 1999). According to Cox et al. (2002), the searching phase of entrepreneurship refers to a unique idea conception in identifying market opportunities. Adeniyi et al. (2022) also used a similar term for the searching phase, which deals with ideas, business opportunities, and new market identification.

In the last decade, the classical view of entrepreneurship of searching for opportunities was criticized for its focus on opportunity identification and argued instead for opportunity creation (Alvarez & Barney, 2007, 2010, 2012; Korsgaard, 2009). Like DeNoble et al. (1999), the current study uses the word creativity as a sub-construct of ESE. The creativity ESE subscale shows a statistically significant difference between EDI-trained and the not-trained groups ( $U = 2544$ ;  $p = 0.006$ ) to start and develop a business. This is similar to Adeniyi's (2021) study on graduates of technical and vocational students in Nigeria, which showed that the search phase of ESE, which incorporated acquiring entrepreneurial skills for opportunity identification or idea development, positively contributed to their entrepreneurial readiness for start-ups. Olugbola (2017) also identified a strong relationship between the first phase of ESE and entrepreneurial readiness.

**Planning.** Planning entrepreneurial self-efficacy is defined as the belief in one's ability to manage, predict, and organize to launch and run a venture (DeNoble et al., 1999). According to Cox et al. (2002), the planning phase involves designing the idea as a business proposal. In the current study, the planning ESE subscale showed a statistically significant difference between



the EDI-trained and the not-trained groups ( $U = 2642$ ;  $p = 0.001$ ) to start and develop a business. Similarly, the Adeniyni et al. (2021) study showed a significant difference in the planning skills of students for entrepreneurial readiness.

**Marshaling.** Marshaling is a subset of entrepreneurial self-efficacy that refers to the ability to gather the resources necessary to launch and maintain a successful venture. (DeNoble et al., 1999). This marshaling phase involves mobilizing financial and human resources to start the business, which involves convincing other people to invest in one's business idea, organizing a team, or finding customers and suppliers for the business to sustain (Cox et al., 2002). The current research on marshaling the ESE subscale showed a statistically significant difference between the EDI-trained and the not-trained groups ( $U = 2495$ ;  $p = 0.012$ ) in marshaling resources to start and develop a business. Unlike this study, Adeniyni et al.'s study (2022) showed that marshaling does not significantly impact the entrepreneurial readiness of TVET graduate students.

**Managing Ambiguity.** Similar to Pihie and Bagheri's (2011) empirical study with Malay vocational and technical secondary school students, Setiawan's (2014) empirical research with 199 undergraduate university students using the six dimensions of ESE showed low levels of perceptions of coping with unexpected challenges in business in ESE construct. However, the current study on managing ambiguity ESE subscale showed a statistically significant difference between the EDI-trained and the not-trained groups ( $U = 2537$ ;  $p = 0.007$ ) in managing change and uncertainty to start and develop a business. The EDI training is framed to allow learning from experience and to deal with challenges and risks entrepreneurs meet on their paths. Moreover, since the study participants had some level of work experience, this may also help them navigate and manage changes.

**Financial Literacy.** Entrepreneurial self-efficacy in financial literacy is the belief in one's ability to organize and maintain accounting for a new venture (DeNoble et al., 1999). Hermawan et al. (2016) concluded that ESE strongly determines entrepreneurial literacy and entrepreneurship interest among vocational high school students. This concurs with Maritz and Brown (2013), who identified ESE as an antecedent trait that positively influences individuals' behavior when starting a new business. The current study's financial literacy ESE subscale showed a statistically significant difference between the EDI-trained and the not-trained groups ( $U = 2900$ ;  $p = 0.000$ ) in having financial literacy to start and develop a business. Though not directly comparable with the current study, Olugbola's (2017) study showed the relationship between finance and entrepreneurial readiness. He established that financial resources positively affect university students' business startups. Financial acquisition and management are essential for businesses, and training is needed to increase the financial literacy of those who start or develop their business.

### ***Discussion and Conclusion of the Moderating Variable***

A moderating variable in research plays a crucial role in influencing the strength or nature of the relationship between an independent and dependent variable. Essentially, it helps to identify under what conditions or for whom the relationship holds. Understanding moderating variables is essential in refining the interpretation of research findings and recognizing the nuances in relationships between variables (Cohen & Cohen, 1983.)

Nowiński et al. (2019) used all ESE components, which mediated entrepreneurship education's influence on entrepreneurship intention. The current study used entrepreneurship training to moderate youth entrepreneurial readiness. Comparing the EDI-trained and not-trained research participants, a statistically significant difference existed in all entrepreneurial self-

efficacy sub-scales, showing that the role of training made a difference among respondents in different trained and not-trained categories. The result aligns with Bandura's (1977) findings that entrepreneurship education programs enhance self-efficacy, resulting in entrepreneurial behavior.

In addition, out of the 84 participants who had some training or education in entrepreneurship, 66 (79%) responded that they had either started or developed their business. This also strengthens the significant role of training in preparing youth for entrepreneurial endeavors. Rocha et al. (2023) described the role of entrepreneurial education in stimulating entrepreneurial activity and its influence on individuals and countries, preparing entrepreneurs with the necessary skills, resources, and capabilities they need. Similarly, Zhao et al. (2005) showed that entrepreneurship education promotes students' ESE, whereas Chun-Mei et al.'s (2011) study showed that ESE significantly and positively impacts students' mandate for entrepreneurship education.

Apart from the moderating role of entrepreneurial training, Mauer et al. (2009) stated that Bandura's (1997) theory has established that self-efficacy has been used as a suitable measure for educational programs. Peterman and Kennedy (2003) also employed ESE to check a training program's effectiveness. Darmanto and Yuliari (2019) identified ESE as the most consistent personality trait that prompts the youth for entrepreneurial actions.

Hatos et al. (2022) studied the impact of entrepreneurial education on entrepreneurial intentions among Romanian doctoral students and postdoctoral researchers. They concluded that entrepreneurial training programs can stimulate ESE and increase the likelihood of starting a business. Similarly, Saoula et al. (2023) studied the mediating role of entrepreneurial education in ESE, entrepreneurial motivation, and family support resulting in entrepreneurial intention. They found that entrepreneurial education was a significant mediator in the relationship.

Seikkula-Leino and Salomaa (2021) studied the research gap in entrepreneurial competencies, self-esteem, and self-efficacy. They suggested the increased role of entrepreneurial education as entrepreneurship is psychologically and socially based on the fact that a person is a whole being, and education can increase competencies. The EDI training program focuses on ten entrepreneurial competencies related to entrepreneurial development. These include (a) opportunity-seeking and initiative, (b) persistence, (c) fulfillment of commitments, (d) demand for quality and efficiency, (e) calculated risks, (f) goal setting, (g) information-seeking, (h) systematic planning and monitoring, (i) persuasion and networking, and (j) independence and self-confidence. The six-day training involves a practical business plan and start-up competition they showed during the training. This not only focuses on individual competency but also the collective learning that presents itself in how learning mates do their business while applying the competencies. This enhanced social learning when modeling the correct behavior.

In conclusion, the moderating variable, training, played a critical role in influencing the strength of the relationship between the independent variable – EDI-trained/not trained, and the dependent variable – youth entrepreneurial readiness. In other words, entrepreneurial training, as measured by ESE scales, shows that youth readiness to start or develop their business is enhanced.

## **Implications**

### ***Theoretical Implications***

The theoretical foundation that guided this study was social learning/cognitive theory. Bandura's (1977) theory of social learning is based on behavior, which is not only a response to the environment but also has the cognitive process of evaluating and adapting to situations.

Therefore, learning has cognitive, behavioral, and environmental elements. EDI training has several elements: the social environment of the training center uses expert presentations, peer learning, networking, and demonstrating one's desired business in the teaching-learning community. The social modeling component and reinforcement of learning take place within the team. Social capital and influence are not limited to family and friends where the youth's background predisposes them; rather, the training set-up and connections created are social influencers that increase entrepreneurial readiness. Second, the cognitive aspect includes classroom teaching and demonstrating the ten competencies, as well as self and facilitator assessment of 30 behavioral traits that boost entrepreneurial self-efficacy. Third, the behavioral factor takes social learning results of entrepreneurial self-efficacy to entrepreneurial engagement (behavior), taking what they learned to the next level. The training focuses on the skill development of trainees.

The current research findings show adequate evidence that entrepreneurial training reinforces youth entrepreneurial readiness based on the social cognitive/learning theory. The social element is not necessarily limited to modeling by family and friends; the entrepreneurial learning environment that creates social accountability enhances entrepreneurial self-efficacy in individuals. However, the wider environment to implement the learning process that impacts the implementation of startups was not assessed. The broader environment is not limited to the social setting of learning or modeling. It is the country-wide entrepreneurial context that includes enabling entrepreneurial policy implementation guidelines.

Markowska and Wiklund (2020) expounded on how the social cognitive learning theory incorporates the behavioral component of skill building and practicing, cognitive elements that deal with knowledge and belief systems, and the environment encompassing social norms,

influences, and access. Their research on increased learning by experimenting resonates with the EDI Empretec training program model. Trainees at EDI gained knowledge of how to do business. They also started a business during the training week and demonstrated how they practiced several aspects of business creation or development.

Similar to the findings of Markowska and Wiklund of the need to strengthen relationships and trust increased learning, EDI's efforts to create a network of trained entrepreneurs create the platform for continuous learning from one another's experience. The study has shown that entrepreneurial self-efficacy significantly predicts youth entrepreneurial readiness. Therefore, enhancing youth's entrepreneurial self-efficacy is essential because it enables youth to exert efforts in promoting their business and adopt coping mechanisms for addressing challenges. The evidence from this study shows the need to promote entrepreneurial self-efficacy of youth to be confident enough to engage in entrepreneurship.

### ***Future Implications***

Adopting ESE dimensions as a measure of entrepreneurial competence could assist in assessing an individual's specific stage of strength and weakness. It can also serve EDI as a measurement tool for the training program and a tool for screening potential trainees to select those with high ESE who could be eligible to reinforce it with training and facilitate the following start-up stages of firms.

Apart from stimulating entrepreneurial mentality, higher learning institutes are in a strategic position to address entrepreneurial education and training by facilitating the entrepreneurial self-efficacy of students, especially graduates, re-engineering the entrepreneurial atmosphere, and equipping students towards entrepreneurship as a career choice, self-employment, and creating enterprises, contributing to the country's economic development.

Yusof et al. (2009) investigated academic entrepreneurship as part of the larger ecosystem using government, universities, and industries' three-way relationship to create a conducive entrepreneurial context. Therefore, mainstreaming entrepreneurship in the curriculum is essential to promote entrepreneurial culture and serve as an incubation center for sustainable results encouraging youth entrepreneurship.

In addition to promoting entrepreneurial training, it is essential to assess the overall country's entrepreneurial context to make a sustainable difference in the implementation stage of youth entrepreneurial readiness. The Global Entrepreneurship Index 2021 assessed entrepreneurial environments for enterprises using ten entrepreneurship points. This includes (a) ease of access to finance; (b) relevant government policies; (c) affordable taxes and bureaucracy; (d) government programs support new entrepreneurs at local, regional, and national levels; (e) adequacy of entrepreneurial education introduced at school and post-school; (f) transferring research and development to commercial ventures; (g) affordable professional services to support new experiences; (h) ease of entry into the market dynamics; (i) availability and accessibility of physical infrastructures; and (j) normalizing entrepreneurship among communities. Therefore, the future direction needs to include assessing the entrepreneurial environment and creating an enabling environment based on the results.

Ács (2019) suggested the Global Entrepreneurship Index would be a powerful tool that countries could use to evaluate and improve their entrepreneurial ecosystem. By accurately assessing the ecosystem, countries can create more job opportunities and foster a thriving business environment. The current research suggested increasing the entrepreneurial self-efficacy of youth through training will enhance their readiness to start and develop their business. In addition, creating an enabling environment by assessing the entrepreneurial ecosystem will

augment a holistic approach to address the complex unemployment and economic development issues.

### **Limitations**

The first limitation of this study is that it compared two groups who had training in a training center for six days and those on a waiting list. Almost all previous research focused on entrepreneurial education in educational institutes, and no direct comparison was found to show how the current results align or differ from existing research, though proxy studies were used to compare and contrast the results. Even if this did not affect the results of the study, the availability of similar research would have given a clearer picture of the entrepreneurial subscales' usefulness in measuring the cognitive attributes of creativity, planning, marshaling, managing change, and financial literacy in the ESE.

The second limitation of this study is that the researcher used a convenience sample to collect data for the study, which is a type of non-random sampling. Participants were selected based on those who had taken training and were waiting for the EDI training. The inclusion criteria were those aged 18-35 until the sample size reached 63. Though explicitly stated in the informed consent form, four participants were excluded, as they were above 36. This could be because their age when they took the study and the day they filled out the survey questionnaire could differ. The number of trained participants after data cleaning was less by one participant, making the sample of trained 62. Increasing the sample size and using random sampling may increase the generalizability of the study. In addition, in the sampling strategy, the inclusion criteria could be wider than those trained in three months, taking one to two years to increase the impact's generalizability.



This research study indicated a statistically significant difference between EDI-trained and not-trained trainees in terms of youth entrepreneurial readiness to start or develop a business. However, it does not explain why trainees responded the way they did on the ESE scale. The quantitative survey involved a structured questionnaire with predetermined Likert scale options but did not provide details on the factors that caused trainees to respond the way they did. In other words, a limitation of the study is that the results cannot infer causal relationships, explaining why participants answered the way they did. Complementing qualitative study with further research using a longitudinal study might assist in examining linkages more clearly, with a full picture of training as a major factor in starting and developing a business.

The researcher did not find a validated instrument to measure the dependent variable of youth entrepreneurial readiness. Therefore, readiness was measured with the binary answer of whether entrepreneurial training helped the trained participants start or develop their businesses. Only 84 participants with entrepreneurial training were eligible to answer the question, “If you have done training, has it helped you start or develop your business?” Those who never had the training, 42 participants, were not included in this result. On another note, the moderating variable of training was measured using ESE, which can measure the training effectiveness by differentiating between EDI-trained and not-trained.

## **Recommendations**

The results and limitations of this study led to the following practical and academic recommendations to guide future research and policy implementation:

The quantitative survey involved a structured questionnaire with predetermined ESE Likert scale options, which would not allow us to know details on the factors that caused trainees to respond the way they did. Therefore, complementing the research with a qualitative study

would help to collect detailed information from trainees to know the cause. Therefore, apart from entrepreneurial self-efficacy enhanced by training, future research may focus on factors that increase youth entrepreneurial readiness to start and develop their business.

The study employed a non-experimental research design with two groups — one that received training and one that did not. The study focused on three-month trainees as the population and selected its sample accordingly. It is worth noting that future research can enhance this study by exploring experimental research designs by increasing the three-month timeframe and selecting a large target population to draw conclusions about the effectiveness of the training program and the generalizability of the results that training can effectively moderate youth entrepreneurial readiness.

The researcher did not find a validated instrument to measure the dependent variable of youth entrepreneurial readiness. However, readiness was measured using the binary responses of whether entrepreneurial training helped the trained participants start or develop their businesses. The entrepreneurial readiness scale, EMRET, published by Coduras et al. (2016), is an essential tool that incorporates psychological, social, and business readiness. The instrument's authors recommended going through the validating process for academicians to use EMRET as a validated and reliable tool to measure entrepreneurial readiness for future research.

Given that higher learning institutes possess a unique ability to empower students in their entrepreneurial endeavors by enhancing their self-efficacy, it is crucial to explore the impact of entrepreneurial education and training on youth readiness to start and develop their businesses. By serving as incubation centers, higher learning institutes can provide practical programs and mentorship to expand learning and experimentation in entrepreneurship. Thus, further research is needed to replicate the present study with students in higher learning institutes and assess the

effectiveness of such initiatives in fostering the entrepreneurial spirit and contributing to economic development.

Future research could analyze if demographic factors such as gender, age, income level, education level, and presence of family or friends make a significant difference in youth entrepreneurial readiness. Besides identifying additional factors for youth entrepreneurial readiness, studying demographic factors may also help identify suitable training candidates. In addition, future studies may use comparative frameworks, longitudinal designs, and qualitative methods to better understand the dynamic link between youth entrepreneurial self-efficacy, training, and entrepreneurial readiness.

Previous research shows that young people aged 20-25 correlate with entrepreneurial intention but decline in their mid-forties to start a new business venture (Bouichou et al., 2021). The present research targeted the 18-35 age range for the youth readiness study. It concluded that their entrepreneurial efficacy, as moderated by training, increased to enable them to be ready to start and develop their business. Research can compare the results of those aged 18-35 with those above 36, which may identify the target population for training investment.

The current research framed its study using Bandura's social learning cognitive theory that emphasized individual belief in entrepreneurial self-efficacy enhanced by skill training (behavioral) factors interacting with the broader environment where business is applied. Future studies can further focus on the role of the three components of social cognitive learning (cognitive/personal factors, behavioral/skill development factors, and environment/social factors) by including external factors such as policy and entrepreneurial ecosystem in determining youth entrepreneurial readiness in the process of social learning.

Entrepreneurial training/education is one aspect of creating an entrepreneurial ecosystem. In order to sustain the moderating effect of training in youth entrepreneurial readiness, future research may focus on identifying factors for sustainable economic development in Ethiopia by assessing the role of training in the total entrepreneurial ecosystem to encourage the youth's entrepreneurial efficacy to start or develop their business.

Scaling up the EDC training is highly recommended in the ten Ethiopia regions and two major cities, targeting the youth to increase their entrepreneurial self-efficacy and linking with the broader entrepreneurial ecosystem for sustainable economic development, and curbing unemployment issues. Thus, funding organizations may choose to invest in evidence-based entrepreneurship development programs that change the country's fate. In addition, the banking industry can collaborate with budding entrepreneurs with high entrepreneurial self-efficacy who have built their entrepreneurial skills to provide the necessary funds to start and develop businesses.

## References

- Abdullah, A. S. M., & Latif, A. (2014). Evaluation of entrepreneurship development training program of Bangladesh small & cottage industries corporation: A study on 3-day long workshop on entrepreneurial development. *Indian Journal of Commerce and Management Studies*, 5(2), 53–61.
- Ács, Z. J., Szerb, L., Lafuente, E., & Márkus, G. (2019). *The Global Entrepreneurship Index*. The Global Entrepreneurship and Development Institute.
- Adeniyi, A. O., Derera, E., & Gamede, V. (2022). Entrepreneurial self-efficacy for entrepreneurial readiness in a developing context: A survey of exit level students at TVET institutions in Nigeria. *SAGE Open*, 1–15.  
<https://doi.org/10.1177/21582440221095059>
- Adenle, A. A. (2017). Building the African economy: Is President Obama’s entrepreneurial public management program sustainable in Africa? *Journal of Entrepreneurship and Public Policy*, 6(1), 92–107. <https://doi.org/10.1108/JEPP-12-2015-0036>
- Ahmed, H. M. S., & Ahmed, Y. A. (2021). Constraints of youth entrepreneurs in Ethiopia. *Journal of Global Entrepreneurship Research*, 11, 337–346.  
<https://doi.org/10.1007/s40497-021-00292-z>
- Akinyemi, F. O., & Adejumo, O. O. (2018). Government policies and entrepreneurship phases in emerging economies: Nigeria and South Africa. *Journal of Global Entrepreneurship Research*, 8(1). <https://doi.org/10.1186/s40497-018-0131-5>
- Akubo, A. J. (2021). Entrepreneurship education as a panacea for addressing the challenges of unemployment in Nigeria: A study of Salem University Lokoja, Nigeria. *Euromentor Journal*, 12(3), 36–49.

Akulava, M., Marozau, R., Abrashkevich, A., & Guerrero, M. (2020). *GEM Belarus 2019/2020. Global Entrepreneurship Monitor Report.*

<https://www.babson.edu/media/babson/assets/global-entrepreneurship-monitor/2019-2020-GEM-Global-Report.pdf>

Alam, M. Z., Kousar, S., & Rehman, C. A. (2019). Role of entrepreneurial motivation on entrepreneurial intentions and behaviour: Theory of planned behaviour extension on engineering students in Pakistan. *Journal of Global Entrepreneurship Research*, 9(1).  
<https://doi.org/10.1186/s40497-019-0175-1>

Alamineh, H. G. (2022). A comparative study on influencing factors of university and technical and vocational education and training (TVET) graduate students' intentions toward entrepreneurship: Evidence from Addis Ababa City, Ethiopia. *Journal of Global Entrepreneurship Research*, 12(1), 83–96. <https://doi.org/10.1007/s40497-022-00310-8>

Aleksandrova, E., Gerry, C. J., & Verkhovskaya, O. (2019). Missing entrepreneurs: The importance of attitudes and control in shaping entrepreneurial intentions in Russia. *Journal of Entrepreneurship in Emerging Economies*, 12(1), 1–33.  
<https://doi.org/10.1108/JEEE-11-2018-0133>

Alvarez, S. A., & Barney, J. B. (2007). Discovery and creation: Alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, 1(1–2), 11–26.

Alvarez, S. A., & Barney, J. B. (2010). Entrepreneurship and epistemology: The philosophical underpinnings of the study of entrepreneurial opportunities. *The Academy of Management Annals*, 4(1), 557–583.

- Alvarez, S. A., & Barney, J. B. (2012). Discovery and creation: Complementary theories of entrepreneurship. In S. A. Alvarez, M. W. Angle, B. Barney, N. J. Foss, P. G. Klein, & J. A. Mathews (Eds.), *Strategy & entrepreneurship* (pp. 1–39). Lund Business Press.
- Andrews, R. D., Standridge, L. A., & Walters, R. P. (2012). *Statistics as a language for social research*. Oxford Graduate School.
- Audretsch, D., Mason, C., Miles, M. P. & O'Connor, A. (2021). Time and the dynamics of entrepreneurial ecosystems. *Entrepreneurship and Regional Development*, 33(1-2), 1–14.
- Bandura, A. (1971). *Social learning theory*. General Learning Press.
- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review*, 84, 191–215.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122–147.
- Bandura, A. (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(1), 359–373.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. Freeman.
- Barbosa, S., Gerhardt, M., & Kickul, J. (2007). The role of cognitive style and risk preference on entrepreneurial self-efficacy and entrepreneurial intentions. *Journal of Leadership & Organizational Studies*, 13(4), 86–104.
- Bărbulescu, D., Tecău, A. S., Munteanu, D., & Constantin, C. P. (2021). Innovation of startups, the key to unlocking post-crisis sustainable growth in Romanian entrepreneurial ecosystem. *Sustainability*, 13(2), 1–16. <https://doi.org/10.3390/su13020671>

- Baron, R. (2007). Behavioral and cognitive factors in entrepreneurship: Entrepreneurs as the active element in new venture creation. *Strategic Entrepreneurship Journal*, 1(1-2), 167–182.
- Bentler, P.M. (1990). Comparative fit indices in structural models. *Psychological Bulletin*, 107, 238–246.
- Bloh, J. V. (2021). The road to evidence-based applicable policies for regional entrepreneurial ecosystems. *Journal of Entrepreneurship and Public Policy*, 10(1), 59–77.  
<https://doi.org/10.1108/JEPP-08-2020-0060>
- Borhani, M., Amiran, H., Shahriari J. E., & Ghadim, M. R. (2020). A readiness framework to evaluate local economy for an entrepreneurial university. *Journal of Industry-University Collaboration*, 2(3), 111–123. <https://doi.org/10.1108/JIUC-03-2020-0003>
- Boris, O., & Parakhina, V. (2022). Youth entrepreneurship support model and youth business associations. *Wseas Transactions on Business and Economics*, 19.  
<https://doi.org/10.37394/23207.2022.19.149>
- Bosma, N., Hill, S., Ionescu-Somers, A., Kelley, D., Levie, J., & Tarnawa, A. (2020). *Global Entrepreneurship Monitor*. <https://www.babson.edu/media/babson/assets/global-entrepreneurship-monitor/2019-2020-GEM-Global-Report.pdf>
- Bouichou, E. H., Abdoulaye, T., Allali, K., Bouayad, A., & Fadlaoui, A. (2021). Entrepreneurial intention among rural youth in Moroccan agricultural cooperatives: The future of rural entrepreneurship. *Sustainability*, 13(16), 1–20. <https://doi.org/10.3390/su13169247>
- Bramwell, A., Hepburn, N., & Wolfe, D.A. (2019). Growing entrepreneurial ecosystems: Public intermediaries, policy learning, and regional innovation. *Journal of Entrepreneurship and Public Policy*, 8(2), 272–292. <https://doi.org/10.1108/JEPP-04-2019-0034>



- Bygrave, W. D., & Hofer, C. W. (1991). Theorizing about entrepreneurship. *Entrepreneurship Theory and Practice*, 16(2), 13–22.
- Central Statistics Agency (2022). *Ethiopia 2021 labour force and migration survey key findings*. [Final-2021-LABOUR-FORCE-AND-MIGRATION-SURVEY Key-finding-Report-.17AUG2021.pdf \(statsethiopia.gov.et\)](https://statsethiopia.gov.et/Final-2021-LABOUR-FORCE-AND-MIGRATION-SURVEY_Key-finding-Report-.17AUG2021.pdf)
- Chaarani, H. E., & Raimi, L. (2022). Determinant factors of successful social entrepreneurship in the emerging circular economy of Lebanon: Exploring the moderating role of NGOs. *Journal of Entrepreneurship in Emerging Economies*, 14(5), 874–901.  
<https://doi.org/10.1108/JEEE-08-2021-032>
- Chan, W. L., & Mustafa, M. J. (2021). Journal of Entrepreneurship in Emerging Economies: Reflecting on the past five years while thinking about the future. *Journal of Entrepreneurship in Emerging Economies*, 13(5), 791–818.  
<https://doi.org/10.1108/JEEE-06-2020-0162/>
- Chavis, A. M. (2011). Social learning theory and behavioral therapy: Considering human behaviors within the social and cultural context of individuals and families. *Social Work in Public Health*. 26(5). <https://doi.org/10.1080/19371918.2011.591629>
- Chen, C. C., Greene, P. A., & Crick, A. (1998). Does entrepreneurial self-efficacy distinguish entrepreneurs from managers? *Journal of Business Venturing*, 13, 295–316.
- Chen, Y. & He, Y. (2011). The impact of strong ties on entrepreneurial intention: An empirical study based on the mediating role of self-efficacy. *Journal of Chinese Entrepreneurship*, 3(2), 147–158.

- Chernova, O., Matveeva, L., & Mikhalkina, E. (2020). The methodology for the evaluation of youth economic potential: Revealing the resources for regional development. *Journal of Advanced Research in Law and Economics*, 11(1), 246–255.
- Chethan, R. I. (2020). Effectiveness of entrepreneurship skill development training: A case study at RUDSETI in Chitradurga District, Karnataka. *Indian Journal of Commerce and Management Studies*, 11(3), 23–29.  
<https://doi.org/10.18843/ijcms/v11i3/03>
- Chun-Mei, C., Chien-Hua, S. and Hsi-Chi, H. (2011). The influence of entrepreneurial self-efficacy on entrepreneurial learning behavior: Using entrepreneurial intention as the mediator variable. *International Business and Management*, 3(2), 7–11.
- Cieslik, K., Barford, A., & Vira, B. (2022). Young people not in employment, education or training (NEET) in sub-Saharan Africa: Sustainable development target 8.6 missed and reset. *Journal of Youth Studies*, 25(8), 1126–1147.  
<https://doi.org/10.1080/13676261.2021.1939287>
- Coduras, A., Saiz-Alvarez, J. M., & Ruiz, J. (2016). Measuring readiness for entrepreneurship: An information tool proposal. *Journal of Innovation and Knowledge*, 1(2), 99–108.  
<https://doi.org/10.1016/j.jik.2016.02.003>
- Coelho, F. J. M., Marques, C., Loureiro, A., & Ratten, V. (2018). Evaluation of the impact of an entrepreneurship training program in Recife, Brazil. *Journal of Entrepreneurship in Emerging Economies*, 10(3), 472–488. <https://doi.org/10.1108/JEEE-10-2017-0077>
- Cohen, J., & Cohen, P. (1983). Applied multiple regression/correlation analysis for the behavioral sciences (2<sup>nd</sup> ed.) Lawrence Erlbaum.

Cooney, T. M. (2012). Entrepreneurship skills for growth-orientated businesses.

[https://www.oecd.org/cfe/leed/cooney\\_entrepreneurship\\_skills\\_HGF.pdf](https://www.oecd.org/cfe/leed/cooney_entrepreneurship_skills_HGF.pdf)Cox, L. W.,

Mueller, S. L., & Moss, S. E. (2002). The impact of entrepreneurship education on entrepreneurial self-efficacy. *International Journal of Entrepreneurship Education*, 1(1), 229–245.

Cunningham, J. B., & Lischeron, J. (1991). Defining entrepreneurship. *Journal of Small Business Management*, 29(1), 45–61.

Darmanto, S., & Yuliari, G. (2019). Mediating role of entrepreneurial self-efficacy in developing entrepreneurial behavior of entrepreneur students. *Academy of Entrepreneurship Journal*, 24(1), 1–14.

Darmasetiawan, N. K. (2019). Readiness and entrepreneurial self-efficacy. Actors of SMEs snake-fruit processed products in the conduct of e-business. *Advances in Economics, Business and Management Research*, 74, 1–5.

Delmar, F., & Davidsson, P. (2000). Where do they come from? Prevalence and characteristics of nascent entrepreneurs. *Entrepreneurship & Regional Development*, 12(1), 1–23.

DeNoble A. F., Jung, D., & Ehrlich, S. B. (1999). *Entrepreneurial self-efficacy: The development of a measure and its relationship to entrepreneurial action*. In R. D. Reynolds, W. D. Bygrave, S. Manigart, C. M. Mason, G. D. Meyer, & H. J. Sapienza (Eds.). *Frontiers of entrepreneurship research* (pp. 73–87). P&R Publications, Inc.

Drnovšek, M., Wincent, J., & Cardon, M. S. (2010). Entrepreneurial self-efficacy and business start-up: Developing a multidimensional definition. *International Journal of Entrepreneurial Behaviour and Research*, 16(4), 329–348.

<https://doi.org/10.1108/13552551011054516>

- Drucker, P. (1985). *Innovation and entrepreneurship*. Harper & Row Publishers.
- Efobi, U., & Orkoh, E. (2018). Analysis of the impacts of entrepreneurship training on growth performance of firms: Quasi-experimental evidence from Nigeria. *Journal of Entrepreneurship in Emerging Economies*, 10(3), 524–542.  
<https://doi.org/10.1108/JEEE-02-2018-0024>
- Emmanuel, S. O., Mohammed, H. E. & Patrick, A. O. (2018). Entrepreneurship: Psychological factors influencing youth's desire for self-sustenance in Mpumalanga. *Academy of Entrepreneurship Journal*, 24(2), 1–17.
- Entrepreneurship Development Institute. (2022). Reports on impacts of entrepreneurship development institute from 1998-2022. EDI-Ethiopia. <https://edi-ethiopia.org/>
- Ethiopian Statistics Service & International Organization for Migration (2021). *Statistical report on the 2021 labor force and migration survey*. Ministry of Planning and Development Ethiopia. *Statistical Bulletin* 588. <https://www.statsethiopia.gov.et/wp-content/uploads/2022/01/THE-2021-LABOUR-FORCE-AND-MIGRATION-SURVEY-STATISTICAL-REPORT-1.pdf>
- Fairlie, R. W., & Holleran, W. (2012). Entrepreneurship training, risk aversion and other personality traits: Evidence from a random experiment. *Journal of Economic Psychology*, 33, 366–378.
- Fatoki, O. (2019). Emotional intelligence and success of immigrant-owned small businesses in South Africa. *Academy of Entrepreneurship Journal*, 25(4), 1–14.
- Fernando, S., & Nishantha, B. (2019). Impact of social learning on entrepreneurial behavior: Case of entrepreneurship education at state sector universities in Sri Lanka. *Entrepreneurship Education* 2, 1–18. <https://doi.org/10.1007/s41959-019-00016-1>

- Fubah, C. N., & Moos, M. (2021). Relevant theories in entrepreneurial ecosystems research: An overview. *Academy of Entrepreneurship Journal*, 27(6), 1–18.
- Fuster, L. (2022). Macroeconomic and distributive effects of increasing taxes in Spain. *Journal of the Spanish Economic Association*, 13(4), 613–648. <https://doi.org/10.1007/s13209-022-00269-5>
- Gartner, W. B. (1985). A conceptual framework for describing the phenomena of new venture creation. *Academy of Management Review*, 10, 696–706.
- Garfield, C. (1986). *Peak performers: The new heroes of American business*. Avon Books.
- Gibb, A., & Ritchie, J. (1982). Understanding the process of starting small businesses. *International Small Business Journal*, 1(1). <https://doi.org/10.1177/0266242682001001>
- Glancey, K. S., & McQuaid R. W. (2000). *Entrepreneurship and market dynamics. Entrepreneurial economics*. Palgrave Macmillan.
- Global Entrepreneurship Monitor (2022). *Global report: Opportunity Amid Disruption*. Global Entrepreneurship Research Association, London Business School, London, UK.
- Global Entrepreneurship Monitor (2023). *Global report: Adapting to a “new normal.”* Global Entrepreneurship Research Association, London Business School, London, UK.
- Gueguen, G., Delanoë-Gueguen, D., & Lechner, C. (2021). Start-ups in entrepreneurial ecosystems: The role of relational capacity. *Management Decision*, 59(13), 115–135. <https://doi.org/10.1108/MD-06-2020-0692>
- Hallam, C., Novick, D., Gilbert, D. J., Frankwick, G. L., Wenker, O., & Zanella, G. (2017). Academic entrepreneurship and the entrepreneurial ecosystem: The UT transform project. *Academy of Entrepreneurship Journal*, 23(1), 77–90.

- Hatos, R., Cioban, S., Bea, G., Dodescu, A., & Hatos, A. (2022). Assessing the impact of entrepreneurial education on entrepreneurial intentions among Romanian doctoral students and postdoctoral researchers. *Sustainability*, 14. <https://doi.org/10.3390/su14148369>
- Heppner, P. P., Kivlighan, D. M., & Wampold, B. E. (1992). Research design in counseling. Brooks/Cole Publishing Company.
- Hermawan, R. W., Soetjipto, B. E., & Rahayu, W. P. (2016). The effect of entrepreneurial self-efficacy and locus of control on entrepreneurship interest through entrepreneurship literacy. *Journal of Business and Management*, 18(2), 141–148.
- Hernández-Sánchez, B., Sánchez-García, J. C., & Mayens, A. W. (2019). Impact of entrepreneurial education programs on total entrepreneurial activity: The case of Spain. *Administrative Sciences*, 9(1), 25. doi: [10.3390/admsci9010025](https://doi.org/10.3390/admsci9010025)
- Herrington, M., & Kelly, D. (2012). African entrepreneurship: Sub-Saharan African regional report. *Global Entrepreneurship Monitor*, 1–74. <https://www.gemconsortium.org/report/gem-2012-sub-saharan-africa-regional-report-48806>
- Ho, C. S. M., Lu, J., & Bryant, D. A. (2021). Understanding teacher entrepreneurial behavior in schools: Conceptualization and empirical investigation. *Journal of Educational Change*, 22(4), 535–564. <https://doi.org/10.1007/s10833-020-09406-y>
- Islami, P. A. F., Elmunyah, H., & Muladi (2017). Contribution entrepreneurial knowledge, skills competence, and self-efficacy to student entrepreneurship readiness of multimedia expertise at vocational high school in Malang. *AIP Publishing LLC*, 200–252. <https://doi.org/10.1063/1.5003535>

- Janissenova, A., Kaliyeva, E., & Kosmaganbetova, G. (2021). Formation of entrepreneurial culture of students. *TEM Journal*, 10(1), 462–470. <https://doi.org/10.18421/TEM101-58>
- Johnson, B. R. (1990). Toward a multidimensional model of entrepreneurship: The case of achievement motivation and the entrepreneur. *Entrepreneurship Theory and Practice*, 14(3), 39–54. <https://doi.org/10.1177/104225879001400306>
- Kallas, E. (2019). Environment-readiness entrepreneurship intention model: The case of Estonians and the Russian-speaking minority in Estonia. *SAGE Open*, 9(1). <https://doi.org/10.1177/2158244018821759>
- Kidane, M., Mulugeta, D., Adera, A., Yimam, Y., & Molla, T. (2015). The relationship between microenterprises and socioeconomic development among youth groups in Addis Ababa, Ethiopia. *Journal of World Economic Research*, 4(3), 61–70.
- Klinger, B., & Schündeln, M. (2007). Can entrepreneurial activity be taught? Quasi-experimental evidence from Central America. *World Development*, 39(9), 1592–1610. <https://doi.org/10.1016/j.worlddev.2011.04.021>
- Kolvereid, L. (2017). Prediction of employment status choice intentions. *Entrepreneurship Theory and Practice*, 21(1), 47–58. <https://doi.org/10.1177/104225879602100104>
- Korsgaard, S. (2009). *Beyond discovery: A review of critique of the discovery view of opportunities*. Academy of Management Conference.
- Krejcie, R. V. & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 608. <https://doi.org/10.1177/001316447003000308>
- Kuratko, D. F. & Hodgetts, R. M. (2004). *Entrepreneurship: Theory, process, practice*, South-Western Publishers.

- Lilia, C. T., Amar-Sepúlveda, P., & Enohemit, O-V. (2022). Interaction of potential and effective entrepreneurial capabilities in adolescents: Modeling youth entrepreneurship structure using structural equation modeling. *Journal of Innovation and Entrepreneurship*, 11(1). <https://doi.org/10.1186/s13731-022-00201-y>
- Lose, T. (2022). Institutionalised business incubation: A frontier for accelerating entrepreneurship in African countries. *Academy of Entrepreneurship Journal*, 27, 1–10.
- Lund, A., & Lund, M. (2023). *Mann-Whitney u test using SPSS statistics*. Lund Research Ltd. <https://statistics.laerd.com/spss-tutorials/mann-whitney-u-test-using-spss-statistics.php>
- Lyons, S. D., & Berge, Z. L. (2012). *Social learning theory*. UMBC Faculty Collection.
- Mack, A. J., White, D., & Senghor, S. (2021). The benefits of exposing post-secondary students to entrepreneurship training in Trinidad and Tobago. *Humanities & Social Sciences Communications*, 8(1). <https://doi.org/10.1057/s41599-021-00905-8>
- Macrotrends. (2022). *Ethiopia unemployment rate 1991-2023*. <https://www.macrotrends.net/countries/ETH/ethiopia/unemployment-rate>
- Markowska, M., & Wiklund, J. (2020). Entrepreneurial learning under uncertainty: Exploring the role of self-efficacy and perceived complexity. *Entrepreneurship & Regional Development*, 32(7-8), 606–628. <https://doi.org/10.1080/08985626.2020.1713222>
- Maritz, A., & Brown, C. R. (2013). Illuminating the black box of entrepreneurship education programs. *Education+Training*, 55(3), 234–252.
- Mauer, R., Neergaard, H., & Kirketerp, A. (2009). Self-efficacy: Conditioning the entrepreneurial mindset. In M. Brannback & A. L. Carsrud (Eds.) *Revisiting the entrepreneurial mind* (pp. 297–317). Springer International Publishing.
- McClelland, D. C. (1961). *The achieving society*. Van Nostrans Reinhold.



- McGee, J. E., Peterson, M., Mueller, S. L., & Sequeira, J. M. (2009). Entrepreneurial self-efficacy: The measure. *Sage Journal*, 33(4). <https://doi.org/10.1111/j.1540-6520.2009.00304.x>
- McMullen, J., Brownell, K., & Adams, J. (2020). What makes an entrepreneurship study entrepreneurial? Toward a unified theory of entrepreneurial agency. *Entrepreneurship Theory and Practice*, 45, 1–42. <https://doi.org/10.1177/1042258720922460>
- Mehari, A. T., & Belay, C. (2017). Challenges and prospects of entrepreneurship development and job creation for youth unemployed: Evidence from Addis Ababa and Dire Dawa city administrations, Ethiopia. *Journal of Innovation and Entrepreneurship*, 6(1), 1–22. <https://doi.org/10.1186/s13731-017-0070-3>
- Memon, M., Soomro, B. A., & Shah, N. (2019). Enablers of entrepreneurial self-efficacy in a developing country. *Education + Training*, 61(6), 684–699. <https://doi.org/10.1108/ET-10-2018-0226>
- Ministry of Trade and Industry & United Nations Industrial Development Organization (2019). *National entrepreneurship strategy of Ethiopia 2020-2025*. <https://www.unido.org/annualreport2019>
- Moberg, K. S. (2012). An entrepreneurial self-efficacy scale with a neutral wording. *Institute for Strategic Management and Globalization*. [https://research-api.cbs.dk/ws/files/58892889/Moberg\\_SMGWP2012\\_6.pdf](https://research-api.cbs.dk/ws/files/58892889/Moberg_SMGWP2012_6.pdf)
- Muhammad, N. I., & Ahmad, M. (2020). The entrepreneur's quest: A qualitative inquiry into the inspirations and strategies for startups in Pakistan. *Pakistan Economic and Social Review*, 58(1), 61–96.

- Mulu, G., Tsegay, G., & Habtamu, A. (2018). *Assessment of the entrepreneurship ecosystem in Ethiopia*. Ethiopian Development Research Institute.
- Mwampote, E. (2019). *Assessment of youth readiness in starting up business ventures in Tanzania: A case of Chunya district*. COSTECH Integrated Repository.  
<http://repository.costech.or.tz/handle/11192/4342>
- National Planning Commission (2016). Growth and transformation plan II (GTP II) (2015/16–2019/20). Government of the federal democratic republic of Ethiopia. [Growth and Transformation Plan II | United Nations in Ethiopia](#)
- Ndofirepi, T. M. (2020). Relationship between entrepreneurship education and entrepreneurial goal intentions: Psychological traits as mediators. *Journal of Innovation and Entrepreneurship*, 9(1), 1–20. <https://doi.org/10.1186/s13731-020-0115-x>
- Newman, A., Obschonka, M., Schwarz, S., Cohne, M., & Nielsen, I. (2019). Entrepreneurial self-efficacy: A systematic review of the literature on its theoretical foundations, measurement, antecedents, and outcomes, and an agenda for future research. *Journal of Vocational Behavior*, 110(B), 403–419. <https://doi.org/10.1016/j.jvb.2018.05.012>
- Nowiński, W., Haddoud, M. Y., Lančarič, D., Egerová, D., & Czeglédi, C. (2019). The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries. *Studies in Higher Education*, 44(2), 361–379.
- Oganisjana, K. (2014). Researching entrepreneurship and complimenting it with entrepreneurial behaviour triggering components. *Economics and Management*, 4(6).  
<https://trends.fbm.vutbr.cz/index.php/trends/article/download/152/138>

- Olayinka, A. Y., & Sulyman, A. S. (2022). Assessment of students' attitudes towards entrepreneurship development initiatives in Kwara State University, Malete (Case Study of Faculty of Communication and Information Science). *Library Philosophy and Practice*. 1–15. <https://digitalcommons.unl.edu/libphilprac/7211>
- Olugbola, S. A. (2017). Exploring entrepreneurial readiness of youth and startup success components: Entrepreneurship. *Journal of Innovation*, 2(3), 155–171. <https://doi.org/10.1016/j.jik.2016.12.004>
- Omoniyi, I., B., & Bongani, G. T. (2022). Entrepreneurship education's impact on South Africa's economic growth and development. *Academy of Entrepreneurship Journal*, 28(1), 1–9.
- Paray, S., & Kumar, Z. A. (2020). Does entrepreneurship education influence entrepreneurial intention among students in HEI's? The role of age, gender and degree background. *Journal of International Education in Business*, 13(1), 55–72. <https://doi.org/10.1108/JIEB-02-2019-0009>
- Parker, S. C. (2009). Theories of entrepreneurship. In S. C. Parker *The Economics of Self-Employment and Entrepreneurship* (pp. 39–67). Cambridge University Press. <https://doi.org/10.1017/CBO9780511493430.004>
- Peterman, N. E. & Kennedy, J. (2003) Enterprise education: Influencing students' perceptions of entrepreneurship. *Entrepreneurship: Theory & Practice*, 28, 129–144.
- Peterson, R. (1985). Raising risk takers. *Metropolitan Toronto*, 75(7), 30–34.
- Pfeifer, S., Šarlija, N., & Zekić Sušac, M. (2016). Shaping the entrepreneurial mindset: Entrepreneurial intentions of business students in Croatia. *Journal of Small Business Management*, 54, 102–117. <https://doi.org/10.1111/jsbm.12133>
- Pigozne, T., Luka, I., & Surikova, S. (2019). Promoting youth entrepreneurship and

- employability through non-formal and informal learning: The Latvia case. *Center for Educational Policy Studies Journal*, 9(1), 129–151. <https://doi.org/10.26529/cepsj.303>
- Pihie, Z. L., & Bagheri, A. (2011). Malay secondary school students' entrepreneurial attitude orientation and entrepreneurial self-efficacy: A descriptive study. *Journal of Applied Sciences*, 11(2), 316–322.
- Potts, J. (2015). Innovation policy in a global economy. *Journal of Entrepreneurship and Public Policy*, 5(3), 308–324. doi:[10.1108/JEPP-02-2016-0003](https://doi.org/10.1108/JEPP-02-2016-0003)
- Presler-Marshall, E., Yadete, W., Jones, N. A., & Gebreyehu, Y. (2022). Making the “unthinkable” thinkable: Fostering sustainable development for youth in Ethiopia's lowlands. *Sustainability*, 14(4239), 1–16. <https://doi.org/10.3390/su14074239>
- Rahim, N. A., Mohamed, Z., Tasir, Z., & Shariff, S. A. (2022). Impact of experiential learning and case study immersion on the development of entrepreneurial self-efficacy and opportunity recognition among engineering students. *Higher Education Pedagogies*, 7(1), 130–145.
- Raza, A., Muffatto, M., & Saeed, S. (2018). The influence of formal institutions on the relationship between entrepreneurial readiness and entrepreneurial behaviour: A cross-country analysis. *Journal of Small Business and Enterprise Development*, 26(1), 133–157. <https://doi.org/10.1108/JSBED-01-2018-0014>
- Ricardo, D. (1817). On the principles of political economy and taxation. John Murray.
- Rocha, A. K. L., Moraes, G. H., Voda, A. I., & Quadros, R. (2023). Comparative analysis of entrepreneurial intention models: Self-efficacy versus entrepreneurial characteristics. *Revista de Administração Mackenzie*, 24(4), 1–23. <https://doi.org/10.1590/1678-6971/eRAMG230209.en>

Rotter, J. (1996). Generalised expectancies for internal versus external control of reinforcement.

*Psychological Monographs: General and Applied*, 80(1), 1–28.

<https://doi.org/10.1037/h0092976>

Şahin, F., Karadağ, H., & Tuncer, B. (2019). Big five personality traits, entrepreneurial self-efficacy and entrepreneurial intention: A configurational approach. *International Journal of Entrepreneurial Behavior & Research*, 25(6), 1188–1211.

<https://doi.org/10.1108/IJEBr-07-2018-0466>

Sakkthivel, A. M., & Sriram B. (2012). Modelling the determinants that impact risk-taking and entrepreneurship behaviour in emerging economies. *International Journal of Entrepreneurship and Small Business*, 15(3), 376–388.

Salary Distribution Ethiopia (2023). *Average Salary in Ethiopia– The complete guide*.

[www.salaryexplorer/average/-salary-wage-comparison-ethiopia-c69](http://www.salaryexplorer/average/-salary-wage-comparison-ethiopia-c69)

Salisu, I., Hashim, N., Mashi, M., & Mashi, A. (2020). Perseverance of effort and consistency of interest for entrepreneurial career success: Does resilience matter? *Journal of Entrepreneurship in Emerging Economies*, 12(2), 1–26. <https://doi.org/10.1108/JEEE-02-2019-0025>

Saoula, O., Shamim, A., Ahmad, M. J., & Abid, M. F. (2023). Do entrepreneurial self-efficacy, entrepreneurial motivation, and family support enhance entrepreneurial intention? The mediating role of entrepreneurial education. *Asia Pacific Journal of Innovation and Entrepreneurship*, 17(1), 20–45. <https://doi.org/10.1108/APJIE-06-2022-0055>

Saptono, A., Purwana, D., Wibowo, A., Wibowo, S. F., Mukhtar, S., Yanto, H., Hadi, U. S., & Kusumajanto, D. W (2019). Assessing the university students' entrepreneurial intention:

- Entrepreneurial education and creativity. *Humanities & Social Sciences Reviews*, 7(1), 505–514. <https://doi.org/10.18510/hssr.2019.7158>
- Scherer, R. F., Adams, J. S., & Wiebe, F. A. (1989). Developing entrepreneurial behaviors: A social learning theory perspective. *Journal of Organizational Change Management*, 2(3), 16–27. <https://doi.org/10.1108/EUM0000000001186>
- Schumpeter, J. A. (1912). *The theory of economic development*. Transaction Publishers.
- Schumpeter, J. A. (1934). *The theory of economic development*. Harvard University Press.
- Schumpeter J. A. (1942). *Capitalism, socialism and democracy* (3<sup>rd</sup> ed.). George Allen and Unwin.
- Seikkula-Leino, J., & Salomaa, M. (2021). Bridging the research gap—A framework for assessing entrepreneurial competencies based on self-esteem and self-efficacy. *Education Sciences*, 11, 572. <https://doi.org/10.3390/educsci11100572>
- Setiawan, J. L. (2014). Examining entrepreneurial self-efficacy among students. *Procedia: Social and Behavioral Sciences*, 115, 235–242.
- Seun, A. O., & Kalsom, A. W. (2015). New venture creation determinant factors of social Muslimpreneurs. *Pertanika Journal of Social Sciences & Humanities*, 23, 17–32.
- Shaheen, N., & Al-Haddad, S. (2018). Entrepreneurial self-efficacy and entrepreneurial behavior. *International Journal of Development and Sustainability*, 7(10), 2385–2402.
- Simpeh, K. N. (2011). Entrepreneurship theories and empirical research: A summary review of the literature. *European Journal of Business and Management* 3(6), 1–9.
- Sintayehu, S. (2017). Challenges and opportunities facing youth entrepreneurs in Ethiopia: A review paper. *Research on Humanities and Social Sciences*, 7(7), 58–64.

Smith, A. (1776). An inquiry into the nature and causes of the wealth of nations, *I*, 1–625.

[https://archive.org/details/inquiryintonatur01smit\\_0/page/n3/mode/2up](https://archive.org/details/inquiryintonatur01smit_0/page/n3/mode/2up)

Spigel, B. (2017). The relational organization of entrepreneurial ecosystems. *Entrepreneurship Theory and Practice*, 41(1), 49–72.

Steenekamp, A. G. (2013). *An assessment of the impact of entrepreneurship training on the youth in South Africa*. North-West University.

<https://repository.nwu.ac.za/handle/10394/9698>

Storey, D. J. (1994). *Understanding the small business sector*. Routledge/ITP.

Thamahane, T. C., Chetty, N., & Karodia, A. M. (2017). Factors that influence entrepreneurship in university students: A case study of two departments at the University of the Western Cape (Republic of South Africa). *Kuwait Chapter of Arabian Journal of Business and Management Review*, 6(6), 1–30. <https://doi.org/10.12816/0036733>

Thornton, M. (2019). Turning the word upside down: How Cantillon redefined the entrepreneur. *The Quarterly Journal of Austrian Economics*, 23(3-4), 265–280.

<https://doi.org/10.35297/qjae.010071>

Udayanan, P. (2019). The role of self-efficacy and entrepreneurial self-efficacy on the entrepreneurial intentions of graduate students: A study among Omani graduates.

*Entrepreneurial business and Economic Review*, 7(4), 7–20.

<https://doi.org/10.15678/EBER.2019.070401>

United Nations (2022). Our work on the sustainable development goals in Ethiopia.

<https://ethiopia.un.org/en/sdgs> (accessed on 14 November 2022).

United Nations Conference on Trade and Development (2018). *Empretec program*.

<https://unctad.org/topic/enterprise-development/Empretec>

- United Nations Conference on Trade and Development (2022). *UNCTAD Empretec – Inspiring entrepreneurship*. <https://sdgpulse.unctad.org/empretec-inspiring-entrepreneurship> (Accessed on 2 February 2023).
- United States Agency for International Development. (2017). Fact sheet: Education and youth. <https://www.usaid.gov/ethiopia/education>
- United States Agency for International Development. (2021, December). Fact sheet: Ethiopia. <https://www.usaid.gov/ethiopia/fact-sheets>
- Vega, L. S., González-Morales, O., & García, L. F. (2016). Entrepreneurship and adolescents. *Journal of New Approaches in Educational Research*, 5(2), 123–129. <https://doi.org/10.7821/naer.2016.7.165>
- Wadhwa, V., Holly, K., Aggarwal, R., & Salkever, A. (2009). Anatomy of an entrepreneur: Family background and motivation. *Kauffman Foundation Small Research Projects Research*. <https://dx.doi.org/10.2139/ssrn.1431263>
- Weiland, S., Hickmann, T., Lederer, M., Marquardt, J., & Schwindenhammer, S. (2021). The 2030 agenda for sustainable development: Transformative change through the sustainable development goals? *Politics and Governance* 9(1), 90–95. <https://doi.org/10.17645/pag.v9i1.4191>
- Wen, Y., Chen, H., Pang, L., & Gu, X. (2020). The relationship between emotional intelligence and entrepreneurial self-efficacy of Chinese vocational college students. *International Journal of Environmental Research and Public Health*, 17(12), 1–18. doi:[10.3390/ijerph17124511](https://doi.org/10.3390/ijerph17124511)
- Wood, R., & Bandura, A. (1989). Social cognitive theory of organizational management. *Academy of Management Review*, 14, 361–384.



- World Bank (2023). Overview. <https://www.worldbank.org/en/country/ethiopia/overview>
- Wulandari, A., Hermawan, A., & Mukhlis, I. (2021). Exploring determinants of entrepreneurial readiness on Sukses Berkah community's member. *Journal of Business and Management Review*, 2(4), 303–317. <https://doi.org/10.47153/jbmr24.1332021>
- Wurth, B., Stam, E., & Spigel, B. (2021). Toward an entrepreneurial ecosystem research program. *Entrepreneurship Theory and Practice*. 59(13), 115–135. <https://doi.org/10.1177/1042258721998948>
- Yusof, M., Siddiq, M. S., & Nor, L. (2009). An integrated model of a university's entrepreneurial ecosystem. *Journal of Asia Entrepreneurship and Sustainability*, 5(1), 57–77.
- Zahra, S. A. (2011. June). Entrepreneurial capability: Opportunity pursuit and game changing. Paper presented at the DRUID2011 on innovation, strategy, and structure – Organizations, institutions, systems, and regions at Copenhagen Business School, Denmark.
- Zhao, H., Seibert, C., & Hills, C. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(2), 1265–1272.
- Zhartay, Z., Khussainova, Z., & Yessengeldin, B. (2020). Development of the youth entrepreneurship: Example of Kazakhstan. *Entrepreneurship and Sustainability Issues*, 8(1), 1190–1208. [https://doi.org/10.9770/jesi.2020.8.1\(80\)](https://doi.org/10.9770/jesi.2020.8.1(80))

## Appendix A:

### Socio-demographic and Entrepreneurial Self-Efficacy Measurement Tool

#### Section 1: Socio-Demographic Items

<b>S1. Gender</b> S1.1. Man <input type="checkbox"/> S1.2. Woman <input type="checkbox"/>
<b>S2. Age group</b> S2.1. 18-25 years <input type="checkbox"/> S2.2. 26-35 years <input type="checkbox"/>
<b>S3. Level of education</b> S3.1. Primary <input type="checkbox"/> S3.2. Secondary <input type="checkbox"/> S3.3. Vocational <input type="checkbox"/> S3.4. College/University <input type="checkbox"/> S3.5. Postgraduate <input type="checkbox"/>
<b>S4. How long have you been active in any work experience?</b> S4.1. 0 years <input type="checkbox"/> S4.2. Up to 2 years <input type="checkbox"/> S4.3. 3-5 years <input type="checkbox"/> S4.4. 6-10 years <input type="checkbox"/> S4.5. 11-15 years <input type="checkbox"/> S4.6. 16-20 years <input type="checkbox"/> S4.7. 21 and + years <input type="checkbox"/>
<b>S5. How do you rate your annual gross income level based on the average standard of living in Ethiopia?</b> S5.1. Very low <input type="checkbox"/> S5.2. Low or medium <input type="checkbox"/> S5.3. High <input type="checkbox"/> S5.4. Very high <input type="checkbox"/>
<b>S6. Have you ever received any entrepreneurial education or training?</b> S6.1. No never <input type="checkbox"/> S6.2. Yes, at high school <input type="checkbox"/> S6.3. Yes, in college/university <input type="checkbox"/> S6.4. Yes, at a training center <input type="checkbox"/>
<b>S7. If you have done training, has it helped you to start or develop your business?</b> S7.1. Yes <input type="checkbox"/> S7.2. No <input type="checkbox"/> S7.3. Did not take training <input type="checkbox"/>
<b>S8. Is there any entrepreneur within your close family (parents, grandparents, siblings, relatives)?</b> S8.1. Yes <input type="checkbox"/> S8.2. No <input type="checkbox"/>
<b>S9. Are some of your friends' entrepreneurs?</b> S9.1. Yes <input type="checkbox"/> S9.2. No <input type="checkbox"/>
<b>S10. Do you believe entrepreneurial training will help the youth to start or develop their business?</b> S10.1. Yes <input type="checkbox"/> S10.2. No <input type="checkbox"/>


## Section 2: Entrepreneurial Self-Efficacy Scale (ESE)

Ser. No.	Items	Not very confident	Below average confident	Slightly below average confident	Average confident	Slightly above average confident	Above average confident	Very confident
<b>I have confidence in my ability to . . .</b>								
<b>Creativity</b>								
<b>ESE1</b>	Identify ways to combine resources in new ways							
<b>ESE2</b>	Brainstorm (come up with) new ideas							
<b>ESE3</b>	Think outside the box							
<b>ESE4</b>	Identify opportunities for new ways to conduct activities							
<b>ESE5</b>	Identify creative ways to get things done with limited resources							
<b>Planning</b>								
<b>ESE6</b>	Manage time in projects							
<b>ESE7</b>	Set and achieve project goals							
<b>ESE8</b>	Design an effective project plan to achieve goals							
<b>Marshaling</b>								
<b>ESE9</b>	Put together the right group/team in order to solve a specific problem							
<b>ESE10</b>	Form partnerships in order to achieve goals							
<b>ESE11</b>	Network (i.e. make contact with and exchange information with others)							
<b>Managing Ambiguity</b>								
<b>ESE12</b>	Improvise when I do not know what the right action/decision might be in a problematic situation							
<b>ESE13</b>	Tolerate unexpected change							
<b>ESE14</b>	Persist in the face of setbacks							
<b>ESE15</b>	Manage uncertainty in projects and processes							

Ser. No.	Items	Not very confident	Below average confident	Slightly below average confident	Average confident	Slightly above average confident	Above average confident	Very confident
<b>I have confidence in my ability to . . .</b>								
<b>ESE16</b>	Work productively under continuous stress, pressure and conflict							
<b>Financial Literacy</b>								
<b>ESE17</b>	Read and interpret financial statements							
<b>ESE18</b>	Persist in the face of setbacks							
<b>ESE19</b>	Control costs for projects							
<b>ESE20</b>	Estimate a budget for a new project							

## Appendix B:

### Site Permission Letter



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 ENTREPRENEURSHIP DEVELOPMENT  
 INSTITUTE (EDI)-ETHIOPIA

**Date: August 3, 2023**  
**Ref No: EDI/1302/2023**


**To: Seble Hailu Diglu**

**Subject: Granting Permission to conduct research at our Institute**


Entrepreneurship Development Institute (EDI) Ethiopia which operates under the Ministry of Labor and Skills (MOLS) is an autonomous institution formed under FDRE proclamation number 1263/2021. EDI aims to promote the emergence of a vibrant, competitive, and innovative private sector driven by a dynamic, vibrant, and growth-oriented SME sector. This is accomplished through a comprehensive package of entrepreneurship support programs ranging from ecosystem and capacity building to business development services (BDS), access to finance, and market linkage. Following its new mandate as a national institution, EDI plays a key role not only in the entrepreneurial ecosystem but also in self-employment.


Seble is one of our clients who got benefited from our service. She started and developed her business after she received our entrepreneurship training. Now she is conducting research investigating entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy of the youth who have taken EDI entrepreneurship training and those who have not. As per your request to collect data and conduct research at EDI, we are pleased to inform you that we have granted you permission.

Sincerely,


  
**Hailemariam (Dr.)**  
**Director General**

Cc: Curtis McClane, Ph.D., D.Min., M.Div  
 Executive Vice-President, Chief Academic Officer (CAO)/Dean of Faculty






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 + 251 11557 1163



[info@edi-ethiopia.org](mailto:info@edi-ethiopia.org)  
[www.edi-ethiopia.org](http://www.edi-ethiopia.org)



Nega City Mall, 3rd floor, Kazanchis  
 Addis Ababa, Ethiopia

## **Appendix C:**

### **Recruitment Letter**

You are being invited to participate in a research project by Seble Hailu Diglu at Entrepreneurship Development Institute entitled: Youth Entrepreneurial Readiness: Entrepreneurial Self-Efficacy and the Moderating Role of Entrepreneurial Training. I am currently enrolled in the Doctoral Program at The Omega Graduate School, Dayton, Tennessee, and in the process of writing my dissertation.

The purpose of the research is to determine: if youth entrepreneurial readiness derives from entrepreneurial self-efficacy as moderated by entrepreneurial training conducted by EDI. The enclosed questionnaire has been designed to collect information in socio-demographic areas and entrepreneurial self-efficacy.

There is no particular benefit to you if you participate, but the researcher may get information that can help advocate for scaling up training interventions for youth and young adults to start or develop their business in the future. The major risk to you is inconvenience in having to take the time to fill out the survey for a maximum of 15 minutes. Your participation in this research project is completely voluntary. You may decline altogether or leave to submit your answers at the end.

There are no known risks to participation beyond those encountered in everyday life. Your responses will remain confidential and anonymous. Data from this research will be kept secured and reported only as a collective combined total. All responses are anonymous, no one will know your individual answers to this questionnaire. If you agree to participate in this project, please answer the questions on the questionnaire as best as you can. It should take maximum 15 minutes to complete. The survey will be administered through the link below on Survey Monkey. Upon submission of the survey you won't need to do anything else.

If you have any questions about this project, feel free to contact Dr. Curtis McClane, cmcclane@ogs.edu, Dissertation Chair and Academic Dean. Information on the rights of human subjects in research is available through the Omega Graduate School Institutional Review Board 1 307 871-4569, irb@ogs.edu.

## **Appendix D:**

### **Consent Form**

#### **TITLE OF STUDY**

Youth Entrepreneurial Readiness: Entrepreneurial Self-efficacy and the Moderating Role of Entrepreneurial Training

#### **RESEARCHERS**

Seble Hailu Diglu, Doctoral Candidate and Lead Researcher/Primary Investigator (PI), Omega Graduate School, +(251) 911 606055, seble.hailu@gmail.com; Dr. Curtis McClane, Chief Academic Officer, Academic Dean, and Committee Chair, Omega Graduate School and contact person for subjects +(1) 423-775-6599; Dr. Joshua Reichard (president@ogs.edu) faculty advisor, Dr. Sean Taladay (sean.taladay1@gmail.com), faculty advisor, and Dr. Worku Tuffa Birru (workutuffa@aau.edu.et), Content Advisor.

#### **RESEARCHERS' STATEMENT**

We are asking you to be in a research study. This consent form gives you the information you will need to help you decide whether to be in the study. The purpose of the research, what we would ask you to do, the possible risks and benefits, and your rights as a volunteer are stated in the Form. This process is called “informed consent.” Before you decide to participate in this study, it is essential that you understand why the research is being done and what it will involve. Please read the following information carefully.

#### **RESEARCH PARTICIPANT RECRUITMENT**

The target population for this study is 127 individuals who took EDI training from January to March 2023 in Addis Ababa. Out of these, 75 were aged 18-35. Conducive sampling will ensure eligible participants meet the inclusion criteria to select between ages 18 and 35 until a sample size of 63 is attained. To participate, you must be between ages 18 and 35 when you took the training at Entrepreneurship Development Institute.

#### **PURPOSE OF STUDY**

This study investigates the difference between entrepreneurial readiness to start or develop a business based on entrepreneurial self-efficacy of the youth who have taken EDI entrepreneurship training and those who have not to determine if there is a significant difference in entrepreneurial readiness among youth in Addis Ababa, Ethiopia. Participation in this study will help to demonstrate whether the training moderates entrepreneurial readiness for new venture creation or business development. Study results will be used to inform the Country better about the need to develop more awareness of the youth to engage in entrepreneurship as a potential career choice and help them be active in the economic development of Ethiopia. This

will also help to scale up the training activities to meet the entrepreneurial needs of the Country. Your participation in the research is voluntary, anonymous, and confidential, and there is no right or wrong answer. If anything is unclear or you need more information, please contact the Researcher at the address above.

## **STUDY PROCEDURES**

The entrepreneurial readiness questionnaire consists of two sections: ten socio-demographic questions and 20 entrepreneurial self-efficacy questions. It will take 15 minutes to fill in. The research data will be collected within two weeks.

All responses are identified only by a number and associated with you only by a unique code associated with your record. The data is used for academic purposes, research, and potential funding for future projects to improve entrepreneurial training and startup businesses. The completed questionnaires will be secured for at least three years.

## **RISKS**

There will not be any harm to those who will respond to the questionnaire. The person who fills out the questionnaire will not write his/her name. The information filled in the questionnaire will be used for research purposes. The research does not involve any vulnerable groups.

## **BENEFITS**

There will be no direct benefit to you for your participation in this study. However, we hope that the information obtained from this study may benefit from assessing Ethiopia's efforts to meet the sustainable goal by 2030 by identifying how the youth and young adults are contributing to the economic development efforts of the Country.

## **CONFIDENTIALITY**

Your responses to this survey will be anonymous. Please do not write any identifying information on your questionnaire. Every effort will be made by the researcher to preserve your confidentiality for participating in the research.

Data collected in this research will be provided to a personal repository for future use by other researchers. This data will not contain information that could directly identify you.

## **CONTACT INFORMATION**

If you have questions at any time about this study, or you experience adverse effects as a result of participating in this study, you may contact the researcher whose contact information is provided on the first page. If you have questions regarding your rights as a research participant, or if problems arise, which you do not feel you can discuss with the Primary Investigator, please contact one of the Institutional Review Board members at + 1 307 871-4569. If you have



questions about your rights as a research subject, you can call the Human Subjects Division at +1 206 543-0098.

## **VOLUNTARY PARTICIPATION**

Your participation in this study is voluntary. It is up to you to decide whether to participate in this study. If you decide to take part in this study, you will be asked to sign a consent form. After you sign the consent form, you can withdraw anytime without giving a reason. Withdrawing from this study will not affect your relationship with the Researcher, if any. If you withdraw from the study at any time of data collection, your data will be destroyed.

## **SUBJECT'S STATEMENT**

I understand the purpose of the research and volunteered to take part in this research. If I have questions later about the research I can contact one of the researchers listed on the first page of this consent form. If I have been harmed by participating in this study, I can report to OGS internal review board. If I have questions about my rights as a research subject, I can call the Human Subjects Division at (+206) 543-0098.

I have received an electronic copy of this consent form.

The printed name of the Subject	Signature of the Subject	Date
The printed name of the Researcher (PI)	Signature of the Researcher (PI)	Date

## Appendix E:

### Permission to Use Entrepreneurial Self-Efficacy Tool

Request Permission to Use Validated Instrument of ESE

Seble Hailu <seble.hailu@gmail.com>

Tue, Jun 13,  
7:48 AM

to Kåre Moberg <Kaare@ffefonden.dk>

Dear Dr. Moberg,

I am Seble Hailu Diglu, a doctoral candidate at Omega/Oxford Graduate School, living in Ethiopia.

I wanted to use an updated version, validated, and reliable instrument on the "Entrepreneurial Self-Efficacy" Tool.

I need to get permission from authors/publishers to use the tool, so this is to request you to allow me to use the tool for my dissertation, entitled, "YOUTH ENTREPRENEURIAL READINESS: THE ROLE OF SELF-EFFICACY, ENTREPRENEURIAL SELF-EFFICACY AND ENTREPRENEURIAL TRAINING."

I appreciate your support!  
Seble

Kåre Moberg <Kaare@ffefonden.dk>

Jun 13, 2023,  
9:36 AM

to me

Dear Seble,

I am happy to hear that you are interested in my research. You are hereby granted permission to use the scale I have developed that you refer to in this email.

Wishing you good luck with your research!  
//Kåre

Seble Hailu <seble.hailu@gmail.com>

Jul 4, 2023,  
9:13 AM

to Kåre Moberg

Dear Dr. Moberg,

Greetings from Ethiopia! Hope you are doing well.

I need help. I was asked by my dissertation committee to provide proof of using a validated instrument. Where can I find the proof for ESE?

Best regards,  
Seble

Kåre Moberg

Jul 17, 2023,  
12:39 PM

to me

Dear Seble,

You find the paper  
here: [https://www.researchgate.net/publication/255856876\\_An\\_Entrepreneurial\\_Self-Efficacy\\_Scale\\_with\\_a\\_Neutral\\_Wording](https://www.researchgate.net/publication/255856876_An_Entrepreneurial_Self-Efficacy_Scale_with_a_Neutral_Wording)

You could also refer to my [dissertation](#) or the [ASTEE project](#), where it is used, but in a slightly adjusted version.

## Appendix F:

### Human Research Protection Foundational Training Certificate

7/30/23, 7:19 PM

Lesson 1: When HHS Regulations Apply | HHS.gov

#### Conclusion

**Go to Section:** Completion Certificate >



## Congratulations!

You have completed OHRP's learning module:

### Lesson 1: When HHS Regulations Apply

OHRP does not collect information about who completes this training. Please fill out the information below and print this page for your records.

**Name:** Seble Hailu Diglu

**Date:** July 30, 2023

7/30/23, 11:13 PM

Lesson 2: What is Human Subjects Research? | HHS.gov

#### Conclusion

**Go to Section:** Wrap Up > Completion Certificate



## Congratulations!

You have completed OHRP's learning module:

### Lesson 2: What is Human Subjects Research?

OHRP does not collect information about who completes this training. Please fill out the information below and print this page for your records.

**Name:** Seble Hailu Diglu

**Date:** July 30, 2023

7/30/23, 11:38 PM

Lesson 3: What are IRBs? | HHS.gov

**Conclusion****Go to Section:** [Completion Certificate >](#)**Congratulations!**

You have completed OHRP's learning module:

**Lesson 3: What are IRBs?**

OHRP does not collect information about who completes this training. Please fill out the information below and print this page for your records.

**Name:** Seble Hailu Diglu**Date:** July 30, 2023**Congratulations!**

You have completed OHRP's Learning Module:

**Equitable Selection of Subjects**

OHRP does not collect information about who completes this training. Please fill out the information below and print this page for your records.

**Name:** Seble Hailu Diglu**Date:** July 31, 2021**Print****OASH**Office for  
Human Research  
Protections

7/31/23, 1:16 AM

Lesson 4: Independent Review of Research | HHS.gov

## Conclusion

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# Congratulations!

You have completed OHRP's learning module:

## Lesson 4: Independent Review of Research

OHRP does not collect information about who completes this training. Please fill out the information below and print this page for your records.

**Name:** Seble Hailu Diglu

**Date:** July 31, 2023

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## Conclusion

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# Congratulations!

You have completed OHRP's learning module:

## Lesson 5: Human Research Protection Training

OHRP does not collect information about who completes this training. Please fill out the information below and print this page for your records.

**Name:** Seble Hailu Diglu

**Date:** July 31, 2023

**Appendix G:**  
**Curriculum Vitae**  
**Seble Hailu Diglu**

<b>Contact Information</b> <ul style="list-style-type: none"> <li>• Cellular +(251) 911 60 60 55; Office +(251) 941 90 90 90</li> <li>• E-mail: <a href="mailto:seble.hailu@gmail.com">seble.hailu@gmail.com</a>;</li> <li>• Skype: seblehailu,</li> </ul>
<b>Education Background</b> <ol style="list-style-type: none"> <li>1) <b>Doctoral Studies in Sociology – Ph.D. (candidate)</b>, Omega (Oxford) Graduate School, Dayton, Tennessee, USA, March 2017 – December 2023</li> <li>2) <b>Master of Arts in Counseling and Human Relations</b>, Liberty University, Virginia, USA, 2001-2005</li> <li>3) <b>Master of Arts in Educational Psychology</b>, Addis Ababa University – School of Graduate Studies, Addis Ababa, Ethiopia, 2001-2003</li> <li>4) <b>Bachelor of Theology Degree</b>, Evangelical Theological College, Addis Ababa, Ethiopia, 1995-1999</li> <li>5) <b>Bachelor of Arts in Management and Public Administration</b>, Addis Ababa University, Addis Ababa, Ethiopia, 1983-1987</li> </ol>
<b>Core Areas of Expertise</b> <ul style="list-style-type: none"> <li>• <b>Psychological counseling:</b> providing individual, couple, family and group counseling and psychotherapy</li> <li>• <b>Management consultancy:</b> providing consultancy services to several governmental and non-governmental organizations in various fields, including organizational and leadership development, strategic planning, project management, customer relations management, human resources management, and knowledge management.</li> <li>• <b>Education:</b> providing classroom teaching, advising students, training to professionals, as well as preparing materials including manuals, training aids, and guidelines, writing, and documentation.</li> <li>• <b>Research:</b> Conducting assessments, surveys, and evaluations including mapping, organizational analysis, situational analysis, knowledge, attitude and practice reviews and mid-term or final project evaluations.</li> <li>• <b>Training:</b> Combining psychology and management to provide pieces of training in a range of specialized fields including management-related topics, strategic planning, project planning and implementation, psychological counseling, gender policy formulation, community mobilization, positive psychotherapy, EMDR therapy, and peace psychology.</li> </ul>
<b>Work Experience</b> <ol style="list-style-type: none"> <li>1. Endaee Communication, Consultancy, Counseling, and Training Services (ECCCTS) PLC – General Manager since June 2016 – present.</li> <li>2. Director General, Ethiopian Reconciliation Commission, February 16, 2021 - March 11, 2022.</li> <li>3. Wudassie Diagnostic Center (WDC) - Marketing Manager and Counselor, Sept. 2013 – May 2016.</li> <li>4. United Nations Educational Scientific Cultural Organization (UNESCO) – National Program Officer for HIV and AIDS, February 2011 – August 2013.</li> <li>5. Freelance Consultant - Management, Psychology, HIV/AIDS, Counseling, February 2010 – 2011.</li> <li>6. Save the Children/USA, seconded to Management Sciences for Health - Training Manager, HIV/AIDS Care, and Support Program, November 2007 – February 2010.</li> <li>7. United Nations International Labor Organization (ILO) - National Project Coordinator, HIV/AIDS Workplace Education Program, December 2004 – October 2007.</li> <li>8. Bethzatha College of Health Sciences - Program Coordinator, August 2003 – December 2004.</li> <li>9. Evangelical Theological College - Director of Administration, Finance and Information Services, September 2000 -August 2001Registrar and Instructor, August 1995 – 2000.</li> <li>10. Ministry of Mines and Energy – Junior to Senior Management Expert, September 1988 - July 1995.</li> </ol>