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Reframing Entrepreneurship Teaching Methods of Higher Education: Differential Impact of Experiential Learning on Entrepreneurial Intentions of Students

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BAHIR DAR UNIVERSITY

College of Educational and Behavioral Sciences

Department of Psychology

**Reframing Entrepreneurship Teaching Methods of Higher
Education: Differential Impact of Experiential Learning on
Entrepreneurial Intentions of Students**

BY

Yasin Mohammed Ali

March 2022

BAHIR DAR UNIVERSITY
College of Educational and Behavioral Sciences
Department of Psychology

**REFRAMING ENTREPRENEURSHIP TEACHING
METHODS OF HIGHER EDUCATION:
DIFFERENTIAL IMPACT OF EXPERIENTIAL
LEARNING ON ENTREPRENEURIAL
INTENTIONS OF STUDENTS**

**A DISSERTATION SUBMITTED TO THE DEPARTMENT OF
PSYCHOLOGY IN COLLEGE OF EDUCATIONAL AND
BEHAVIORAL SCIENCES BAHIR DAR UNIVERSITY, IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY IN EDUCATIONAL PSYCHOLOGY**

Yasin Mohammed Ali

Supervisor: Professor Reda Dargie

March, 2022

Bahir Dar

DECLARATION

This is to certify that, the Dissertation entitled “Reframing Entrepreneurship Teaching Methods of Higher Education: Differential Impact of Experiential Learning on Entrepreneurial Intentions of Students” submitted in partial fulfillment of the requirements for THE DEGREE OF DOCTOR OF PHILOSOPHY IN EDUCATIONAL PSYCHOLOGY to the Department of Psychology Bahir Dar University, is a record of original work carried out by me and has never been submitted to this or any other institution to get any other degree or certificates. The assistance and help I received during this investigation have been duly acknowledged.

Yasin Mohammed Ali

March, 2022

Bahir Dar University

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Approval of Dissertation for Defense

I hereby certify that I have supervised, read, and evaluated this dissertation titled “Reframing Entrepreneurship Teaching Methods of Higher Education: Differential Impact of Experiential Learning on Entrepreneurial Intentions of Students” by Yasin Mohammed Ali prepared under my guidance. I recommend the dissertation be submitted for oral defense.

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Approval of Dissertation for Defense Result

We hereby certify that we have examined this dissertation/thesis entitled “Reframing Entrepreneurship Teaching Methods of Higher Education: Differential Impact of Experiential Learning on Entrepreneurial Intentions of Students” by Yasin Mohammed Ali. We recommend that the dissertation meets the accepted standards with respect to originality and quality and is approved for the degree of “Doctor of philosophy In Educational Psychology”

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ABSTRACT

This study examined the differential impact of experiential entrepreneurial learning method on entrepreneurial intentions of students compared to the traditional entrepreneurial teaching method of the course "Entrepreneurship and Small Business Management " at Wollo University. The research design appropriated for the research was a quasi-experimental nonequivalent comparison-group design. Data for the study drawn from 202 undergraduate students of Wollo University. To collect the data, the improved and extended version of Entrepreneurial Intention Questionnaire (EIQ) and generic learning outcome measuring open-ended items employed. The data collection processes were conducting between February 2019 and June 15/2019. While measuring the impact of each course teaching learning method on entrepreneurial intention and its antecedents, test-retest difference two-sample t-test, ANCOVA, multiple response chi-square analyses, logistic regression, and path analysis of SEM used. The findings of the study showed that both the newly designed experiential entrepreneurial learning and traditional entrepreneurial teaching methods had significantly improved entrepreneurial intention and its antecedents of the study participants. On the other hand, the entrepreneurial intention of students learned entrepreneurship by the experiential method was significant higher than the control group. The intention model (i.e., TPB) was valid for representing the entrepreneurial intention development of students. Entrepreneurial self-concept has significantly mediated the relationship between EI and EIIC and its antecedents. The association among the type of entrepreneurial teaching-learning method, the perceived job creation responsibility attribution development, and course benefit evaluation (reporting of cognitive, affective, and skill-related entrepreneurial learning outcomes) of participants' responses were statistically significant. In light of the findings recommendation, implications, and future directions forwarded.

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CHAPTER 1: INTRODUCTION

This dissertation examined how the teaching-learning methods of higher education affect the entrepreneurial intention of learners. Particular emphasis provided to the differential impact of experiential learning method. This section of the dissertation presents the introduction of the study.

It begins with giving background information (including distant variables having impacts on the development of entrepreneurial intention of students) about figurative and policy document descriptions of Ethiopian educational and entrepreneurial development issues. The introduction section also describes how and why different entrepreneurial learning methods can be effective in enhancing learners' entrepreneurial intentions. In addition to the theoretical and practical issues, rationale, research problem objectives, research questions, significances, delimitation, and limitations of the study presented as follows.

1.1. **Background of the study**

The question, "should the training provided by higher education institutions take into account the employment opportunities of the students or not?" has been debatable for a long time. Researchers in both sides presented philosophical and practical arguments for supporting their views. Cranmer (2006) presented both views and pointed out that researchers arguing on both sides have convincing outlooks. However, researchers like Cranmer and others (e.g., Olaniyan & Okemakinde, 2008) argued that the number of young people enrolling in higher education is growing, the world is becoming a village, and the world economy these days based on free competition. Therefore, it is important to link the mission of higher education institutions with the developmental needs of countries and the future life of trainees.

As Hailemelekot, (2013) stated, unless they intend to improve the employability and job creation capability of their graduates through ongoing interventions, HEIs operating in poor economies, will definitely lose their key role in poverty reduction. By following the international trend, the Education Strategy Center of Ethiopia stipulated, that one of the mission of higher education system is producing competent citizens who would contribute to the regional and national, social and economic development (MoE, 2018). However, in this regard, the gap between policy documents and the reality on ground had been reported wider.

According to the report of the United Nations Department of Economic and Social Affairs/Population Division World Population Prospects (UNDESA, 2019), Ethiopia ranks second in Africa and twelfth in the World in an estimated population of about 105 million in 2017. According to this report, Ethiopia's population is largely young at about 41% of the population being below 15 years of age and the proportion of the working-age population (15-64) being 54%.

According to the National Employment Policy and Strategy of Ethiopia (NEPSE, 2009), unemployment has been taken as a persistent and prevalent socio-economic problem of the country. Studies show that even after 13 years, the number of unemployed youth has increased dramatically. According to the report of ILO, the youth unemployment rate of Ethiopia from 2016-2019 is 3.33%, 3.26, 3.21, and 3.17 percent respectively. The rate is significantly higher than the general population unemployment rate (ILO, 2021). Ironically, compared to the total youth unemployment, the rate of higher education graduates is greater. For instance, the graduate unemployment rate for universities in Ethiopia estimated to be 40% (Delivery Associates Ltd., 2017). CSA (2018) also reported that, compared to the total unemployment rate, graduate unemployment increased from 26% in 2014 to 66.1% in 2018. As the trend indicates, the number of unemployed youth is increasing year by year and is having a significant negative impact on the country's economic, political, and social development. The unemployment problem could not only affect the life of the graduate and their families, it also seriously smashes the expenditure and investment of Ethiopian government on HEIs (World Bank, 2016). Particularly, this has a sound meaning and deterring implication for higher education, which consumes 42% of the education sector budget of Ethiopian government.

Several causes attributed for the problem of youth unemployment in Ethiopia. The mismatch of the rapid workforce population growth and the limited capacity of industries in absorbing job seekers mentioned are among the reasons for the problem. This labor market demand has reported as would have been accommodated by the Public Employment Services (PES) and the Private Employment Agencies with a key intermediary role throughout the country.

According to the Ethiopian Education Development Roadmap (2018-30), Ethiopian HE curricula lack focus to the development of graduate employability, lack emphasis to entrepreneurial skill, hence, learners lack proper attitudes and skills for venturing (MoE,

2018). Lack of entrepreneurship skill, and mismatch of skills of employees with the labor market (e.g., Meaza, 2021), problem of structural, policy and enabling curricular frameworks (e.g., Hailemeleket, 2013), coordination and integration problems between HEI system and the market (Tesfamariam & Jeilu, 2021), are just a few of the many reasons given to illustrate the problem. Despite the reasons for the high unemployment rate, studies show that the Ethiopian government has done a lot to improve the relevance, quality, and accessibility of higher education. A closer look at this process provides an opportunity to understand the background of this study and the nature of the problem, and we will take a moment to look at research reports vis-à-vis higher education directions.

Ethiopia, in its Second Growth and Transformation Plan (GTP II), envisaged to become a (lower) middle-income country by 2025 (MoFED, 2015). This stretched goal, as the national entrepreneurship strategy document (2020-2025) depicted, the leading role of start-ups, micro, small, and medium enterprises (MSMEs) is key (MoTI, 2019). Accordingly, the education sector as a prominent source of human capital for the socio-economic transformation of countries is provided high and due attention. This seems among the good and compelling reasons that forced the Ethiopian government to redraft and map the whole education policy with special emphasis on higher education (MOE, 2018).

As reports indicated, Ethiopia has recorded a rapid expansion in the development of higher education: a 10.2% of enrollment rate in 2015/17, and a high graduation rate for the last 15 years (MOE, 2018). To reach the GTP's stretched objective in 2025, the country should achieve at least 22% gross enrollment. However, there are serious problems that affect the development of the sector. In addition to the problems and challenges mentioned within the new higher education roadmap assessment; in-equitability, quality problem, weak didactic alignment, and haphazard curriculum, unproductive learning method (MOE, 2018), the political crisis Ethiopia encountered for the last five years, i.e., 2017 to present) also complicated and negatively affected its fast-growing economy, stability, and the mission accomplishment of higher education.

Aligned with the national growth and poverty reduction strategy, the reform of Ethiopian higher education sector development framed and shaped by the education and training policy (ETP). The policy aimed at mainstreaming access, relevance, and equity within the Ethiopian higher education system (FDRE, 1994). This policy served as a reference and departure point of the subsequent Higher education proclamations, directives,

and strategic guidelines. Among others, the Higher Education Proclamations, i.e., 351/2003, 650/2009 and 2019 deliberated to oversee the higher education system to produce skilled labor and job creator under the developmental need of the country through strategically appropriated researches and community service programs with quality education (Bishaw & Melesse, 2017).

The Education and Training Policy of Ethiopia indicates that, "Higher education at various levels and programs should be research-oriented, enabling students to become problem-solving professional leaders in their fields of study and overall societal needs" (FDRE, 1994). The higher education proclamation of the country (650/2009) is also stipulated that the objective of higher education is "to produce knowledgeable, skillful and attitudinally mature graduates in numbers with the demand- based proportional balance of fields and disciplines so that the country shall become internationally competitive" (Federal Negarit Gazeta, 2009).

To fight and alleviate poverty and to sustain the economic growth (Semela, 2011), good governance, and political stability of the country (Yirdaw, 2016); the Ethiopian government is forced to work aggressively on higher education expansion and development. Therefore, to achieve the ambitious national goal of becoming a mid-income country by 2025 (MoFED, 2015), unquestionably qualified professionals hold a significant share in terms of realizing those objectives.

To this end, as Yirdaw (2016) stated, maintaining the equilibrium of quality and quantity of higher education graduates is a priority. As the ESDP V (2015/2016) GTP plan document stated, among others, the goal of the GTP is

“To produce competent graduates who have appropriate knowledge, skills and attitudes in diverse fields of study; to produce research which promotes knowledge and technology transfer based on national development and community needs; and to ensure that education and research promote the principles of freedom in exchange of views and opinions based on reason, democratic and multicultural values” (MoE, 2015; P.105).

For ultimately achieving those highly stretched objectives of the GTP through the education sector development program (ESDPV), Ethiopia's higher education infrastructure has mushroomed in expenditure and expansion within the last 15 years. In recent years, the

numbers of higher education institutions have elevated tremendously, and Ethiopia now has reached 44 and more public universities.

Following this rapid expansion of higher education in Ethiopia, the issue of transferable skills, graduate's prospective attitude toward self-employment, their confident ,readiness, and fitness to the demand of the developmental and societal needs of the country become a point of discussion and major concern among all stakeholders including the public. The concern and discourse of the discussions have mainly focused on how higher education graduates could be self-employed and own enterprises. Hence, this study aimed at providing a research driven advice to higher education policy initiators, legislators and to the National Poverty Reduction Strategy how to synchronize an impactful business experience to entrepreneurial learning in higher education.

In Ethiopia, the issue of entrepreneurship and small businesses development has been a point of discussion and concern of the Ethiopian government since the mid-1990s. The MSE development strategy of 1997, and the strategic objective; "enhancement of enterprise cultivation and entrepreneurship" of the Ethiopian Industry Development Strategic Plan of 2013-2025 (MoTI, 2014), are strong signals of government initiatives. Such legal and policy frameworks opened doors of self-employment opportunities for the youth.

From employment to poverty reduction and innovation, Ethiopian higher education prospective graduating learners tied to several personal and social pressing countrywide imperatives. Considering this fact, the Ethiopian Higher Education Policy document interweaved the relationship between curriculum development of higher education and the economy. The policy further emphasizes that the teaching-learning modality of higher education needs to be prepared based on sound pedagogical principles which are guided by robust psychological learning theories and should be lined up to the national standard.

As the education sector development plan (MOE, 2015) envisioned, higher education graduating students would be competent and have appropriate knowledge, skills, and attitudes in their respective discipline through the application of active learning, i.e., student-centered learning methods. Unfortunately, the real practice is so different, and the phrase of Mortimer and Sathre (2007), "politically savvy" best describes the situation up to date, and again the change as a nation we have brought also dismays the paper valued "active learning" and "student-centered" approach rather.

Contrary to the stipulations of Higher education proclamation about learning and its practices, Ethiopian higher education institutions are still highly behaviorist that focuses on knowledge acquisition, which is known to intensive level of lecturer involvement and control, learner passivity and indecisiveness (Tadesse et al., 2020) with a surface learning outcome. Therefore, reconsidering the mouthy so-called "student-centered" learning methodology of Higher Education is a forced choice.

Considering the facts described above, the practice of entrepreneurship education in Ethiopia is similarly fashioned. Regardless of the anticipated learning behavioral changes of graduating students stated within the education policy, higher education declaration, and the harmonized academic policy of HEIs, the status of entrepreneurship education in Ethiopian universities is still crawling on the common course stage with full of problems delivery modalities.

Despite its importance and contribution underlined, the practical action taken to furnish the academic setting for entrepreneurship education is de-motivating. Furthermore, there is no a clear evidence of who designed the curriculum, what and how the course is delivered, and how and when entrepreneurship learning can occur in the higher education system. Therefore, this study designed to support the above-mentioned shortcomings and problems to bring about radical change through research and to guide the teaching and learning process of entrepreneurship in Ethiopian universities.

Practical entrepreneurial learning can produce measurable educational, social, and economic outcomes among learners (Martinez et al., 2010; Müller & Diensberg, 2011). However, the learning outcome recorded for entrepreneurship has been reported as detached from the reality observed in the real-life situation of learners. Beyond that, as said above, in the Ethiopian context and also around the globe (Kabongo & Okpara, 2010), the issue of entrepreneurship education is in the infancy stage of its development, and particularly in Ethiopia, the beginning is charted in theoretically ungrounded, unstudied direction, and its application is too. Hence, the issue of entrepreneurialism has remained lip service.

Beginning from the eve of the new millennium, the relevance of entrepreneurial education is undoubtedly valued (Fayolle, 2013); government and development agencies are supporting its development and expansion in higher education (Bell, 2015; Malebana & Swanepoel, 2015). These days, the economic development and social stability of a given nation is partly attributed to the degree of prevalence of entrepreneurial culture (Singer et

al., 2015). Supporting this assertion, Fayolle et al. (2016), consider entrepreneurial education as an engine for the social and economic development of persons, households, and nations. Therefore, today more calls propagated for entrepreneurship and its education to be meaningfully prevalent and reach a large segment of the population (Bell & Bell, 2016). This understanding is rooted, though not completely, in the earlier known works of Schumpeter, Kirzner, Schultz, and Cantillon, which describes the dominant, unique, and action-oriented activities of entrepreneurs as influential drivers of economic activity (Arko-acheamfour, 2014; Ndofirepi, 2020; Solesvik et al., , 2013).

Entrepreneurial behaviors and competencies considered as a key to responding to the dynamic economic, social, and political environment change of countries. Entrepreneurial cognition, affect, and psych-motoric properties of an individual can be considered as a bridge for connecting economy, technology, education, and social stability. Therefore, the need for entrepreneurial learning or education is increasingly rampant. Meaningful entrepreneurial learning underlies the stimulation of learners' cognitive abilities, enhanced effective judgment, and/or broader outlook of innovative emotion, and manipulative skill of entrepreneurial opportunities (DeTienne & Chandler, 2004; Honig, 2004). Taking students to such a higher level of learning outcome requires a potential unleashing learning method that can immerse learners in an actual business making process, which also provides learners an opportunity of experiencing thinking and reflection on now and then experiences of their learning outcomes. Learners who are engaged in entrepreneurial learning processes are required to show a salient change in business-related activities and intention for pursuing business opportunities, which would lead to the development and realization of one's venture after certain times of their graduation.

Learner-centered, action-oriented, and problem-based learning, which include constructivist learning practices (Hagg et al., 2020), experiential learning, problem, and project-based learning, gains higher acceptance and support for entrepreneurial learning and education than the traditional lecture-based passive teaching in higher education (Jones and English, 2004). For various amenable reasons and aligned practices, *inter alia*, experiential learning is predominantly considered as effective and efficient for entrepreneurial learning (Bell & Bell, 2020; Fuchs et al., 2008).

However, it looks like those traditional teaching methods persist in the teaching-learning processes of higher education (Blenker et al., 2011). Such approaches are founded

on mere knowledge transfer learning views, which ultimately stultifies the entrepreneurial mindset or entrepreneurial intention development of learners (Kirby, 2004; Kyrö & Carrier, 2005). Furthermore, within the traditional teaching method, the problem of alignment and coherence and ill congruence between content and learning outcome of entrepreneurship courses boldly observed (Mwasalwiba, 2010). Such inconsistencies and unexcused pedagogical making up failures observed in higher education, according to Fayolle, (2013) and Jones et al., (2014), are partly attributed to limited participation of psycho-educational experts and lack of knowledge about the philosophical foundations of teaching-learning dynamics in the entrepreneurship course or program development processes (Bécharde and Grégoire, 2005; Fayolle & Gailly, 2008; Fayolle, 2013).

Researchers in educational psychology, learning science, and educators in entrepreneurship can create methods to link the dynamic real-life scenario practices of learners for encouraging learning and harvesting of entrepreneurial new skills (Macht and Ball, 2016). This entrepreneurial behavior educable and learnable view is also supported by empirical findings in the area of experiential learning principles, which include; action-oriented learning activities (Rasmussen & Sorheim, 2006) and student-centered learning approaches (Fiet, 2001). Efficacious, purpose-driven, differentiated, and student engaging entrepreneurial learning requires experiential learning practices (in which principles of human, social and individual constructivism are infused), creative problem solving, and action-oriented learning activities (Jones & English, 2004, & Jones & Iredale, 2010).

Irrespective of the claimed significance and impacts of constructivist experiential entrepreneurial learning on entrepreneurial intention and its related antecedents, no profound theoretically and methodologically grounded strong work evidenced yet. As Fayolle (2013) tried to show, only limited efforts of research works had a meaningful support of educational psychology theories. Considering these facts, Neck and Corbett, (2018) reported that, those disparities could be attributed to lack of proper training in learning science. Others also extended their argument and reported that lack of knowledge and skill how to design curriculum for a particular field of study aligned with learning principles (Fayolle et al., 2016) and negligence for personal causes.

Researchers in entrepreneurship education consider the experiential learning methods as effective and appropriate (e.g., Mandel & Noyes, 2016). This method of learning can be pictured as how human beings are learning to live (e.g., learning to talk, to

walk, to socialize ourselves, to fulfill our personal basic needs) through involvements of dominant aspects of development, i.e., mental, social, and physical processes. These processes and involvements of various forms of development of learners are activated through learning activities; cooperation, participation, sharing, negotiation, exploration, etc. in these highly interactive and dialectical transformative relationships of the learner and the system, knowledge, skill, and positive attitude towards entrepreneurship is believed to be created. These processes of learning are guided through the core principle of experiential learning, experimentation, and reflection on experiences (Kolb, 1984). This learning process is different from that of traditional learning, which treats learners as passive and receptive beings, towards embedding action, problems, and projects in the learning process (Jones & English, 2004).

Learning entrepreneurship through immersion in entrepreneurial activities is considered and related to experiential learning. The immersion process aligns with practical activities and infusion of learners' now and then experiences (Kolb & Kolb, 2006). The purpose of Kolb's (1984) learning cycle is, indeed, to guide the learning activities. Within the wheel-like model of Kolb's experiential learning cycle, reflection on experiences, filtering and forming new insights from that experience, followed by testing and refining the newly emerged perspectives through further action-reflection (experiences).

As acting entrepreneurs learn from the day-to-day difficulties of their experiences, students could also learn gaps and conflicts of entrepreneurial issues through educational programs, based on their understanding and interests (Krueger, 2007). Students can acquire many relevant issues, like opportunity identification, observe firms, listen to the success and failure stories of model entrepreneurs, and evaluate academic works related to entrepreneurs' behavior. However, such "about" forms of entrepreneurship education and supply or supply-demand model of teaching-oriented teaching-learning alignments couldn't guarantee a deep and transformed learning experience for students. Through such surface learning practices, entrepreneurial behaviors and competencies cannot be achieved. Therefore, employing teaching models, for instance, demand, demand-competence, and competence per "for and through" forms of entrepreneurship education, higher education learners can test the entrepreneurial reality in practice and they would develop a deeper and practical understanding of entrepreneurship, development of entrepreneurial behaviors and competencies.

Based on Ajzen's TPB (1991), behavioral intention is the predictor of any action. It is also predicted by the underlined belief an individual has, attitude (can include motivational factors), and normative beliefs (can include self-concept) and control beliefs (PBC), Exogenous factors, for instance, education is believed to affect attitude and other predictors of intention and the behavior, mediated by intention, and sometimes through control beliefs (Ajzen, 2005; Krueger & Carsrud, 1993). Accordingly, TPB is modeled by several studies to investigate the impact of EE on EI and entrepreneurial behaviors (Ajzen, 2014; Ferreira et al., 2012; Liñan et al., 2011; Mwasalwiba, 2010).

Though the nature of courses, programs, length of intervention, and purpose of the intervention determines, entrepreneurship is concerned with the extent to which graduated students as an outcome of university education engage in establishing enterprises or ventures creation (Nabi & Holden, 2008). In countries where the population size is large and the unemployment rate is higher, the issue of entrepreneurship is a core policy agenda. Particularly, for countries like Ethiopia, struggling to escape from poverty and unleashing the potential of the youth for innovation and self-employment, entrepreneurship education and training programs are highly supported by the government.

Entrepreneurship education (EE) believed to have a positive impact on EI and other related business management knowledge, skills, and attitudes learning outcomes (Morris et al., 2013; Vanevenhoven & Liguori, 2013; Yasin & Reda, 2021). As the human capital strand EE field of investigation posits, people who have a higher level of knowledge of skills and positive attitude or competencies, which are combinations of attitude, knowledge, and skill, are better achievers in the market and investment performance outcomes (Ployhart & Moliterno, 2011; Unger et al., 2011). Accordingly, researchers want to prove the relationship of those performances and cognitive resources through associating them with proximal individual learning outcomes (e.g., self-efficacy, entrepreneurial implementation cues, entrepreneurial self-concept) of graduating students. Such proximal, individual, behaviors and cognitive learning outcomes (e.g., entrepreneurial self-efficacy or PBC) are robust predictors of EI (e.g., Schlaegel & Koenig, 2014). In general, a high number of research works indicate that EE has a positive impact on EE (Fayolle & Gailly, 2009; Fretschner & Weber, 2013; Gibcus et al., 2012; Sánchez, 2013). Such studies suggest that EE cultivates students' EI, its antecedents, and related psychological entrepreneurial behaviors and competencies.

In the line of those introductory discussions provided above, this research investigates the impact of two competing learning and teaching methods, i.e., Experiential Entrepreneurial Learning Method (EELM) and Traditional Entrepreneurial Teaching Methods (TETM) on Entrepreneurial Intention (EI) and its antecedents: Entrepreneurial Attitude (Eat), Subjective Normative Beliefs (SNB), Perceived Behavioral Control (PBC), Entrepreneurial Self-concept (ESC), Achievement Motivation (EAM) and Entrepreneurial Intention Implementation Cue Acts (EIIC) is tested. Additionally, generic learning outcomes, as measured by student course evaluation have investigated. In the process, educational psychological learning theories and their precursor philosophical foundations have been critically reviewed. Essences of entrepreneurship, forms of entrepreneurship education in higher education, and models of teaching and learning methods of entrepreneurship in higher education discussed. Theoretical foundation and practical adaptation of Bloom's (1954) and Kraiger's (1993) general education and training learning outcomes to business-specific learning outcomes by Fisher et al., (2008) were analyzed, synthesized and reframed for guiding the newly designed entrepreneurial learning method.

1.1.Rationales of the Study

Referring the public outcry and resentment in the media as evidence, many scholars see the cause of the crisis as political, but the key to Ethiopia's problem is economic. The question for equitable distribution of wealth, development, and equal political participation, which has been on the rise since mid-2015 to present, has severely affected the country's investment flow, economic activities, and employment opportunities for graduates. The impact of the crisis on youth unemployment, small and medium-sized businesses is even greater than expected. It is not surprising, therefore, that the country's youth unemployment rate is doubling from year to year. This has put pressure on the quality, relevance, and access to higher education. The issue of students graduating from higher education institutions without adequate training and experience is a growing concern. So could proper entrepreneurship education and training help the country and its citizens entering higher education to overcome the current challenges? With this in mind, this research tried to analyze and synthesized a bunch of literatures in entrepreneurial learning, entrepreneurial intentions, and learning outcomes so that a valid and reliable entrepreneurial learning model can be configured to the system of higher education in Ethiopia.

The fact that scholarly research findings have supported the strong relationship between socio-economic development and entrepreneurship, the issue of entrepreneurial learning and development of entrepreneurial competencies are at the discussion table of researchers and policymakers as one of the determinant channels of stimulating and triggering enduring changes in society (Kyro, 2006). Following the strong evidences of its impact on the economic development of countries, entrepreneurship education accompanied by the experiential learning method, has provided to students, and infused across all levels of an educational system (Kuratko, 2005). Surprisingly, Today in some countries, policy development centers are beginning to consider entrepreneurial competencies as important as literacy, and workable for all professions (EU, 2011).

An entrepreneurial ecology of a given country is powerful for giving a full pictorial account of economic development through broadening employment opportunities, increased productivity, innovation, and realization of social justice. As Kozlinska (2016) described, in a state of everlasting economic, social and geopolitical fuzzy future, entrepreneurship in the new millennium has become more topical and a forced-choice that could solve the basic and key developmental challenges of countries. In particular, the role of entrepreneurship in developing countries like Ethiopia, which has: a high population count, high unemployment rate, untapped natural resources, a lot of educated manpower, and a large number of productive members of society, is undoubtedly unbeatable. The reason behind this is, the vast majority of everyday activities of human life are motivated by one's business spirit to create a novel or unique social or material value, wish to win or cooperate, transform and develop to a higher self of manhood.

Higher education graduates need to learn entrepreneurial competencies and develop a planned and deliberate intention that could able them to launch their business venture and become financially independent, able to identify the causes and solutions of their community's unmet needs, and become a creative and innovative business owners who will run one's venture in scientific business management principles. Uniquely and preferably, experiential entrepreneurial learning requires students to develop those entrepreneurial behavioral attributes. Such learning methods not just increase the self-confidence and interest of learners who have a strong intention of creating a business in the future. It also would enable them to apply the knowledge they gain immediately and automatically. Therefore, to support and evaluate those learned behavioral attributes, our higher education

institutes are required to develop a testable, manageable, feasible, context-specific, educational psychological theory grounded sound learning model of an entrepreneurship learning method that will allow us to explain and describe the tangible results of the aforementioned learning outcomes. Hence, these issues are true causes and rationales of why this dissertation focused on entrepreneurial learning methods in higher education and their impact on the entrepreneurial intentions of prospective graduating students.

1.2.Statement of the Problem

Though the nature of courses, length of interventions, and purposes of the intervention determines its purpose, entrepreneurship is concerning with to what extent graduated students engage in establishing enterprises or ventures creation (Nabi & Holden, 2008; Nabi & Liñán, 2011). In countries where population size is large and the unemployment rate is higher, the issue of entrepreneurship is a core policy agenda. Particularly for countries like Ethiopia that is struggling to escape from poverty and unleashing the potential of the youth for innovation and self-employment, entrepreneurship education and training programs requires a high support from the government. Accordingly, the research and academic community are receiving a frequent call to conduct a research and forward workable recommendations (Nabi et al., 2010; Rae et al., 2012).

Various research findings indicated that entrepreneurship education positively affects learners' entrepreneurial behavior and other business-related behaviors (e.g., Badri & Hachicha, 2019; Bae et al., 2014; Ragu, & Mati, 2011; Tiwari et al., 2017). This positive impact is also has a support from meta-analyses research works (e.g., Dickson, Solomon, & Weaver, 2008; Mwasalwiba, 2010; Pittaway et al., 2007). However, the positive impact rests on various factors that related to institutional, educational, social, and learner-related factors. Among others, the nature of course delivery reported as one of the factors that have a differential impact on corresponding learning outcomes of entrepreneurship education (Harmeling & Sarasvathy, 2013).

Compared to the experiential learning method, the traditional entrepreneurship teaching method portrayed as incapable of producing competent and market fitting graduates (e.g., Gibb, 2005; Hytti et al., 2004; Pittaway & Thorpe, 2012).

The institutional assessment conducted by Mudde, Dugassa, and Alemfire (2015) on entrepreneurship education in Ethiopian universities can be a good evidence to reconsider the issue, particularly, the need to reform entrepreneurial learning methods in higher education.

Based on this report, the current practices of entrepreneurship education in Ethiopian higher education is in poor shape. It is contrary to the developmental need of the country, i.e., lack of policy direction, lack congruence with the growth plan of the country, methodologically unstructured, poor content, poor objective-content-method relationship and spineless for practical knowledge of learners, and so that they called for reconsideration of the entrepreneurial education and learning in higher education.

Similarly, couple of years ago to the research he had conducted recently with his colleagues, Dugassa (2012) indicated that, the entrepreneurship education in public universities of Ethiopia characterized as introductory and weak in methodology so as to achieve desired learning outcomes. In support of this earlier finding, Tadesse, Manathunga, and Gillies (2020) also reported that Ethiopian higher education is still focus on lecturing and dictating students learning. Hence, further investigation and reform is appropriate and mandatory.

Following these arguments and empirical research findings, there is a paradigm shift in teaching entrepreneurship from the traditional approach of teaching to the more experiential entrepreneurial learning method (Sánchez, 2013). As research findings indicate, entrepreneurial intentions, their antecedents, and related skills can be enhanced by providing a learning context in which students can interact with entrepreneurs and real-life entrepreneurial activities and processes (Chang & Rieple, 2013; Fayolle & Gailly, 2015; Politis, 2005). Accordingly, this research seeks to examine how an experiential entrepreneurial learning method affects the entrepreneurial intention of graduating students compared to the existing traditional entrepreneurial method of teaching.

Based on Ajzen's TPB (1991) intention is the predictor of any behavior (e.g., creating one's venture in the future). Intention is also predicted by the underlined belief an individual has; attitude, normative beliefs, and control beliefs (PBC). Exogenous factors, for instance, education, believed to affect attitude and other predictors of intention and the behavior mediated by intention, and sometimes through control beliefs (Ajzen, 2005; Krueger & Carsrud, 1993).

Accordingly, TPB is modeled several studies to investigate the impact of EE on EI and entrepreneurial behaviors (Ajzen, 2014; Ferreira et al., 2012; Kautonen et al., 2013; Liñan & Chen, 2009; Liñan et al., 2011; Mwasalwiba, 2010). Accordingly, this research is going to examine all belief and control-related variables considered under Ajzen's TPB in line with the impact of the two entrepreneurial learning and teaching methods.

Entrepreneurship education has been believed to have a positive impact on EI and other related business management knowledge, skills, and attitudes learning outcomes (Yasin & Reda, 2021). As the human capital strand field of investigation in entrepreneurship education posits, students who have an opportunity of receiving a certain entrepreneurship education or training will have a higher level of knowledge, skill, and attitude or competencies, and would enable them to be better achieving on entrepreneurial activities (Ployhart & Moliterno, 2011; Unger et al., 2011). Accordingly, this dissertation seeks to examine the relationship of those enabling factors (experiential Vs. traditional entrepreneurial learning-teaching methods) and learning outcomes, as measured by a composite of TPB and general education and training learning outcomes of Bloom (e.g., intentions, attitudes, normative beliefs, self-efficacy, entrepreneurial implementation cues, entrepreneurial self-concept, entrepreneurial knowledge, skills and affects) of graduating students.

1.3.Objectives of the Study

An exhaustive reform of entrepreneurial learning is an ongoing agenda around the world. The learning processes and results tested through adoption of psychological and educational learning principles. The attitude of the future generation of the country should go to be positive and have an enterprising view. According to research works in the area, this enterprising thinking or view of learners can be achieved through integration of context-specific and practical entrepreneurship teaching-learning methods, enriched by local and international best practices.

Therefore, this study has conducted to achieve the following objectives;

- i. Examine the impact of entrepreneurship course teaching methods on EI and its antecedents
- ii. Examine the differential impact of experiential learning methods (ELM) on entrepreneurial Intention (EI) and its antecedents.
- iii. Investigate the relationships of entrepreneurial intention, its implementation cues (EIIC), and entrepreneurial intention antecedent variables (Eat, Esnb, Epbc).
- iv. Examine the relationship of entrepreneurial self-concept, perceived behavioral control, subjective normative belief, EI, and its implementation cues through TPB.

- v. Examine the association between the types of learning methods and students' course effectiveness evaluation in perceived job creation responsibility and generic learning outcomes.

1.4. Research Questions

- i. Do Entrepreneurial teaching methods positively influence entrepreneurial intentions, its antecedents, and entrepreneurial intention implementation cues (EIIC)?
- ii. Is there a significant mean difference between the impact of EELM and TETM on entrepreneurial intentions, its antecedents, and entrepreneurial intention implementation cue?
- iii. What is the relationship of EI, its antecedents, and EIIC modeled by TPB for the two entrepreneurship teaching-learning methods?
- iv. How entrepreneurial self-concept mediate the relationships of entrepreneurial intentions, its antecedents, and entrepreneurial intention implementation cue?
- v. What kinds of association occur between the types of learning methods and students course effectiveness evaluation in perceived job creation responsibility and generic learning outcomes?

1.5. Significance of the Study

The issue of the experiential learning method and transferable skills has remained a hot agendum of researchers and policymakers in higher education. Though the talk persists, the practice is off-track; the issue of entrepreneurship and its learning is in its infancy. Supporting this argument, the recent Entrepreneurship National Strategy of Ethiopia has presented the barriers of entrepreneurship education and the curriculum practices as follows;

“Entrepreneurship curricula in Ethiopia are too theoretical and detached from the local context and therefore ineffective, which further exacerbates the absence of interest by aspiring and existing entrepreneurs. Curricula lack the use of concrete local business cases that could provide role models for aspiring entrepreneurs. This is also due to poor linkages between education institutions and entrepreneurs and organizations working on entrepreneurship development” (MoTI, 2019; pp. 31).

According to the strategy, entrepreneurial learning in Ethiopia is not action-oriented (not experiential), poor integration between various disciplines and entrepreneurship

courses, unable to give opportunities to students how to transfer knowledge of their field into business, poor communication and networking between universities and business enterprises. Therefore, this research has at least three awesome justifications in the following areas:

- The research will provide a theory-driven and guided framework for entrepreneurial learning in higher education. Thus, higher education and entrepreneurship development agencies could benefit from its practical contributions.
- In this research, the impact of the two competing entrepreneurship learning methods is guided by TPB. Intention models, including Ajzen (1985), pose their framework of intention. There is no intermediate suggestion plotted between intention and action. This research begins to try to fill such gaps by adding EIIC as an indicator of strong goal implementation intention immediate outcome.
- Intention models are dominantly concerned about desirability and feasibility or attitude, control, and normative beliefs variables as antecedents of strong intention. Only, the Entrepreneurial Event Model of intention considers entrepreneurial propensity as a factor that could determine the transferability of intentions to action. This research adds an extra second variable that can mediate PBC and SNB to EI and EIIC that is entrepreneurial self-concept. Therefore, in this regard, this research has new ads to the intention model TPB; this will provide an appropriate insight to researchers in the area.

1.6.Delimitation of the Study

This study delimited to the following areas.

- i. Only Wollo University College of Agriculture prospective graduating students (Plant Science, Animal Science, Rural Development Agricultural Extension (RDAE), and Water and Soil Management (WSRM) have participated in the study
- ii. The impact of experiential and traditional entrepreneurial learning methods on entrepreneurial intention, its antecedents, and EIIC tested on the compulsory course “entrepreneurship and small business management” has measured.
- iii. Only 202 students have participated in the study.
- iv. The design delimited to the none-equivalent group quasi-experimental design.

1.7.Limitations of the Study

Readers should take into consideration the next important issues while using or reading the present research for any of their personal and institutional consumptions.

First, the research only investigated the entrepreneurial intention of prospective graduates of Wollo University. The learning change observed and reported in this research may be different in the actual venture creation behavior of study participants.

Second, the present study only recruited 202 (114 experimental and 88 control) participants among four departments of the college of agriculture. Increasing the number of participants, broadening the sampling frame from different colleges and or universities in may be helpful for generating a strong evidence for predicting venture creation from entrepreneurial intention.

Third, the intervention of the study was resource consuming. Providing or organizing a student loan for both the experimental and control group study participants was impossible. Hence, only the student loan process facilitated and provided for study participants assigned as an experimental group. On the other hand, while the Business Creation Exercise Week (BCEW) held, inviting and engaging large number of micro and small enterprises (for experience sharing) were also challenging for management. Therefore, such barriers could have a potentially undesirable effect on the findings reported. Therefore, access to a student loan, BCE week, and experience sharing for both the experimental and control group of students may bring result that is more conclusive.

Fourth, while measuring variables of the study included under TPB, Likert scale ratings employed as a means of obtaining aggregates. Using Likert scale as an only means of data gathering about intention and its antecedents may affect validity of a scale. Hence, considering belief related variables through employing bipolar scales may be helpful and fill the gaps of this study.

Fifth, this study only measured the impacts of learning methods on entrepreneurial intentions of participants. The present research could not identify to what extent teaching-learning methods explain learning g outcomes of participants. Hence, in addition to the teaching-learning method, testing the model through adding the content, course facilitators experience, and the nature of assessment may increase the reliability and objectivity of any study in the area.

Sixth, this research is dominantly quantitative. The pre-posttest measures and few subjective qualitative data collecting open-ended items have been included within the instrument. Measuring intention through quantitative data and reaching at a valid conclusion might affect confidence. Hence, in addition to the pre-posttest quantitative data measuring scales, considering qualitative data through memos, learning progress tracker tools and formative assessments may enhance the generalizability and conclusiveness of findings.

1.8. Operational Definitions

Entrepreneurial intention: Is a self-acknowledged conviction or a commitment of prospective graduating students to create their venture after graduation, or purposeful cognitive representation of actions, planning, and readiness for exploiting a business opportunity by applying entrepreneurial learning.

An entrepreneurial attitude is a degree to which a graduating university student has a favorable or unfavorable attitude towards establishing his/her business venture after university graduation.

Subjective Normative Belief: Subjective normative beliefs are referred to as students' perceptions of what people in their network would think if they became an entrepreneur. Thus, in this research subjective normative belief is the social and cultural pressure exerted on students' potential resulting from the expectations of friends, family members, and significant others of becoming an entrepreneur or creating a business venture.

Perceived behavioral control: defined as the perceived capability of prospective graduating students in creating their business venture or prospective graduating students' perceived easiness or controllability of business venture creation processes.

Entrepreneurial self-concept: refers to students' compared (normative) and affective self-belief of having necessary entrepreneurial competencies (opportunity hunting, information seeking, networking, self-confidence, persistence, team working, and business planning) that could enable them to establish their venture after graduation.

Entrepreneurial Achievement motivation: For this research, achievement motivation of entrepreneurship defined as graduates' motivation for becoming entrepreneurs, aroused primarily through achievement. People motivated by achievement are those that set goals for themselves. when they reach these goals, motivate themselves in such a way that

they could be enabled to new and bigger challenges in life, depend mainly on themselves and their effort, prefer to work alone and do not worry too much about what others think about their actions.

Entrepreneurial Intention Implementation Cues: According to this research, entrepreneurship intention implementation cue act is defined as a deliberate action emerged from a strong intention of a student to establish his/her venture in the future. The intention implementation cue activities can be business plan preparation, opportunity identification in one's vicinity, business partner identification, locating the source of finance for business creation, goal specification, and plan breakdown to establish a venture or enterprise within a definite period in future.

Perceived Job Creation Responsibility; refers to how students attribute who would be responsible (the student, government/parents/ the student, and the government/family) job creation for prospective graduates after graduation.

Generic Entrepreneurial Learning Outcomes; The tripartite competence framework presented by Fisher et al. (2008) for entrepreneurial learning has been employed for measuring entrepreneurial learning outcomes of the present study. Accordingly, under the cognitive learning outcome; basics of accounting, finance, marketing, and risk understanding were categorized. For the skill related learning outcomes; market researching, recognizing opportunities, creating a business plan, obtaining financing, identifying strategic partners, risk management, persuasion, listening, setting priorities and focusing on goals, dealing with customers, managing people, resolving conflict, adapting to new situations, and coping with uncertainty were categorized and examined as skill. Finally, for the affective outcomes; passion for entrepreneurship, self-efficacy for entrepreneurship, commitment to business venture, self-confidence, self-esteem, and need for achievement motivation to excel has been themed and measured.

Experiential Entrepreneurial Learning Method: refers to an entrepreneurial learning method framed by theories of social and humanistic constructivism, particularly Kolb's (1985) experiential learning principle, which underlines learning as experiential, practical, and learner-centered. It is an entrepreneurial learning method applied to *for* and *through* forms of entrepreneurship education aimed at enabling students to create their business venture after their graduation through facilitating the compulsory common course provided to final year Prospective Graduating College of Agriculture students

of Wollo University. This experiential entrepreneurial learning, as modeled by Bechard and Gregoire, (2005) is typically typified by demand, competence, and mixed model of forms of entrepreneurial teaching or learning in higher education. While the course entrepreneurship is facilitated by experiential learning method, business creation exercise inside the university, university loan, trade exhibition, opportunity identification, guest speaker, firm observation, Business plan preparation, and feasibility study are commonly used as a means of course delivery and entrepreneurial learning process.

Traditional Entrepreneurial Teaching Method: refers to a teaching method practiced in higher education to the existing entrepreneurship compulsory common course provided in higher education students of College of Agriculture final year Prospective Graduating Students in Wollo University. The traditional entrepreneurial teaching method provides less power and responsibility to students, dominantly theory-driven, and the teaching-learning process provides less opportunity for practice and business creation exercises during the teaching-learning process.

CHAPTER 2: REVIEW OF RELATED LITERATURE

This chapter begins by reviewing the theoretical frameworks of learning in educational psychology of learning perspectives. The discussion of reviewing the literature is extended to experiential learning and entrepreneurship education. Finally, the discussion of the chapter culminates after making a thorough discussion on the impacts of experiential learning on entrepreneurial intentions, its antecedents, and entrepreneurial generic learning outcomes.

2. THEORETICAL FRAMEWORKS OF ENTREPRENEURIAL LEARNING

To understand how entrepreneurial learning flourishes and its particular characteristics, knowledge about learning science is key. To do so, this study addresses paradigms of learning by analyzing the philosophies, principles, and implications of dominant educational psychological learning theories. This strand of the research process helps in clarifying the nature and features of entrepreneurial learning and its feature of occurrences in higher education. Beyond that, it could help show the framework of how the entrepreneurial learning process is guided by learning science and its socially mediated experiential nature (Funken, Gielnik, & Foo, 2020; Pittaway & Thorpe, 2012; Wang & Chugh, 2014). Finally, presentations of this section (particularly the learning) will align the learning theories with entrepreneurial learning and determine the selection of the appropriate learning method and didactics of entrepreneurship education in higher education.

2.1. Learning

The view and understanding of learning is complex and its history of inquiry is too long. Its study processes involve various forms of philosophical and theoretical lenses (Olson & Hergenhahn, 2012). As the result of disparities of those learning lenses, learning literature ranges from biology to psychology, sociology to pedagogy and andragogy, military to entrepreneurship (Bates, 2015). In this study, only the three theories that are the most dominant and serve as an umbrella for many learning theories, paradigms, models, and

approaches (i.e., Behaviorism, cognitivism, and constructivism) discussed. Experiential learning, to which many researchers in the area agreed upon its appropriateness for entrepreneurial learning, also maintained within the consecutive discussions of the chapter.

In their profoundly worthwhile critical review article on the conceptual and operational essences of learning, Murphy and Night (2016) described that a properly defined term serves as shorthand for communication among community members. Above all, this is useful for terminologies like learning, which is a multidisciplinary concept. According to Shuell (1986), there is no globally agreed definition of learning by theorists and researchers. Regarding the uneasiness of defining learning, Smith, and Medin (2013) encapsulates that the fact that it is multifaceted for various uses, the definition of learning defies clear-cut definition. Regardless of those arguments, either the mentioned definitional or interpretation (e.g., Bower & Hilgard, 1981) issues, the general conceptual definition of learning (which coincides with most of the behavioral and cognitive focused educational psychologists), " is an enduring behavior change, or in the capacity to behave in a given fashion, which results from practice or other forms of experience." (Schunk, 2012: pp.4). The definition underlines the relevance of change; in behavior, in knowledge (schemata) structure (Shuell, 1986), in participation in a set of collective practices of a community of learners (Esmonde, 2009), or change in "human disposition" or competences (Gagne, 1965) through (over) time (Shuell, 1990), as a result of experience, i.e., practices and observations (Kolb, 1984; Mashburn, Justice, Downer, & Pianta, 2009).

Specifically, learning theorists from the block of behaviorism defined learning as behavior change and control (Skinner, 2007). On the other hand, the cognitivist (including the contextualists) and humanists defined it, as construction, acquisition, and internalization of cultural intricacies (Paavola et al., 2004), growth and development of competencies (Bruner, 1966), and unfolding of potentials, talents, and capabilities (Rogers, 1969; Maslow, 1981). Through the lens and frameworks of those basic theory-driven definitions, educators, researchers, and practitioners extend their definition and interpretation of learning.

2.2. The Emergence of Psychological study of Learning

Customarily, in the history of psychology literature, 1879 of Wundt's psychological laboratory referred to as the starting point of psychology as a formal field of study or discipline (Walberg & Haertel, 1992). Neither Mueller's (1979) refusal of acknowledging

the Leipzig psychological laboratory as the first blow of formal beginning of psychology nor its (Wundt's laboratory) inability of discovering remarkable discoveries (Shunk, 2012), Wundt's contribution for the emergence of the psychological learning view was invaluable. The pricelessness of that laboratory establishment can be acknowledged for two reasons. Its transformative role of those philosophical views of knowing (what mind is and how it could be studied) into experimentation (Evans, 2000), can be mentioned as the primary significance. The second contribution was, by following the footsteps of Wundt, a school of psychological thoughts (particularly, structuralism and functionalism) had emerged by his fellow students (e.g., Titchener, 1909).

The less dependability and subjectivity of introspection (the method used by structuralism while studying the mind through compartmentalization of consciousness) has been followed by a serious challenge. The persistent argument resulted in the shift of studying the mind through its purpose, adaptive nature, and practical function, (Dewey, 1900). However, on one side, the unfocused efforts and the broad spectrum touches of functionalists, on the other side, the strong desire of making psychology pure science, i.e., measurability of an observed phenomenon (Asher, 2003), couldn't let functionalism stay longer on the throne of psychological exploration. Functionalism handed over the race of investigating psychology (mind) hurdle to behavioral, humanist, and Cognitive learning theorists; the era of the so-called modern learning theories has started.

2.3. Theories of Learning

From the beginning of psychology as a science in the late 1980s, theories of learning and cognition passed through three different periods of exploration. According to Mayer (2001), these periods classified as the response acquisition period, the knowledge acquisition period, and the knowledge construction period. Each of the periods characterized in line with particular assumptions about learning, which led to the development of educational practices in varying situations.

During the response acquisition period, the psychological theory was highly affected by behaviorists' thought and learning theory also framed accordingly. The knowledge acquisition period uniquely dominated by information-processing theory that moved psychology from the overt behavior-specific endeavor to the complex system. The

knowledge construction period coincided with constructivist theories of cognition that stressed the social, cultural, and contextual dimensions of cognition. Learning and cognition, according to constructivist theory, are not only psychological phenomena, rather, individual, cultural, social, and historical phenomena situated in a community of learners. In the next section, the three periods are briefly described focusing on learning, and consider how each period defined and described learning.

2.3.1. Behaviorism

The scientific investigations (introduced at the beginning of the 20th century) of natural science were highly impressive for people in the social context. During the century, the renowned physicist Newton had discovered the laws of gravity and motion. These laws were capable of explaining and predicting all macroscopic phenomena taking place in nature. By deriving Newton's law of nature, Psychologists had believed that when time permits, basic human nature can also be explained and predicted by some basic laws. Following the effectiveness of Newton's experimental method, psychologists also used their experimental approach to measure human behavior. This method also has appreciated by precursor positivist philosophers who believed that knowing extracted from sensory experience. Accordingly, psychologists overlooked the investigation of covert behavior and chose to investigate overt human behavior (Eloff & Ebersohn, 2004; pp.17). Having in mind other equally important pushing and pulling factors, this was how the methodological development of behaviorism came into existence.

Consciousness, the focus of the psychological investigation of structuralism and functionalism, lost its legacy after the emergence of behaviorism; readable behavior won the heart of researchers (Leahey, 2000). *The Behavioral Learning Theory*, which was published by Watson in 1913, can be taken as a turning point from functionalism to behaviorism (Overskeid, 2008). According to behaviorists, psychology can be a science when its method of studying a phenomenon solely gives an observable and measurable outcome.

The Pavlovian conditioning has obtained an appreciation and praise from Watson. According to his propagation of Pavlov's work, conditioning was an ideal framework for achieving the goal of psychology for diverse forms of human learning.

The psychology of learning, according to Watson and Skinner, is based on the empiricist perspective to science; a reductionist view of examining the relationship between stimuli and the response of a phenomenon. Lately, Skinner understood that in learning, human beings go beyond responding to the environment; their prior experiences also help them to react to the environment (Skinner, 1974). Following this development, Skinner contested that every action of a man is controlled by his experience. Accordingly, what matters is experience, not a mind (including its underpinnings: thought, feeling, and intentions) regarding the way people behave.

The reductionist and positivist, Pavlov, Watson, Skinner, Thorndike, and other conditioning (which is the hallmark of associationism, connectionism, contingency, contiguity, and others) behavioral psychologists, underscore (not denying its relevance) cognition, and argue that such covert behavior is not essential to explain human learning; but environmental events are (Schunk, 2012).

Knowing, according to conditioning, is framed by the assumption that behavior is formed as a result of the response of an organism provides to stimuli, and each behaviorism sect makes its assumptions about the way how stimulus-response associations are strengthened and weakened across different situations and experiences of the organism within a given situation (Collins et al., 2001).

When cognition viewed as a capability of associating experiences, learning is the formation, consolidation, and alteration of those associated experiences. Among others, the process of the emergence of learning, according to the view of learning in behaviorism include conditioning of reflexes (a response to one situation comes to be associated with another situation) and reinforcement of stimulus-response associations (reinforcing a particular response and strengthening the connection), (Collins et al., 2001).

Whether it is called conditioning or associative, its learning application is enormous. It allows students to give responses for any task of interest (learning) and obtain dependent feedback (contingent) on the individual student's responses. It is also a robust framework for learning of day-to-day routines; has the advantage of implementing individualized instruction that gives many opportunities for learners to respond actively to questions and problems and obtain feedback for each response that would enable the learner to establish a meaningful association.

According to conditioning behavioral psychologists, effective learning demands a meaningful preparation both to the orientation of students about the overall condition of activities and the environment where the learning undertakes (Gagne, 1985). This is particularly a key in operant conditioning, where the impact of instruction depends on its capability of reinforcing desired responses. The importance of reducing and prioritizing complex learning tasks into learning hierarchies, or simple-to-complex sequencing of material (van Merriënboer et al., 2003), in line with Gagné's (1985) theory of *The Conditions of Learning*, can be mentioned as a good example of how conditioning of simpler tasks affect the complex skills in learning.

The idea of transfer, which is an equivalent; associative shifting (Schunk, 2012), and Pavlov's generalization (Windholz, 1997), in conditioning involves:

Gradients of similarity along stimulus dimensions, so that a response learned as an association to one stimulus generalizes more strongly to other stimuli that are similar to it in all respects, and less strongly to stimuli that differ from it in one or more dimensions (Greeno, et al., 1996; P.22).

However, as Thorndike (1932) informed us, the transfer should be considered with caution. According to his description, a skill practiced in a given specific context may not improve one's capability to perform that skill generally. To give a clear image of this, training on bicycle riding does not advance learners' ability to ride a horse or ride a motorbike. Accordingly, skill-related learning routines are beyond the essence of transfer and require different types of learning content and instruction.

Following the footsteps of natural science, the associationism of Thorndike, Pavlov, and Skinner had tried to formulate the general law of human learning. Though associationism has effectively framed in a simple and lower order, or routines of human learning, unfortunately, it was incapable of explaining and predicting various forms of higher-order learning. To show this inconclusiveness, the 1950s Skinner's "unfruitful" attempt of using behaviorist principles to explain how language acquisition in humans takes place, can be mentioned as an example. Negating Skinner's effort, Chomsky contended that simple stimulus-response association cannot explain the dynamic and creative nature of language development (Eloff & Ebersohn, 2004). As Benjafield et al. (1993) presented, several researchers agreed that the critique provided by Chomsky on Skinner was

considered as the beginning of the sunset of the popularity of behaviorism, and psychologists became more passionate and interested in the cognitive processes of learning.

2.3.2. Cognitivism

Beginning in the late 1950s, behaviorism was highly confronted by newly emergent views of learning. Social cognitive learning theory and the information processing model of learning were major challenges to behaviorism. Bandura (1986) discussed human learning within a framework of reciprocal determinism. According to his discussion, the interactions among personal factors (e.g., personal agencies and cognition), behavior, and environment determine human learning and/or behavior. Bandura also argued that human behavior or learning is not only dependent on simple association and conditioning; enactive (through doing) and vicarious (by observing and modeling others) learning are key issues.

Actual doing or performing on a given behavior leads to retention of the successful consequences, and rejection or modification of those behaviors failed. Bandura (1986) contended that it is the consequences of a behavior, not strengthening behaviors, which are presented by conditioning theories, that serve as rich sources of information (inform people about the appropriateness of behavior) and an internal drive to direct behavior (people strive to learn a behavior they value). In vicarious or enactive learning, what affects learning is cognition, not the learning consequence (Schunk, 2012). This view of human learning and cognition opens the door of opportunities for the development of cognitive information processing theories.

One of the classical cognitive models that opened the door for studying the internal cognitive process for learning was the information processing approach. It assumes that learning is linear and mechanistic. Strube (2000), commented that the information processing perspective has "strictly adhered" to the experimental methodology, which is underpinned by positivist assumption (postulates that there is only one objective way of exploring how people learn in all contexts) of learning. Despite the harsh criticisms that smashed the information-processing approach to learning (e.g., Mayer, 2001), it helped researchers to knock the field of cognitive science emphasizing internal cognitive processes contrary to observable behaviors.

Knowledge acquisition represented as a cognitive/mind activity that involves internal coding and configuring by the learner. Learners are active and engaged in

information seeking and processing. Information processing theories focus on how people expose themselves to environmental circumstances, encode information to retain it for further usage, and associate it to previously stored information in the memory system (Shuell, 1986). Family theories of this camp indicated that humans are information processors of their environment; the central information processing unit of man is his mind (Mayer, 1996)

Regardless of the disagreements and harsh criticisms forwarded from developmental psychologists, for some stage oriented and cognitive psychologists, learning is considered as discrete change between an identifiable behavior of an organism or a person rather than with changes in the probability of responses, as behaviorists endorsed (Ertmer & Newby, 2013). During learning, cognitive theories underline the relevance of the "conceptualization of students' learning processes" and emphasize how information is encoded, decoded, organized, stored, and retrieved by the mind. For information processing theorists, as structuralism does for the mind, learning is not as concerned with what students do, rather with what learners know, and how they developed to acquire it (Jonassen, 1991).

According to cognitive theories, a transfer is dependent on the way information is stored in the memory of learners (Schunk, 1991). Those students who have a better understanding of how to apply their previous knowledge in a new situation and context can be benefited from the transfer of learning. According to Duffy and Jonassen (2013), understanding, in the view of information processing theories, is considered as a composed form of knowledge, which bases on the form of concepts, procedures, and discriminations. The identification processes of similarities and a difference of new information to the already stored information determined by the boundary of prior knowledge (Ertmer and Newby, 2013).

2.3.3. Constructivism

As Fosnot and Perry, (1996) stated, students' conception of knowledge from their experience referred to as constructivism. The essential issue under this theoretical framework of learning is students actively construct their knowledge and extract meaning from their experience. The Philosophical argument of constructivism relies on an epistemological view of (e.g., Dewey, 1938) knowledge and reality as subjective and relative to a person, and known through the distinct experience of a person (Doolittle &

Camp, 1999). In his recent seminal article, Yilmaz, (2011) also noted that constructivism as a philosophy of learning emerged as a result of dissatisfaction with the theoretical views of knowledge and human development, which relies on reductionist, mechanistic, objectivist, and positivist views of knowing (Glaserfeld, 1996).

According to the view of constructivism, no knowledge exists outside the mind of man; truth or reality is not absolute, and knowledge is not discoverable, rather constructed through the experience of man (Hendry, Frommer, & Walker 1999; Simpson, 2002). The concept of truth, as a mirror of the external world, has replaced by relativism. Therefore, constructivists postulated that knowledge is not passively receivable from the outer world, but makeable by an emergent individual or community of groups in the experiential world (Bruning et al., 2004).

Constructivists posit human development and learning (particularly, for Piaget and Vygotsky) as contextual, relational, and transactional. First, human action is at the heart of their analysis; the mind is not a mere container that crammed memories, rather, represents an organized dynamic system expressed in actions. Second, they are contextualists (Cobb & Bowers, 1999); human action cannot occur in a bare world. Rather, human learning is social, cultural, and relational by its nature. Third, learning and development interact dynamically, one affects the other (Stetsenko & Anna, 2006).

Constructivism underpins various thoughts about how learning and knowledge occur. Based on the commonality of the epistemological line of each perspective, thoughts under constructivism are grouped as exogenous, endogenous, and dialectical constructivism (Moshman, 1982). Exogenous constructivism refers to the acquisition of knowledge through reconstructing structures that exist in the external world (e.g., contemporary information processing theories reflect this notion). Contrary to the exogenous, endogenous constructivism focuses on the organization of cognitive actions (Bruning et al., 2004).

According to Piaget, change in cognition is a function of equilibration, which is an ever-existing dynamic knowledge construction process, through adaptation and organization (Piaget, 1976). In a moment of attempting to understand a new learning situation, the experience of the individual within the circumstance is determinant in learning, and for its efficient and effective processes. When a person comes to contact with a new event, situation, or learning, the environment induces some kind of contradiction to the current understanding of that person about things, which in turn creates (most of the time)

uneasiness in understanding (knowing) and, likely leads to a state of disequilibrium in cognitive road map (schemata) (Gillani, 2003; Yilmaz, 2011). As Gillani, (2003) described, to overcome the imbalance and to create a stable state of equilibrium in the cognitive structure, learners in the situation are required to modify or reorganize their schemata and need to adapt to the demand of the environment through assimilation and accommodation.

According to Vygotsky, learning is a construction and transformation process of an internalized shared cultural purposeful behavior through the mediation of tools spanning beyond mere reflexes. This process of learning involves the support of more experienced and knowledgeable significant others (Sackney & Mergel 2007). Stetsenko and Anna (2006) also described how learning and its transfer occur, stipulated that interaction of socially distributed evolving, dynamic, and transformative cultural practices resulted in learning; through transfers from the inter-personal to the intra-personal plane, from the wider social dynamic world to the individual.

Watzlawick, (1984) (cited in, Saunders, 1992; pp.136), defined constructivism as "the notion that learners respond to their sensory experiences by building or constructing in their minds, schemas or cognitive structures which constitute the meaning and understanding of their world". Cognitive structures of the learner or the developing person occur from his/her previously developed schema, not from direct environment information. Accordingly, knowledge is not a reconstruction of the already existing external world; it is acquired through the experience of an individual with the corresponding environment. Woolfolk Hoy et al, (2013) also prescribed this perspective as cognitive focus, Duffy and Cunningham, (1996) call it, individual constructivism, and Mueller, (2012) also mentioned it as radical cognitive constructivism (e.g., Piaget's theory of cognitive development can be typified to this view). In between those two views, dialectical constructivism, in which knowledge or learning is viewed as a result of the interaction of person and environment, person and culture, person and history (in this perspective, the view of Vigotskys's socio-cultural-historical or activity theory, Carl Rogers humanistic learning theory, and Malcolm Knowle's Andragogy theory can be mentioned). Learning, as viewed by humanism, is a dynamic and continuous process of knowledge construction through the decisive role of personal choice, meaning, and emotion of learners (Hira & Hynes, 201; Maslow, 1943). Extending the discussion of humanistic constructivism is worthwhile for the theoretical framework of entrepreneurial learning.

Humanistic theory is usually considered as a "third force", which refers to its emergence as a reaction to behaviorism and psychodynamic views of human development and learning. Their view of human nature is holistic, which is (dissimilar to both behaviorists' reductionist and Freud's deterministic views), emphasizes human behavior, thought, and feelings (Weiner, 2018). The basic philosophical assumptions and principles of humanistic theory for learning is dominantly constructivist and give due attention to cognitive and affective processes of learning. They stipulated that human beings have unique capabilities, potentials, a sense of control over their sense of presence and choices (Schunk, 2012).

From a humanistic learning perspective, learners are required to be actively engaged in their learning process through continual self-criticism and self-evaluation. Learning that is imposed by outsiders of students is lower in relevance and value and could lead to less engagement, lower motivation, and unchanged personality development of learners. Therefore, the primary job of teachers is not imparting knowledge, it's facilitating the learning process which gives room for learners to share each other's experience, arouse their motivation of learning, compose their experience, and share the thoughts, feelings, and experiences of learners and facilitators through the provision of necessary resource (Rogers, 1969).

Humanistic psychologists believe that psychological climates (e.g., caring, safe, respectful, trusting, respectful, and understanding) experienced by learners are a key for learning. Among them, the field theorists, (e.g., Lewin, 1951), similar to Vygotsky's (1978) connotation, give particular attention to collaboration, appreciation of group commitments, caring interpersonal relations, and a culture of active interaction (Knowles et al., 2005).

Rogers and Frieberg, (1994) described that purpose-driven and experiential learning has an importance to the whole person's development and learning, and has an immersion power of the learner in the lesson. It is also self-initiated and affects the learner's behavior, personality, and attitude and is judged by the learner whether it could meet his/her personal need or lead to the achievement of one's goal.

2.3.4. Experiential learning

Experiential learning provides an understanding of human learning and education as a lifelong process that depends on the pursuit of knowledge, the pursuit of social

psychology, philosophy, and cognitive psychology (Kolb, 1984). Other than the two philosophical precursors of psychological learning theories previously discussed in this chapter, i.e., rationalism and empiricism, experiential learning builds on the pragmatic philosophical view of William James, and John Dewey. Therefore, as Kolb maintained, experiential learning is a "philosophical rationale for the primary role of personal experience in experiential learning" (Kolb, 1984, p. 18).

The concept of pragmatism had its birth when C. S. Peirce published a series of essays on "truth" in *Popular Science Monthly* in 1878. Even though it hasn't been directly mentioned, the essay "How to Make Our Ideas Clear" written by Peirce in 1878, is considered as the starting of the view of pragmatism (Dewey, 1984). According to Peirce's theory, the connectedness between reasonability and reasonable action is inseparable. James, (1907) and Dewey, (1964) used the method and adapted it to psychology and education.

A pragmatist is quite different from a rationalist and an empiricist in many issues. The purpose and concreteness of a phenomenon propagated by James and others have been followed by a serious challenge and intellectual dispute within the communities of philosophers. In general a pragmatist:

Turns away from abstraction and insufficiency, from verbal solutions, from bad a priori reasons, from fixed principles, closed systems, and pretended absolutes and origins. He turns towards concreteness and adequacy, towards facts, towards action, and towards power (James, 1907, p. 51).

Amidst those noisy voices against pragmatism, Dewey had applied the method of pragmatism to education. According to his assertion, the new method places action as a bridge between thought and application; "to be able to attribute a meaning to concepts, one must be able to apply them to the existence," Dewey, (1984; pp. 5). This means that verbal expression of things cannot be as meaningful as testing them in real-life situations. The essence of knowing and understanding things underlined in the experience of its taste. According to Dewey, the reason is a systematic manipulation of ideas through which effective actions are emergent, and these ideas in turn help to obtain better control of the action.

In Dewey's view, education is not solely about tomorrow. Learners are not like charging batteries prepared for later usage or function, which passively stored and acquired knowledge for the coming life. Accordingly, education is "a process of living and not a preparation for future living" (Dewey, 1972; pp. 87). In this regard, authenticity, presence, purpose, and lively application of the now and then learning knowledge for solving societal problems and improving the common life of all, is the essence of education and learning. According to Dewey, education transmits culture and provides different views of the world, and gives opportunities to students to disclose their potentials and hidden attributes through their own experience. Therefore, for both James and Dewey experience has a prominent role in learning; the process of life experience and educational undertakings is highly associated (Dewey, 1938; Kolb, 1984).

It is also good to add some points about the humanistic philosophical and theoretical nature of experiential learning in a few paragraphs. The fact that behaviorism is built upon the philosophical view of empiricism (experience and practices) may intuitively perceive experiential learning as a form or family member of behaviorism. Experiential learning is a humanist concept, not from behaviorism traditions. Boldly and loudly, David Kolb has contested it:

"The emphasis on the process of learning as opposed to the behavioral outcomes distinguishes experiential learning from the idealist approaches of traditional education and the behavioral theories of learning created by Watson, Hull, Skinner, and others. Human experiences cannot be neatly classified into behaviorist categories. Ideas are not fixed and immutable elements of thought but are formed and reformed through experience (Kolb, 1984, p. 26).

In experiential learning the interplay of the cognitive learning process and affect (emotion), related experiences determine the outcome of the learning content being covered. Humans are not inherently empty barrels who passively wait for agencies to fill up (Kolb, 1984; Kolb & Fry, 1975). In humanistic psychology tradition, human experience and its interpretations are uniquely valued (Maslow, 1954; Rogers, 1961). Therefore, experiential learning particularly recognizes and values feeling as part and parcel of the learning process and cognitions.

Experiential learning, according to Lewis and Williams, (1994; pp.) refers to "learning from experience or learning by doing". Similarly, others are also defined as

learning from experience (Usher & Soloman, 1999), and taking an active part in learning (Yount, 2001). All definitions involve experience, action, and active participation of the learner. The keywords embraced within the definition of experiential learning underscored by previously discussed learning theories.

The shift from considering learners as passive knowledge receivers to active meaning constructors through utilization of one's experience, the emergence of differential learning perspectives for various age groups of learners, and the influx of adult learners in higher education programs have contributed as a pushing factor for the emergence of experiential learning theory.

The epistemological underpinning of experiential learning is constructivism. In constructivism, learning is defined as the knowledge construction process of learners from their experience. According to Henze (2009), constructivism as a source of experiential learning theory, involves some important assumptions for learning; active participation of learners, the centrality of previous experience, meaningful social negotiation, and learning in action. Taking together those important assumptions indicated under constructivism, Hedin, (2010), underlined the two distinctive features, these are, direct contacts of students to the learning phenomenon and their meaningful reflection on their experience from the lesson, as markers of experiential learning. Experiential learning provides an opportunity for learners to make an intentional experiential learning process and reflection, which resulted in the development of new knowledge, attitude, and skill (Lewis & Williams, 1994).

People reading about experiential learning may think all the contribution goes to David Kolb's model of experiential learning. However, this is not true; there are different models of this learning method or principle. For instance, Boud and Walker's (1992) stages in experiential learning, Dean's (1993) process model of experiential learning for adults, and Laura Joplin's (1981) Five stage model can be mentioned as various models of experiential learning contributed for research and academia. This does not mean that all the listed and other related models have an equivalent impact and empire within academia. In this regard, David Kolb's professional commitment and his model's versatile contributions prominently recognized.

Kolb's (1984) experiential learning theory, which emphasized the process of learning, is derived from numerous precursors or intellectual ancestors (Kolb, 1984), of learning theories (pragmatism, constructivism, humanism, and cognitivism) proponents.

Experiential learning theory draws on the work of prominent 20th-century scholars who gave the experience a central role in their theories of human learning and development—notably John Dewey, Kurt Lewin, Jean Piaget, William James, Carl Jung, Paulo Freire, Carl Rogers, and others—to develop a dynamic, holistic model of the process of learning from experience and a multi-linear model of adult development (Armstrong, & Fukami, 2008; P.2).

In his prominent and memorable work, *Experience and Education*, Dewey, (1938) stipulated that having all uncertainties in the learning and education process, the unchangeable frame of reference, is the strong bondage between education and personal experience. According to Dewey, however, not all experiences are equally relevant for educating a person, or education and experience are not equated. Reflective thought in observation of one's experience is the key of education, particularly, in experiential learning (Dewey, 1997).

The role of feedback in group dynamics (Lewin, 1953), assimilation and accommodation in the learning process (Piaget, 1976), the importance of initiative and personal involvement in learning (Rogers, 1969), the determinant nature of dialogue within the community of learners (Vygotsky, 1978), and others' view have been infused to the essences and principles of Kolb's (1984) experiential learning. To elaborate this process, Menaker et al. (2006), summarized Kolb's (1984) steps of the experiential learning cycle. According to their description this learning method involves experiencing the new environment or new concept of learning, observing the new environment or learning issue, and make a meaningful reflection. Finally, the learner generalize and form an abstractly conceptual understanding about the reflection (thinking), and test the formed abstract concept on a real-life situation (experiment) or modify the formed concept through the newly faced experience (doing).

According to Kolb's (1984), experiential learning suggests that learning of certain issues formed through a combination of construction and transformation of experiences. This theory represents two dialectically associated models of forming experiences (i.e., concrete experience and abstract conceptualization of a given behavior), and two dialectically related models of transforming experiences, (i.e., reflective observation and active experimentation). The gateway of learning of a given behavior or knowledge is concrete experience, followed by reflection and formation of abstract conceptions (Hedin,

2010). Therefore, experiential learning according to this cyclic model is a process of forming knowledge that involves a dynamic tension among the four modes of learning which is responsive to contextual demands. "The learner passes through this process of an idealized cycle and touches the bases- experiencing, reflecting, thinking, and acting" (Kolb, & Kolb, 2012).

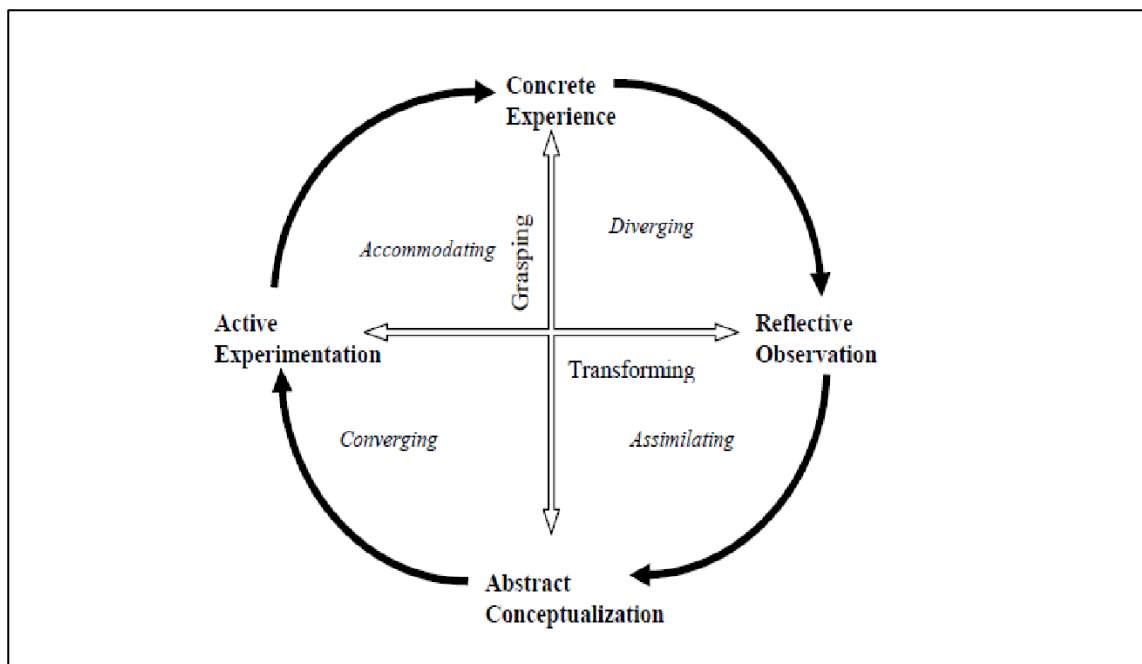


Figure 1: Experiential Learning Cycle (Kolb & Kolb, 2008)

Kolb's central theme of learning and knowing is a schematic representation of an experience and its transformation. However, the figurative grasp and operative transformation alone are not sufficient. The simplest sense making of an experience and its transformation is not sufficient for learning; there must be an experience that is being acted on (Kolb, 1984).

Reflection, which is the response of the learner for the respective experience, within Kolb's learning cycle, is considered as an important means of capturing, thinking, and evaluating one's experience of the learning process. The strong connection between the learning experience and reflective activity is highly valued for enhancing learning; occurs

through, returning to experience, attending to feelings, and association or appropriation (Hedin, 2010).

Experiential learning has come to existence based on the view that knowledge construction is not a constant and unchangeable component of the thinking process. However, it is constructed and reconstructed through the experience of a person or learner. It is also a nonstop gradual emergent process, usually represented as cyclical, which denotes that the learning of individuals is dependent on the involvement of their ideas and beliefs at different stages of elaboration.

Experiential learning defies the proposition of learning as a transfer from experts (knowledgeable others) to novices. Learning, rather is conceptualized and operationalized as a collaborative process through which learners critically ponder about phenomena and examine issues to make meaning from their experience. As Freire (1974) enumerated, the process of construction of learning between students and teachers is co-authored, which is non-differentiated. Having in mind its limitations, as Dewey prophesied, experiential learning provides the foundation of learning for living and working democratically.

Whether it is entrepreneurial learning or any other field of study, theories of learning in psychology and education have an eclectic, multidisciplinary, and dynamic method on how to deal with the learning itself, learners, and the learning environment. By supporting this, Kyrö (2015), and Béchar and Grégoire (2005), maintained that the association between the learning paradigms in educational psychology and entrepreneurial learning is closer. Accordingly, when designing such teaching-learning methods for such courses, awakening and abiding by the process to the principles of learning science in psychology has reported reasonable (e.g., Biggs, 2012). As raised elsewhere in this chapter, the learning theories/ paradigms in educational psychology that could frame and guide the teaching and learning processes of entrepreneurial learning are cognitivism, behaviorism, and constructivism (including experiential learning).

The learner, in behaviorism, is controlled, and learning is the totality of reactions to external stimuli. As Kyrö, (2015) noted, formal learning for behaviorists delivered through the lectured-based one-way transfer of knowledge from teacher to student, in which learners' task is a reproduction of those transferred learned contents. Teacher dominantly decides the process and the content students to learn. The learning process (mechanistic as the physical world) and its view about the nature of learners (considered them as passive

and their behavior as derived by external stimuli alone) is highly criticized by contestants of behaviorism (Robinson et al., 2016). On the other hand, according to cognitivism, reasoning is the only way of gaining knowledge. Accordingly, the learner is an independent rational thinker of the context surrounding him/her. Learning, according to cognitivism, occurs inside the mind of the learner in the form of schemata, which can be stored and retrieved when needed. Similar to behaviorism, the teacher knows what students should know, the appropriate learning strategy, and the way it can be imparted or transferred to a learner (Kyrö, 2015).

Contrary to the previous two psychological learning paradigms, constructivism views learning as active, interactive, experiential, subjective, learner formed, built on learner's interest, and developed through dynamic interaction between and within the learner and the contextual environment. The learning process in constructivism values the role of normative and broader cultural systemic practices (interactive and situated nature of learning) vis-à-vis the engagement of the learner (active engagement in adapting an environment through self-regulation (vonGlaserfeld, 1995). In constructivism, learning, its process, and method of development occur through negotiation, not the sole issue of the teacher as does for behaviorists and traditional cognitivist. These principles of constructivism are more appropriate for disciplines requiring learners to be novel in thinking (e.g., entrepreneurial learning).

Finally, humanism for learning as a derived form of constructivism, experiential learning as a form of humanism and formed through various thought strands of constructivism, has been discussed. Throughout the discussion, the relevance of now and then experiences of learners, learning in action and experimentation and reflection on learning experiences, choice, self-regulation, learning in living, and involvement of emotion in learning are underlined as learning principles that make experiential learning theory unique than principles of learning of the earlier theories.

2.4. Entrepreneurship Education and Learning

2.4.1. Entrepreneurship

The prominent Economist Schumpeter, (1934) maintained that an entrepreneur is an innovator who disturbs the market and overreliance on certain products through the creation of new production methods, novel business models, and new consumer handling strategies. Shortly, according to Schumpeter, the essence of entrepreneurship is related to a continuous improvement (innovation) of products and services, ultimately creating an imbalance in the market and maximizing a profit. This does not mean that the entrepreneur should be able to be an innovator and the source of capital for the undertakings. On the other hand, the issue of alertness for a profitable opportunity, which has been advocated by Kirzner, is mentioned as the center of entrepreneurship (Jakee & Spong, 2003; Pittaway, 2005).

Furthermore, Cantillon believes that an entrepreneur is a risk-taker, even in the face of "irreversible uncertainties" (Batstone & Pheby, 1996). Knight, (1942; P.129) also contested that, since the business environment is volatile, and the economic change is unpredictable, "entrepreneurs are risk specialists and uncertainty bearers". Therefore, in the latter view, entrepreneurship is not about having things; it is seeking things in the presence of adversities, uncertainties, and risks. Hamilton and Harper, (1994) pointed out that the function of an entrepreneur includes the skill of managing things through other people in an environment where uncertainty, adventure, and risk are inevitable. Schumpeter, Schultz, Kirzner, and Weber rejected risk/uncertainty as an underlying component of entrepreneurial activity. Entrepreneurs as functional and mercantile operators, (Clark, 1887) and Weber, (2001), and entrepreneurship as a personality trait, (McClelland, 1987), have also been the center of discussion of entrepreneurship.

As the consecutive discussions of entrepreneurship show, there is no one common consensual entrepreneurship thematic issue among prominent theoreticians and researchers. Therefore, there wouldn't be an all-satisfying definition of entrepreneurship. However, Innovation, opportunity, risk, uncertainty, market, information, personality, functionality, and prospective attitudes for venture creation are mentioned as important markers of entrepreneurship.

Considering those scattered views of entrepreneurship, Gibb and Price (2014) also conclude that there is a universal common understanding about the way individuals and

enterprises create and implement innovative and novel ideas and ways of doing things, and their proactivity on the future and their environment. In addition to these, entrepreneurs have a change-provoking behavior that involves different degrees of difficulties with unpredictable or uncertain scenarios; the concept of entrepreneurship includes all those issues.

In the summary of this section, it can be clear that a universally accepted consensual definition of entrepreneurship seems to remain elusive; however, fortunately, the agreement on some of those central thematic issues helped us to have a partial understanding of the essence of entrepreneurship and entrepreneurs' behavior (Steenekamp, 2013).

2.4.2. Entrepreneurship education

Whilst the phrase entrepreneurship education is highly utilized by policymakers, researchers, educators, and innovators, there has not been a common consensus about the basic principles, definitions, and outcomes (Pittaway & Cope, 2007). The disparity of the definition of entrepreneurship education, *inter-alia*, is caused by researchers and institutes interested in involving broad-spectrum issues and only venturing related narrow issues within their respective definitions. Having an understanding of those academic and research disputes, entrepreneurship education (more appropriate and suited for the present study) is defined as a "process of education for entrepreneurial attitudes and skills, which involves developing certain personal qualities" (Fayolle et al., 2006; pp. 702). Similarly, Wyness, Jones, and Klapper, (2015) also view entrepreneurship education as an instrument of developing an entrepreneurial mindset up and means of becoming self-employed or establishing one's venture. A positive impact has been reported across different learning outcomes (Ayuo, 2018; Dickson et al. 2008; Fayolle et al., 2006; Stokes & Wilson, 2010).

Accordingly, Lackéus (2015) suggested that during the discussion of entrepreneurial education, clarification of considerations (either the broader or the narrower definition of interest) eases unnecessary ambiguities. To understand the differences of the two dichotomies in defining entrepreneurial education, the narrow definition embeds business development, venture creation, and self-employment (Fayolle & Gailly, 2008). However, the broad definition of entrepreneurship education encircles and concerns being enterprising, taking initiatives, and becoming entrepreneurial in thinking and attitude (Mwasalwiba, 2010).

Entrepreneurship education has emerged in various domains of knowledge (Katz, 2000). Depending on the learning objectives and the nature of learners, the nature of entrepreneurship education can be categorized in different forms (Robinson et al., 2016).

Accordingly, Jamieson, (1984) (Cited in Matlay et al., 2010), contributed to our understanding of forms of entrepreneurship education and their descriptions. He classified it as *about, for, and in [through]*. This classification, particularly, the first two has also been maintained by Linan, (2004), Kirby (2004), and Hytti and O'Gorman (2004). However, a certain degree of difference between Jameson's "in " entrepreneurship and others' "through" entrepreneurship is entertained.

“*About*” entrepreneurship approach is a typical example of the academic tradition and focuses on the description and understanding of entrepreneurship. This is similar to Linan's (2004) classification, entrepreneurial awareness education, aimed at increasing knowledge about entrepreneurship and influencing the development of a positive attitude that could lead to intention to become an entrepreneur (Mwasalwiba, 2010; Yatu, et al., 2018). In this approach, learners are required to understand the essence of entrepreneurship; economic importance, the process of venturing, socio-economic-cultural variances, and entrepreneurship and behaviors of entrepreneur heroes.

Research reports show that such forms of an entrepreneurship program allow learners to stimulate their entrepreneurial knowledge and soul to think about self-employment and the establishment of one's venture (Maritz & Brown, 2013). Having the serious limitations of such forms of entrepreneurship education, the entrepreneurial intention of students (learned by such a program) has been found to increase (Karimi et al, 2016; Nabi et al., 2016)

When entrepreneurship is narrowly viewed as the capability to start and run a venture, the form of education and its suitable teaching-learning approach preference is aligned with the “*for*” entrepreneurship dichotomy (Mwasalwiba, 2010; Yatu et al., 2016). Entrepreneurial competencies required for being a successful entrepreneur, i.e., knowledge of business planning, financial literacy, and human resource management are part of “*for*” entrepreneurship education (Linan, 2007; Matlay & Carey, 2007; Mwasalwiba, 2010).

The aim of the “*for*” type of entrepreneurship education is not only concerned about reinforcing entrepreneurial knowledge, skills, attitudes, and practices of their future

business, it also strives to increase learners' intention of improving their behavior how to manage the business they are or will running (Herman & Stefanescu, 2017; Draycott & Rae, 2011).

People with an established venture are required to update their skill and knowledge on how to run their business through well-designed innovative, actionable, and experiential short or long-term entrepreneurship courses and training packages (Henry et al., 2005; Co & Mitchell, 2006; Mwasalwiba, 2010). Therefore, "through or in" the form of EE is more ideal and appropriate for enterprise owners, nascent entrepreneurs, and sometimes for prospective and graduated students. The curriculum of the course or training determines the nature of the participants. Therefore, such programs are not mandatorily prescribed for those on business or having a business experience alone. This is not on behalf of the cost of identifying the appropriate audience or target group for any of the forms of EE programs rather Fayolle et al., (2006).

Taking into consideration all the three forms of entrepreneurship education, in countries like Ethiopia, in which the history of entrepreneurship is less than a decade, the curriculum of entrepreneurship education could not overlook impeding factors. Among others, attitude towards entrepreneurship, tolerance for ambiguity, risk perception, and perceptions towards failure can be taken as factors. Among others, introductory entrepreneurship courses in higher education are required to include learning packages that sensitize or stimulate learners (Davey et al., 2016). Such stimulating or sensitizing content-method alignment of an entrepreneurship course or event increase students; motivation and participation in the entrepreneurial activities, their readiness of facing different self-employment opportunities, and their perceived self-efficacy of becoming an entrepreneur after their graduation as a career (Fayolle, 2007; Fayolle & Klandt, 2006).

To conclude the discussion of this section, as presented under the description of each form of entrepreneurship education, none of them has an exclusive characteristic. They have Conceptual and practical interdependence and intersectionality. Regardless of the specific characteristics of each form of entrepreneurship education, the course or program required to provide students an opportunity of having; a general or particular understanding (about entrepreneurship) of enterprise and a desirable attitude that lead to a strong intent and skill (for and in entrepreneurship) of owning, properly managing and extending an enterprise. Therefore, when an entrepreneurship course helps learners to develop their understanding

and broaden their perspective of how entrepreneurship prosper countries, their motivation would be enhanced to be engaged in an entrepreneurial project during their study time. The motivation arousal can also be sustained after graduation, or intended to look for some business opportunities and work as a part-timer, or could apply in the business development and incubation center of their university. Such learning outcomes may not be attributed solely to "about or for" forms entrepreneurship education approaches. Accordingly, one calls it by naming, either about or for entrepreneurship education; however, if both forms of education are going to be implemented meaningfully, the similarity of the learning outcome overwhelms their differences and disparities. Thus, teaching entrepreneurship courses in higher education can be more effective either through the "for" or the hybrid of "about" and "for" entrepreneurship.

2.4.3. Entrepreneurial teaching models in higher education

Higher education entrepreneurial teaching and learning, as many researched and reported, lack theory-driven frameworks for assessing the impacts of different intervention strategies (Baptista & Naia, 2015; Fayolle & Gailly, 2008; Krueger, 2015; Lackeus, 2015). Having these research works on the gap, this section of the review will show how the supply-demand-competence model of teaching entrepreneurship in higher education could qualify.

In the year 1984, Jamieson developed the three forms of entrepreneurship education which is helpful for our present conceptual understanding and curriculum development of entrepreneurship education for various groups vis-à-vis different learning objectives and contents. On the other hand, four years earlier from Jameson's work, in 1980, the French socio-educationalist Reboul (1999/1980) had introduced pedagogical frameworks on how entrepreneurial learning occurs. These archetypes are supply, demand, and competence teaching models for tertiary education levels. Later on, this model came to the academic scene as an entrepreneurship-teaching model and research discourse (Bécharde & Grégoire, 2005). This framework has a full-fledged representation of the ontological and operational level of teaching learning. Within the operational level, the teaching didactics, and within the ontological representation, the philosophical and learning theory-based conceptions of teaching, learning, the role of teachers and students, the interaction of context with other ontological levels has been included (Kozlinska, 2016).

According to Béchar and Grégoire (2005) a teaching-learning method, employed to deliver the content of an entrepreneurship course or program is the main factor that differentiates teaching models in higher education. To say an entrepreneurship course content and its delivery method is impactful, the didactic interaction (objective-content-learners), the pedagogic (teaching-learning methods and facilitating tools), and the interplay of contextual interactions with the pedagogy and didactics should be meaningfully tested on an operational level (Fayolle & Gailly 2008; Béchar & Grégoire 2007). Hence, this representation of teaching entrepreneurship in higher education (supply-demand-competence) has a lot to do with this study, which aimed at testing the impact of two of the pedagogical (traditional and experiential learning methods) on EI.

2.4.3.1. The supply model

Governments have their developmental agendas and policy directions. Therefore, either in the issue of entrepreneurship (economy, employment, and market) or other sectors, any government clarifies its expectations through policies. In developing countries, like Ethiopia, market, employment, and innovation are dominantly concerns of a government. Hence, the situation for entrepreneurship cannot be a different scenario. These days entrepreneurship education, training and practices are primarily advocated by government, followed by international development agencies.

The supply model of teaching entrepreneurship in higher education is directly related to the form of entrepreneurship education, “*about.*” It is typically a teaching-oriented approach, focused on knowledge transmission, reproduction, in which students are viewed as knowledge receivers, treated as “knowledge containers” (Braun, 2012), and sometimes called a government imposing and top-down approach (Philpott et al., 2011).

The teaching process in this model aims at providing knowledge and nature of entrepreneurship through the presentation of theories and practices for enhancing the critical thinking of learners, usually unentertaining for entrepreneurship learners. Lectures, seminars, and term paper presentations are the main learning activities through which learners obtain new insights about entrepreneurship.

The supply-teaching model commonly employed in traditional universities. In such universities, the concern of teaching is meeting the academic schedule, with no budgetary concerns for course delivery practices. Teaching in large class sizes, lecturing in halls for similar batch students is an example of the supply teaching model. In such types of models

course, facilitators could not have any business experience; they could be lecturers or assistant lecturers. Though these teachers are inexperienced and ordinary, they have absolute authority in driving the teaching-learning process, determining what students should do and not to do, how to learn, how to be assessed. In the supply model, students are required to listen, read and process and retrieve large amounts of information provided from and by their teachers, recommended and mandatory readings. The course content is predefined and students' learning is content-driven (Kozlinska, 2016).

The description provided above indicates that behaviorism and traditional cognitivism theoretical perspectives frame the philosophical and theoretical supply model of teaching in higher education. The ways of instructional processes framed and organized, the extended freedom of the teacher, the ways the course content is fixed, and the passive and receptive nature of learners, are particularly extracted from the tradition of behaviorism. Philosophically, the predefined nature of contents of the supply model can characterize it as positivist, which considers knowledge as an independent entity, and free from the subjective personal experience of the learner (discussed under empiricism of this chapter).

On the other hand, the framework of the formal instruction depicted in the supply model, in which students are encouraged and discouraged based on their right and wrong responses provided for the contents determined by the teacher, is typified by Skinner's response based on conditioning and Thorndike's law of effect in learning. The dominant learning principle in behaviorism, that is, reward and punishment; for a higher grade or lower, for pleasant class participation and task engagement or misbehavior and laziness in task handling, are also undertakings of the supply teaching model of entrepreneurship in higher education.

In the supply model, framed by cognitivism, the issues of active listening, reading, storing, and processing large amounts of information during instruction, are key responsibilities of learners for effective learning. Learning skills; How to remember, organize, elaborate, and retrieve stored information for later use, are key contributions of cognitivist theories for the supply model of teaching entrepreneurship in higher education (Hoy et al. 2013; Mueller 2012; Sackney & Mergel, 2007).

2.4.3.2. *The demand model*

The issue of social employment is one of the prominent factors behind the emergence and development of entrepreneurship education in many countries, particularly

in developing countries (Harrington & Maysami, 2015). For instance, the expansion in tertiary education since 1994, compared with the 0.6% of 1974, had led to the gross enrolment ratio in tertiary education of 8.1 % in 2014 (UNESCO, 2014). This significant increment of graduate ratio is expected to be doubled or much higher today than it has been recorded in 2014. As a result, graduating students are confronted with employment pressure. A course on entrepreneurship provided during their study time is a provision to those students who have an interest and potential to launch their business. Of course, various studies have shown that such students are likely to implement their vision of owning an enterprise (Bae et al., 2014).

Joblessness is not only a concern of graduates or college dropout students, it is also a serious issue of youngsters who do not join higher education, migrants, and military subtrahends. For better understanding of how to make a business and create a venture, entrepreneurship education or training has been demanded by these groups.

Today's economies are knowledge-driven (Kozlinska, 2011). Once the economy of countries becomes innovation dependent and takes innovation as an instrument to win the competition in the market, knowledge-intensive enterprises will only maintain the disequilibrium and exploit opportunities. Therefore, enterprise owners, managers, and nascent entrepreneurs could recognize the relevance of entrepreneurial learning, and walk towards entrepreneurial training providing institutes. The development of the demand (it is also possible to say the competence model too) based model of teaching entrepreneurship in higher education rests on those unmet needs of the society.

The demand teaching model of entrepreneurship courses or programs in higher education is built on the central theme of social cognitive (e.g., Bandura) and constructivism (endogenous, exogenous, and human constructivism) learning theories and the view of pragmatist philosophers. In this model learners' action, choice, interest, and experience are governing and guiding principles of the teaching-learning process. In this model of pedagogy, the center of the scene, the voice to be heard, the decision to be endorsed, the demand to be met, and the choice to be respected – is students, not course teachers'. Therefore, the role of course facilitators and universities is a creation of an enabling conducive environment (inside and outside the classroom) for the development of entrepreneurial behavior, and self-discovery among learners.

For and *through* or the hybrid of the two forms of entrepreneurship education can be aligned with the teaching method of demand model. Therefore, the model can be aligned with content and process-driven curriculum and could be also appropriate for the development of soft and non-cognitive learning outcomes. Béchard and Grégoire, (2005) maintained that the demand model is ideal for arousing the motivation and aspiration of learners to become an entrepreneur as a career, to instill a sense of initiative, to cultivate positive attitude, knowledge, skill, and affect, through the reflection of their own learning experiences.

The demand model gives learners an opportunity of sharing experiences, encouraged exploration and innovation, discussions, and experimentations through trips, simulations, reflections, and contests. In this model, Individualized and team works are equally treated under principles of learning that emerged from individual and social constructivism, situated and experiential learning (Kozlinska, 2016; Mueller 2012).

Learning contents and delivery methods are co-negotiated and consensual between course teachers and learners. Contrary to the supply model, in the demand model, learners have a knowledge and a default implicit or explicit agreement of what to learn, and this gives teachers to have the necessary information to observe the progress of learners whether new kind of behavioral or cognitive change is occurring (Sackney & Mergel 2007; Béchard & Grégoire 2005).

On the side of the course facilitator, this model has another catchy feature, teachers are required to have lived practical experience in business or entrepreneurship, professional participation in entrepreneurship education matters. These experiences are assets for teachers for many valid reasons, to share reliable real-life experience, to be a good role model, to provide up-to-date expert knowledge and skill for students.

Finally, the demand model sets standards that usually emanate from policy and legal documents, to ensure the quality of learning outcomes, participation of stakeholders (inside and outside universities), integration of different departments and stakeholders, and financing of an entrepreneurship education process.

2.4.3.3. *The competence model*

The demand and competence models are more or less similar. The only difference can be the degree of emphasis, particularly, the latter model aims at facilitating entrepreneurial competencies for venture creation among learners, whereas, the demand model includes the entrepreneurial soft skills, attitudes, and entrepreneurial behaviors as learning outcomes of entrepreneurship courses. While the demand model uses both theoretical and practical teaching methods, particularly, the competence teaching model depends on training methods of coaching, apprenticeship, and mentoring. In this model entrepreneurship by itself can be considered as a method of training (as a weaver, potter, and smith train their children and /or youngsters). The education *through* entrepreneurship and partly, the *for* entrepreneurship forms of teaching entrepreneurship in higher education are concordant with these models of pedagogy (Müller & Diensberg 2011; Löbler 2006)

The philosophical and theoretical frameworks of the competence and demand model are also one family. Social constructivism (specifically, situated learning, activity theory, and experiential learning methodology) is so appropriate and coincides with the competence model of teaching. During the learning process, support from elderly and or significant others, self-directedness and unreserved bidirectional interaction with a community of learners in handling tasks, meaningful and continual observation, experimentation (doing things in a real-life situation), and reflection (as provided by Kolb, 1984) on experiences are at the center of the competence teaching model.

In summary, the best fitting effective model rests on the course objective, content knowledge of the teacher, course facilitation skill of teachers, learner readiness, and engagement in the learning processes. In practice, teaching elements or theoretical views of one model could be existent in another model. This is not a surprise; they are complementing each other through the expository arrangements of hybrid models. Accordingly, in addition to the three pure teaching models, supply-demand, and demand-competence teaching models can be again formed under their conveniences for practices and based on theories of learning principles.

Accordingly, the dichotomy, traditional (lecturing, listening, reading assignments, public presentation attendance, group and individual project works, debates) and experiential (project works, business creation exercises in campuses, contests, exhibition organization, innovation prototype presentation, feasibility study, business plan writing,

and others) teaching and learning methods are a direct fit to those described models of teaching (Hynes et al. 2011; Lee & Hsieh, 2010). As the description of each model depicts, theory and understanding focus courses are typically supply type and affiliated with the traditional learning method (e.g. Piperopoulos & Dimov 2014). However, the demand and demand-competence hybrid models are fitting to the experiential learning methodology.

2.4.4. Experiential entrepreneurial learning

As Drucker (1985; pp.) stated, “Entrepreneurship is neither a science nor an art, it is a practice.” The core issue underlined in Drucker’s statement is action; an evolving, emerging, dynamic, and continual practicing of entrepreneurial behaviors through time makes or creates entrepreneurs (Heinonen et al., 2011; Sarasvathy & Venkataraman; 2011). Therefore, in this regard and senses, entrepreneurial learning is processes of experience-action-reflection processes that evolve overtime through intra and inter relationship of a person.

Researchers in entrepreneurship education consider the experiential learning methods as effective and appropriate (e.g., Mandel & Noyes, 2016). This method of learning can be viewed as how humans are learning to live (e.g., learning to talk, to walk, to socialize ourselves, to fulfill our personal basic needs) through involvements of dominant aspects of development, i.e., mental, social, and physical processes. These processes and involvements of various forms of development of learners are activated through learning activities; cooperation, participation, sharing, negotiation, exploration, etc. in these highly interactive and dialectical transformative relationships of the learner and the system, knowledge, skill, and positive attitude towards entrepreneurship is believed to be created. These processes of learning are guided through the core principle of experiential learning, experimentation, and reflection on experiences (Kolb, 1984). This learning process is different from that of traditional learning, which treats learners as passive and receptive beings, towards embedding action, problems, and projects in the learning process (Jones & English, 2004).

Research in entrepreneurial learning has emerged across different views of learning. Particularly, experiential learning (Dimov, 2007; Lévesque et al., 2009; Politis & Gabrielsson, 2009), and organizational learning perspectives are prominent. The tradition of research in entrepreneurial learning is largely drawn from the work of David Kolb and his colleagues (e.g., Kolb, 1984; Kolb & Kolb 2005; Kolb & Kolb, 2000). The second strand or

source of entrepreneurial learning, i.e., organizational learning is accumulative of research works from single- and double-loop learning (Argyris & Schön, 1978), exploratory and exploitative learning (March, 1991), and higher-level or lower-level learning (Fiol & Lyles, 1985) are the few examples among the broader lists and contributions. However, though these research works have a definitive significance for the theory and practice of entrepreneurial learning, both the experiential and organizational theories lack epistemological and ontological rigor. Regardless of the presence of those various forms of approaches to entrepreneurship education (e.g., Hytti, 2001), it is not evident what type of learning strategies/methods have improved entrepreneurial learning among higher education students.

Learning entrepreneurship through immersion in entrepreneurial activities is considered and related to experiential learning. The immersion process aligns with practical activities and infusion of learners' now and then experiences (Kolb & Kolb, 2005). The purpose of Kolb's (1984) learning cycle is, indeed, to guide the learning activities. Within the wheel-like model of Kolb's experiential learning cycle, reflection on experiences, filtering and forming new insights from that experience, followed by testing and refining the newly emerged perspectives through further action-reflection (experiences).

Entrepreneurs are special learners. Their adaptive and fast learning behavior reported by many. In the middle of the argument whether personality determines being an entrepreneur or not, Gartner (1988), argued that behavior is the key issue, not personality traits. This position also supported by the renowned psychologist and motivation theorist David McClelland. Thus, researchers and educators in entrepreneurship have been questioning what sort of competencies and behaviors do entrepreneurs have and how do they behave. This view has opened a new door of thinking about how entrepreneurial learning emerges and shifts the academic discourse from personality traits to the processes dependent and experience-oriented entrepreneurial behavior and competence construction.

Though he was trait based in his earlier works, McClelland's (1985) characterization of entrepreneurs as achievement-oriented, risk-taker, goal setter, activity initiator, feedback seeker, and tolerant for ambiguity and failure; make them different from those who are not entrepreneurs (Baron 2008; Krueger, 2007). Such behaviors and competencies can flourish through experiencing success, failure, frustration, and threat, and by reflection on those experiences (Minniti & Bygrave, 2001).

As acting entrepreneurs learn from the day-to-day difficulties of their experiences, students could also learn gaps and conflicts of entrepreneurial issues through educational programs, based on their understanding and interests (Krueger, 2007). Students can acquire several relevant issues, like opportunity identification, observe firms, listen to the success and failure stories of model entrepreneurs, and evaluate academic works related to entrepreneurs' behavior. However, such "about" forms of entrepreneurship education and supply or supply-demand model of teaching-oriented teaching-learning alignments could not guarantee a deep and transformed learning experience for students. Through such surface learning practices, entrepreneurial behaviors and competencies cannot be achieved. Therefore, employing teaching models, for instance, demand, demand-competence, and competence under "for and through" forms of entrepreneurship education, learners can test the entrepreneurial reality on the ground and lead to a deeper and practical understanding of entrepreneurship and development of entrepreneurial behaviors and competencies.

2.4.5. Reflection of the best-fit teaching-learning models of entrepreneurship

The teaching method of any entrepreneurship education is dependent on the objective of the course or program. According to his extensive literature review (Mwasalwiba, 2010), most of the researchers included in his review classified teaching methods as traditional (lecturing or the conventional teaching method) and innovative (action-oriented) methods. In the same vein with Mwasalwiba's classification, this study also uses the classification "traditional and innovative/Experiential" teaching methods for entrepreneurial learning methods as "traditional Versus Experiential" entrepreneurial learning methods.

In the traditional learning method of entrepreneurial learning, teachers are supposed to deliver theoretical and conceptual knowledge on enterprises and planning issues in business, motivate students to explore business ideas, and provide some projects that can materialize the content of the course (Frank et al., 2010). On the other hand, students are required to understand strategies of business development, familiarize themselves with business planning development, identify marketing strategies and examine feasible methods of business ideas within their business planning practices (Venesaar, 2008).

Though entrepreneurial learning is demanding of creativity of designing course delivery through here and now experiences of students, unreserved spontaneous reaction

and their action, in the traditional teaching-learning the learning experiences of students, including their progress is controlled and validated by the course teacher (Hörnqvist & Leffler, 2013; Liñán et al., 2011). As many researchers in the area argue, the traditional learning method is unproductive in the development of the entrepreneurial skill of learners. Accordingly, a theory-driven, which rests upon the nature of entrepreneurship education or course learning method is required to be developed (Bapista & Naia, 2015; Bechard & Gregoire, 2005; Fayolle & Gailly, 2008; Fretschner & Weber, 2013; Lackeus; Martin et al., 2015).

Researchers in entrepreneurship education argued that students can only develop entrepreneurial competencies through learning entrepreneurial activities in a form of social constructivist active learning paradigm, equivalent with an experiential learning method, which is participatory, experience granting, action-oriented, and immersion learning methods (Lackeus & Williams-Middleton, 2015; Mueller et al., 2015).

By depending on the previous discussions on the nature of entrepreneurship education and, compared with the three learning paradigms, the theoretical framework, principles, and practices of constructivism, particularly, experiential learning methodology is more appropriate for entrepreneurial learning than behavioral and radical/traditional cognitivist learning perspectives. However, this understanding should be interpreted with caution. Let alone the more dynamic and the unpredictable social, economic, and technological change affected entrepreneurial learning, no self-sufficient and one seized or readymade learning perspective for any learning issues. As a theoretical framework of teaching-learning practices, behaviorism and traditional cognitivism is considered as a traditional, teacher-dominated (one way), learning method, which is usually practiced in higher education through exerting strict management over classroom learning (Robinson et al., 2016).

Followed by the strong and diversified need of learners and the demand of the dynamic socio-economic change of the context, today, there is a switch from pedagogy to andragogy and heutagogy (responsibility is shared, the lesson is dependent on the interest of learners and students are self-determined to their learning goals and methods), (Jones et al., 2014; Penaluna & Penaluna, 2015). In the latter two types of pedagogies, students take part in the course design process, delivery methods selection, and assessment strategies of the entrepreneurial learning activities, and based on their previous experience and readiness for

taking responsibility for their learning, they are autonomous and self-determined (Forrest & Peterson, 2006; Sagar, 2015). This shift provides vigor for learners to have an enhanced self-confidence in taking risks and managing ambiguities (Morselli, 2018).

These days, heutagogy is becoming acceptable and influential in higher education (Bhojrub *et al.*, 2010). It is different from andragogy in that teachers are course facilitators than learning directors (Ashton & Newman, 2006). Its primary focus is on awakening and developing new capabilities, e.g., metacognitive skills, which in turn leads to the emergence of a high degree of personal agency in the learner (Bhojrub *et al.*, 2010).

Previous discussions of this section show that entrepreneurial learning is experiential by its very nature. The Demand, demand-competence, and competence models have been found the most suitable and appropriate model of entrepreneurship education or entrepreneurial learning in higher education. However, no reason and strong empirical and practical research recommendations as the supply and supply-demand hybrid models are ineffective for entrepreneurial learning.

As the discussions of educational psychology learning theories and their application in various forms of entrepreneurship education show, the interplay of endogenous and exogenous constructivism and human constructivism (particularly experiential learning methodology) with the demand, competence, and demand-competence hybrid models seem more effective for experienced or at least for nascent entrepreneurs than to complete novices (Hoy *et al.* 2013). The learning principles shown in those theories and learning models, e.g., self-responsibility for one's learning, previous experience in entrepreneurship, complete readiness, and motivation for learning, are quite uneasy for applying among novice entrepreneurship learners.

On the other hand, the latter two teaching-learning models of entrepreneurship courses (demand-competence and competence) may not be appropriate for students across all cultures and demographics. Though requires a definitive empirical finding, considering my own lived experience as evidence, For instance, learners in individualized culture could be better in self-learning and task initiative than students come from collective culture, e.g., Ethiopia, if this couldn't happen, at least, there would be a significant difference between the two. On the other hand, a country, like Ethiopia, where most of the students in higher education are misplaced (for economic and socio-political reasons) in study fields, could also impede the applicability of the said learning models. It is also fair to mention students'

experience of learning by experiential, problem-based, or immersion and any action-oriented learning methods. Learners with fewer experiences of such learning methods might be better beneficiaries than those who have not at all. Hence, no matter the teaching-learning model's fitness with entrepreneurial learning and contents, unless learners' existent behavior or learning characteristics are identified, following neither the demand-competence nor the competence models resulted in the stated objective of the curriculum. This concern has underlined by Fayolle & Gailly, (2008), who observed that action-oriented learning is not always well fitting to some pedagogical situations.

The dynamics of entrepreneurial learning and models of teaching in a room where learners are naïve for entrepreneurship could be complicated. The volume of the intervention, allocated resources, learners' educational level could affect teachers' choice of teaching model, (experiential vs. traditional), and students' learning behavior at all. Teachers, who are junior in the experience of teaching and unfamiliar with entrepreneurship in practice, could prefer the supply and supply-demand model intervention. This could also be true for students' learning preferences. Contrarily, teachers who have a lived experience of entrepreneurship, students with prior experience of entrepreneurship and older enough in age, could prefer the demand, demand-competence, and competence models of teaching and learning. This preference, inter-alia, would have a direct positive impact on the development of entrepreneurial behavior, competencies, knowledge, skill, and a positive effect.

2.5. Entrepreneurial Learning and its Impact on Entrepreneurial Intentions

This section is the culmination of the chapter. Earlier discussions synthesized and developed the eclectic framework of evaluating the impact of entrepreneurial learning. Based on the contribution of several pieces of research on the impact of entrepreneurship education, this study is based on entrepreneurial intention models and learning outcomes, particularly, drawn on Ajzens's (1985) TPB and the educational outcome model (Bloom's Taxonomy) adapted model of Fisher et al., (2008).

The discussion begins by describing relevant issues of measuring the impacts of entrepreneurship education. The discussion of the section saturates by providing the integrative framework of teaching-learning entrepreneurship and its impact and presenting

the measured variables of this study, entrepreneurial intention and its antecedents, entrepreneurial intention implementation cues, entrepreneurial self-concept, and entrepreneurial achievement motivation.

2.5.1. Impacts of entrepreneurship education

Entrepreneurship education has a positive impact on various learning outcomes of students (Athayde, 2009; Badri & Hachicha, 2019;; Bae et al., 2014; Cruz, Escudero, Barahona, & Leitao, 2009; Singh et al., 2017; Tiwari et al., 2017). This positive impact is also supported by many meta-analyses of research works by numerous researchers (e.g., Dickson et al., 2008; Mwasalwiba, 2010; & Pittaway et al., 2007). However, such findings are not providing similar conclusions and recommendations about their respective findings. According to Lorz, (2011) methodological inconsistencies, differences of independent variable treatments, and the issue of sampling reported as factors for variances of the impacts of entrepreneurship education on entrepreneurial intentions and related learning outcomes.

In the methodological considerations of variances, impacts of entrepreneurial education are reported from focus only post-test measures (e.g., Menzies et al., 2002; Menzies & Paradi, 2003; Noel, 2001), lack of control group, and a smaller number of participants. Using Post-test measures as a research method may show an impact of significant difference between study groups in an entrepreneurship course program. However, since such methods lack randomness and control group in the selection of participants, the representation and finding most likely could not be representative and conclusive. As Lorz (2011) reported, among his meta-analysis of 41 research papers, negative results reported among the post-test and one-group studies.

On the other hand, the time of measuring the impact of the intervention mentioned as another source of variance of studies in entrepreneurship education. The length of the period course or training delivery considered as a moderating factor between EE and entrepreneurial learning outcomes, for instance, for attitude, perception, and intention (Fraser, 2009; Komulainen & Løvmo, 2014). For some researchers, for instance, Fayole, (2006) measured a one-day intervention impact of an entrepreneurship-training program, Kolvereid and Moen (1997), measured the impact of entrepreneurship education program for eight years, Menzies et al. (2002) for 15 years. As mentioned under the measurement section

of chapter three, some researchers measure the impact of entrepreneurship education and training interventions spanned from month to year. Such variations of time treatment affected the convergence of previous research findings.

Commonly, the treatment (independent) variable tested within the impact studies were, entrepreneurship education programs or course impact on certain aspects of learning outcomes. For instance, among others, the impact of entrepreneurship training programs in vocational centers (Olomi et al., 2009), the impact of entrepreneurship courses (Gallwoy et al., 2005), the impact of duration of entrepreneurship courses (Lorz, 2011), impact of entrepreneurship education components (Tung, 2011), and the impact of entrepreneurship education teaching methods (Kozlinska, 2016), can be mentioned. The nature of the type of courses (compulsory or elective) or programs level (high school, vocational, graduate or postgraduate), method (traditional or experiential) of their delivery and are the leading factors of the divergence or the negative impact reports of entrepreneurship education (Oosterbeek et al., 2010). For instance, among the negative impact reports, (Oosterbeek et al., 2010)'s finding was obtained from the compulsory course. Therefore, during thinking or researching the impact of entrepreneurship education or entrepreneurial learning, these factors are key issues to be addressed.

2.5.2. Entrepreneurial learning outcomes

According to the European Qualifications Framework (EQF), learning outcomes are learners' knowing and deep understanding of things with an ability to accomplish learned processes (Helgoy & Homme, 2016). Researchers believe measurable learning outcomes can be achieved through entrepreneurship education (Martinez et al., 2010; Müller & Diensberg, 2011). Such learning outcomes can be educational and socio-economic. This discussion only maintains the educational or learning outcomes.

The triadic concepts of Bloom, (1956) educational objectives can be mentioned as a source of entrepreneurial learning outcome frameworks for many researchers in the area (Heder et al., 2011). Accordingly, Knowledge (as cognitive), attitude (as affective), and skill (as psychomotor) are mother classifications of learning outcomes across various frameworks; for instance learning outcomes related to the business situation and interpersonal changes (Fisher et al., 2008), behaviors, attributes and skills (Gibb, 2005), attitudes, capabilities, and skills (Hytti, 2002) are the few frameworks.

During the impact testing processes, this dissertation maintains a holistic framework of measuring the impact of entrepreneurial learning methods (experiential vs. traditional) on entrepreneurial intentions and its antecedents, Fisher et al., (2008) are learning outcomes, i.e., business-specific knowledge, skill, and attitude.

The two pioneering Educational and psychological researchers/educators who set the ground for modeling general education and training objectives and outcomes are Bloom (195), general education objectives, and Kraiger et al., (1993) general training objectives. Bloom's hierarchical and ascending in order, domains of learning are: cognitive (dealing with knowledge, comprehension, analysis, synthesis, and evaluation), affective (embeds attitudinal, emotional, and life skill), and psycho-motor (changes related to skill-related behavior developments), (Churches, 2008).

Followed by the emergence of the cognitive view of learning in the 1950s, and the shift from behaviorism to cognitivism/constructivism, in the 1970s Bloom's classification of learning objectives was overlooked by researchers from the camp of cognitive/constructivism. Accordingly, Kraiger et al. (1993) brought a three-dimensional learning objective construct for general education and training to academia.

Kraiger et al. (1993) suggested a new model of classifications of objectives for general education and training framed by cognitive/constructivist view of learning: Declarative knowledge, mental models and meta-cognition, as cognitive; composition, proceduralization, and automatization, as a skill; and, attitude and motivation as an affective domain of learning outcomes (for further descriptions and classifications of the two learning objectives see Table 1). Irrespective of the epistemological and ontological difference of views on what is learning and how it emerges, the similarity of the models overwhelmed their difference. While Bloom's model prioritizes the knowledge domain, followed by the affective and psychomotor learning outcomes, Kraiger started his model from cognitive (knowledge) learning outcomes to skill-related changes (which positioned third in Bloom's classification) and ends with effect (attitude) related learning outcomes.

The socio-economic significance of entrepreneurship presented elsewhere in this chapter and the introduction section. Accordingly, to narrow the gap between years spent on education and the work world and enhance the culture of entrepreneurialism, governments of countries adopt various policies, directives, and legal documents. For instance, the Ethiopian Ministry of Education approved two compulsory entrepreneurship courses for all

undergraduate students (MoE, 2018). Though this effort can be appreciated as a good beginning, decades ago, the European Framework for Key Competences for Lifelong Learning maintained entrepreneurship as one of the eight key basic components as a foundation to an overall development of learners. Hence, this dissertation aimed at how learning an entrepreneurship through competing teaching-learning methods affect the entrepreneurial mind setup or intention of learners to start a business after their graduation. Accordingly, to measure those learning outcomes, the educational objective model of Bloom (1956) and Kraiger (1993) adapted to entrepreneurship (e.g., EC, 2012) and Fisher et al. (2008)'s model are the ideal frameworks.

The business-specific and interpersonal learning outcome model of Fisher et al. (2008) also prioritizes learning outcomes (see Table 1) inline of Kraiger (1993); i.e., knowledge to skill to attitude. Such prioritization of learning outcomes has a support from the European Competence Framework (EC, 2013) and Heder et al. (2011). Based on this understanding, learning outcomes, e.g., knowledge of basics of accounting, finance, technology, marketing, fitness to entrepreneurship are identified as a cognitive related learning outcome. On the other hand, ability to conduct market research, identifying opportunities, writing a business plan, obtaining credit/loan, selection of business partner, persuasion, working with others, goal setting, and coping with uncertainty are categorized under skill related learning outcome. Finally, entrepreneurial motivation, Passion for entrepreneurship, entrepreneurial self-efficacy, commitment for one's business or venture, self-confidence, entrepreneurial self-concept, and need for achievement grouped within the affective related learning outcome. This archetype or framework

Based on Fisher et al. (2008) the classification of learning outcomes of entrepreneurship education shown in Table 1 in addition to the content-driven business-specific prescribed outcomes, there are more learning outcomes supported by psychological learning theories. For instance, self-efficacy (Bandura, 1994), which is learners' perceived belief for executing certain tasks (e.g. Students' perceived capability of establishing a venture after graduation) is reported as an important learning outcome as content-driven outcomes. Similarly, variables indicated under TPB (Ajzen, 1985), e.g., entrepreneurial attitude, which is an antecedent of entrepreneurial intention is also reported as relevant learning outcomes as content-driven learning outcomes of EE.

Table 1
Entrepreneurial learning outcomes

	Business-specific Contents	Interpersonal Contents
Cognitive	Understanding Basics of accounting, finance, technology, marketing, risk, opportunities, and entrepreneurial behaviors	Knowledge about how to work with others and understanding personal fits
Skill	Making marketing feasibility studies, identifying appropriate market locations, products, and services, identifying opportunities, risks and determining the profitability of opportunities, writing a business plan and monitoring, financial booking, obtaining finance, saving, goal setting, risk analysis, etc.	Persuasion and networking, convincing others for obtaining their support, listening, Listening, sharing goals for others, motivating others, cooperating with others, negotiating with customers, resolving the conflicting business issues in a win-win way, obtaining feedback from customers and workers, pitches in workers when needed, adapting new situation and coping from uncertainties
Affective	Entrepreneurial attitude and passion to be an entrepreneur, intention, entrepreneurial self-efficacy and perceived behavioral control, commitment to a venture	Independence and self-confidence, self-concept, motivation for entrepreneurship

Fisher et al., (2008)

The attitudinal and personal agency related individual behaviors indicated in the entrepreneurship domain are the closer or proximal learning outcomes of affective and cognitive domains of enterprising actors (Bird & Schjoedt, 2009)

Entrepreneurial intention (EI), inter-alia, is one of the best effective variables which can model the learning outcome or impact of entrepreneurial education or learning. Intention defined as "the cognitive state temporarily and causally before action" Kruger, (2009) is adapted to entrepreneurship based on theories from social psychology, i.e., theory of planned behavior (Ajzen, 1991). This model also expanded by EI researchers, for example, the Entrepreneurial Event Model (Shapero & Sokol, 1982) and Entrepreneurial Intention Model (Bird, 1988) are the other two prominent models applied to model behavioral intention. Particularly, the affective related learning outcomes of EE, i.e., EI and subsequent behaviors obtained an empirical support of measurability through those models (Krueger et al. 2000).

Therefore, according to the learning outcome framework provided by Fisher et al., the affective related learning outcomes included in this research, for instance; attitude towards being an entrepreneur, intention to create one's venture, entrepreneurial perceived behavioral control, or self-efficacy can be considered as business-specific learning outcomes. In the same domain, entrepreneurial self-concept and entrepreneurial achievement motivation can be considered as interpersonal learning outcomes of the affective domain. However, since entrepreneurial intention implementation cue (EIIC) is a cumulative effect of opportunity identification, partner identification, information seeking, loan seeking, and looking for sources of finance for one's venture after graduation, it is part of the skill domain of the model. According to this model, these variables are higher-order learning outcomes that can affect the future career/entrepreneurial behavior of learners.

2.6. Entrepreneurial Intentions as EE Learning Outcome

According to Conner & Armitage, (1998: pp.1430) intention can be defined as "a person's motivation to make an effort to act upon a conscious plan or decision." Based on the definition, for instance, in the context of the present research, a conscious plan or decision to realize one's venture after graduation can be considered as intention. The theoretical foundation of intention can be associated with Bandura's (1986) social cognitive theory of learning, which prescribes, whereas it has an interactive deterministic nature (Person to Behavior to Environment), a person can influence his actions, which means through the development of various personnel agencies and beliefs (e.g., self-efficacy).

Research works across different disciplines show intentions are robust predictors of actual behavior (Armitage & Conner, 2001; Gelderen et al., 2008). Therefore, a graduating student who decides to become an entrepreneur at least, needs to have a desirable positive attitude towards venture creation. In addition to that, he or she also supposed to develop an appropriate perceived capability for running a business, an actual capability of identifying business opportunities in his/her area, seeks information, write a business plan, marshal resource, and looks into sources of finance. According to researchers in the area, all these processes are highly intentional (Lorz, 2011), and these developments are entrepreneurial learning objectives and expectations to be fulfilled (Fisher et al., 2088). Hence, the learning processes and outcomes can be considered as a good example of planned and intentional behavior (Autio et al., 2001).

EI, therefore, can be redefined as a person's intention to make a thoughtful plan to initiate entrepreneurial activities which lead to the development of a business. Following the social cognitive learning perspective, EI can be also defined as "self-acknowledged conviction by a person that he intends to set up a new business venture and consciously plan to do so at some point in the future" (Thompson, 2009: pp.676). As Ajzen (1991) states, strong intentions, particularly, when the behavior cannot be achieved or observed simultaneously with the eliciting cause or, "involves unpredictable time lag" are higher predictors of corresponding behaviors. Therefore, strong EI and "its implementation cues" can be taken as a good predictor of realizing a venture (Fayolle et al., 2006; Souitaris et al., 2007).

Hence, irrespective of the obvious differences, for measuring the impact of entrepreneurship education on students' intention to create a venture, the intention model, particularly, TPB identified as robust as an actual behavior. In reality, there is no true scenario that that can ensure venture creation learning outcomes of students before they are leaving their university. Then, measuring their strong intention is the ideal and appropriate strategy. Waiting years to pass and measuring the behavior is not a creative method, and unhelpful for improving the impact process where learning is going on. Methodologically, time taking and longer period data are prone to risks of changes and complications of contexts (Hytti & Kuopusjarvi, 2004). Therefore, this section presents the essence of entrepreneurial intention, its antecedents, and theoretical frameworks that model the testing process of entrepreneurial intention.

2.6.1. Theory of planned behavior (TPB)

For social and cognitive psychologists humans are conscious beings. Most of their action is deliberately chosen with various forms of underlined beliefs. Therefore, behavior is a result of an informed and conscious decision to behave in a certain manner. That is why intention is considered as important as the consequent action (e.g., in criminal court cases).

In entrepreneurship education and its learning outcome, Theory of Planned Behavior (TPB) is frequently mentioned by researchers and educators as a valid model of describing the relationship between EE and corresponding learning outcomes (e.g., Fayolle et al., 2006; Gelderen et al., 2008; Goje, 2017; Lorz, 2011; Lüthje & Franke, 2003; Müller, 2008; Seth, 2020; Souitaris et al., 2007; Tung, 2011). The theory of reasoned action,

developed by Fishbein (1967), has been considered as the motherboard of TPB (Theory of Planned Behavior). According to the theory of reasoned action, before an actual engagement, people consider and evaluate the consequence of their activities ahead of time and situation. Thinking to act on certain behavior is also affected by or stems from an underlying belief of that behavior or action (Ajzen & Fishbein, 1977).

Therefore, according to the theory of reasoned action, a positive or negative attitude people have (e.g., an attitude towards being an entrepreneur or creating a venture) is dependent on their belief towards that behavior and their evaluation. Therefore, according to this theory, the stronger mediator between the attitude (towards entrepreneurship) and its corresponding behavior (e.g., creating a venture) is intention (deliberate or careful planning to have a business enterprise). On the other hand, a strong intention of being an entrepreneur strongly predicts and facilitates the realization of business creation in the future (Ajzen & Fishbein, 1977). Hence, the theory of reasoned action states, attitude towards a given behavior and subjective normative beliefs (opinions of parents, closer friends, and maybe teachers) are the two determinant factors of intention.

As Ajzen and Fishbein (1980) theorized, people will intend to be engaged or perform a given task or behavior when they do evaluate it favorably and believe/think that doing that behavior has approval or acceptance by significant others. After making a closer observation on the theory of reasoned action, Ajzen (1991) hatched the theory of planned behavior by adding perceived behavioral control as a third and important predictor of intention. According to this improved theory (see Graph 2); attitude, normative belief, and perceived behavioral control are considered as having a greater accuracy of predicting intention.

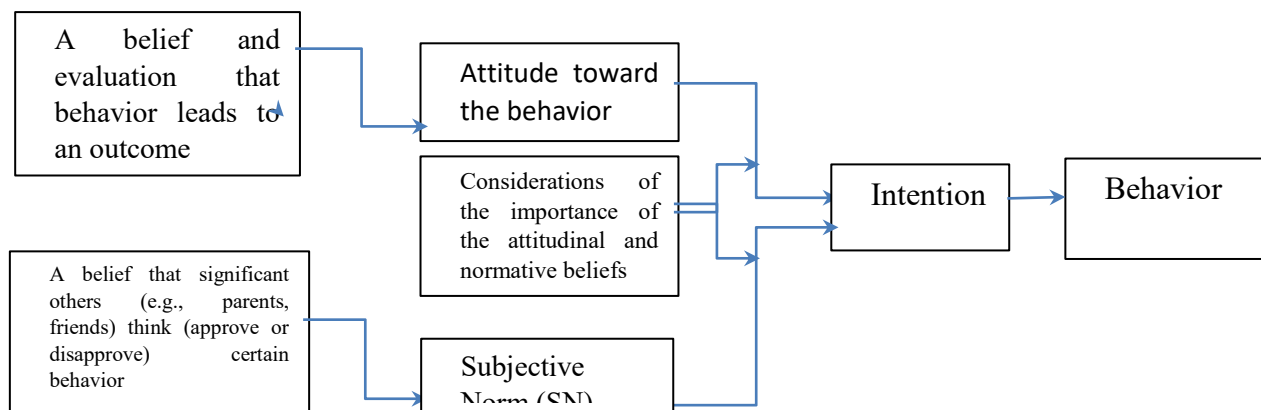


Figure 2: The Theory of Reasoned Action (Ajzen & Fishbein, 1980)

The theory also maintains the combined effect of the newly added variable, perceived behavioral control (PBC) and intention will predict behavior with greater accuracy than the theory of reasoned action could do (Ajzen, 2011b; Ajzen, 1991). Unlike the Theory of Reasoned Action, which only considers behaviors under a person's control; the Theory of Planned Behavior considers volitional control as a variable. By definition, volitional control means a person must have the resources, opportunities, and support available to perform a specific behavior (Ajzen, 1991).

The theory of planned behavior embeds three conceptually independent but interactive predictors of behavioral intention: attitude, perceived behavioral control, and subjective normative belief. Attitude towards a behavior measures the extent to which an individual has a favorable or unfavorable evaluation of the behavior. On the other hand, Perceived behavioral control, which is an equivalent variable with Bandura's (1986) self-efficacy, represents an individual's perceived capability of executing certain tasks (Krueger Jr et al., 2000), or an individual's perceived belief of accomplishing or controlling an outcome of certain behavior or belief of controlling an outcome of certain behavior. The third variable, subjective normative belief, refers to a cultural or social pressure that affects an individual's own choice and leads to the development of belief or evaluation of a person whether significant others approve or disapprove if he will perform a given behavior (Ajzen, 2011b).

Several studies supporting findings of the theory of planned behavior, particularly about entrepreneurial intentions (e.g., Iakovleva et al., 2011; Liñán & Chen, 2009; Liñán et al., 2011; Nabi, et al., 2017, Siu & Lo, 2013). However, there are also reports showing TPB is weak in modeling human behavior. Some argue that human behavior is not always a consciously planned outcome and full of intent, there are many times that inner mental drives and implicit attitudes govern human behavior (Aarts & Dijksterhuis, 2000).

The relationship between attitude and intention, and intention and actual behavior is between 40-60% (Ajzen, 2011b). On the other hand, intention explains 27-40% of the actual behavior. Though this amount of variation explanation is higher enough and significant, still others argue that not as such a huge variation, and require a lot to be done (Ajzen, 2011b; Davidsson, 2004; Fishbein & Ajzen, 2011).

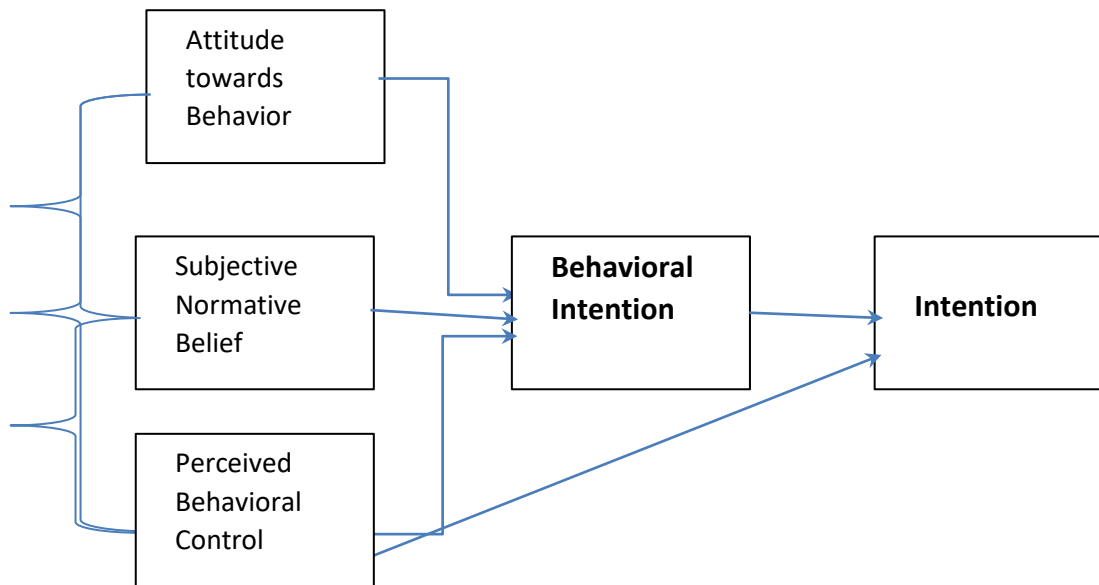


Figure 3: Theory of Planned Behavior (Ajzen, 1991)

2.6.2. Entrepreneurial event model

When developing their model, Shapero & Sokol, (1982) were not thought to measure intentions; researchers have adapted it to entrepreneurial intention models rather (Kermit, 2008). The purpose of the model aimed to describe and explain processes that lead to the happening of an entrepreneurial event, or scenario, which leads to a moment of realizing a new business (Kollmann & Kuckertz, 2006).

According to EEM, every individual tends to prefer his/her current behavior up to some displacing factor (positive pull and negative push) of this behavior. This theory posits that challenge, frustration, or inertia guides human behavior up to facing some critical incidents that could displace the resistant behavior, which might have blinded an individual to seeing some life-changing business opportunities in the past. For example, a freshman course student who could not pass the sophomore class and was forced to leave the university, "goodbye for good," can exploit, or explore business opportunities of his vicinity that he overlooked or unnoticed in the past indeed.

According to Shapero and Sokol (1982), those life pass changes can be negative life experiences such as demotion, bankruptcy, divorce, retirement, or natural and manmade devastating experiences. The negative life experience can be falling between two harrowing things. Such experiences can be graduating from one's university study and sitting without a

job, family death in high school and take-over of business running responsibility, finishing military service, or being free from jail after a year. Finally, life-changing opportunities could also force people to break old habits and shift their life path to business. For instance, family members or friends who are financially strong can present a question of "lets us work together," an owner of a company can provide seed money for hard-working managers. Thus, if that life-changing negative and positive factors triggers thinking of identifying opportunities and alters the perceptual ability to examine feasibility and desirability of a certain business, the individual may act if the credibility of the specified behavior is higher than the alternative (Krueger et al., 2000; Shapero & Sokol, 1982).

Perceived desirability, perceived feasibility, and propensity to act (less popular) are the main concepts of the EEM of Shapero and Sokol (1982). According to them, perceived desirability refers to an individual's perceived evaluation of the value, attractiveness, or desirability of a given behavior or not. Culture, significant others, and work experience can affect the perception of desirability of certain behavior. The concept of perceived desirability is particularly, related to Ajzen's subjective normative belief and to some extent with attitude.

Perceived feasibility, on the other hand, indicates perceived manageability of a certain behavior to oneself, for instance, beginning a business, reducing a weight, regularly visiting patients in a hospital once a month, etc. This concept is similar to Bandura's self-efficacy and Ajzen's perceived behavioral control. Regarding the support of empirical works and the dependence of the model, there are empirical supports for EEM that indicate perceived feasibility and desirability explain nearly half of the variance of entrepreneurial intention (Peterman & Kennedy, 200).

In entrepreneurial learning research, there are various forms of intention models. The variables included and the exogenous factors considered in these models are overlapping and compatible. Almost all of them focus on the pre-entrepreneurial, individual affective proximal or immediate learning outcomes of educational or training intervention programs. All the theories have developed based on attitude and behavior theory (Ajzen, 1991) and the self-efficacy theory of Bandura (1986).

The commonality of the two intention theories (TPB and EEM) is higher than their dissimilar characteristics. The perceived desirability of EEM is almost similar to Ajzen's SNB and attitude, the perceived feasibility of EEM is similar to the PBC of Ajzen and the

self-efficacy of Bandura (Bandura, 2000). Secondly, both models suggest that exogenous factors (e.g., education) can influence intention through attitude and the corresponding perceived beliefs of accomplishing certain tasks (feasibility or PBC), (Fayolle et al., 2006).

The perceived desirability of EEM posited as an endogenous factor of an individual than as a contextual pressure that interferes in the decision-making process of a person. Ajzen's SNB qualifies in this regard. According to Ajzen, perceived desirability of any behavior only gives an accurate picture when it embeds an underlined favorable belief of a person towards that behavior (personal assessment) and person's evaluation of perceived thinking (opinion) of significant others (Ajzen, 2005). Particularly, the later perceived thinking (i.e., opinions of parents, teachers, and friends) are so important for students' career choice decision-making processes. Therefore, TPB is more proper to this study.

2.7. Conceptual Model

This section presents the impact of entrepreneurial learning methods based on TPB. The presentation and discussion begins by preliminary conceptual model, which tests the relationship between entrepreneurship learning methods and TPB and the impact of entrepreneurial learning methods (ELM) of the study. Followed by the preliminary model, the impact of the two learning methods, i.e., Experiential Entrepreneurial Learning (EEL) and Traditional Entrepreneurial learning (TEL) and their relative differences in the TPB presented.

The three newly added variables have different purpose within theory of planned behavior. Entrepreneurial Intention Implementation Cue (EIIC) can serve as indicator for measuring the immediate and true learning outcome of entrepreneurial learning, and can also be a quasi-representative of behavior in TPB. Entrepreneurial Self-concept (ESC) as mediator of perceived behavioral control (PBC) and subjective normative belief (SNB) to EI and EIIC, achievement motivation for entrepreneurship (EAM) also tested in line of the model of TPB, for validating the model and relationships of variables.

2.7.1. The impact of entrepreneurship education on entrepreneurial intentions

The highest contribution of psychology over entrepreneurship research can be acknowledged to EI. EI is also one of the central thematic research issues in entrepreneurship education (e.g., Shinnar et al., 2012). For refreshing the essence of EI

based on discussions on the previous section, it is a strong self-assurance belief of a person intending in order to establish a business venture at some point in the (Thompson, 2009). According to empirical findings in the area, people who have a strong intention of EI are more likely to establish or launch their own business in the (Kautonen et al., 2013). Hence, more knowledge and understanding on EI is becoming relevant for education, training and other related intervention programs (Shane & Venkataraman, 2000).

Based on Ajzen's TPB (1991), intention is the predictor of any behavior. Intention is also predicted by the underlined belief an individual has, attitude (can include motivational factors), and normative beliefs (can include self-concept) and control beliefs (PBC) Exogenous factors, for instance, education is believed to be affect attitude and other predictors of intention and the behavior through mediated by intention, and sometimes through control beliefs (Ajzen, 2005). Accordingly, TPB is modeled a number of studies in order to investigate the impact of EE on EI and entrepreneurial behavior (Ajzen, 2015; Kautonen et al., 2013; Liñan & Chen, 2009; Liñan et al., 2011; Mwasalwiba, 2010).

Though the nature of course, program, length of intervention and purpose of the intervention determines, entrepreneurship is concerned with the extent to which graduated students as an outcome of university education engage in establishing enterprises or ventures creation (Nabi & Holden, 2008; Nabi & Liñan, 2011). In countries where the population size is large and unemployment rate is higher, the issue of entrepreneurship is a core policy agenda. Particularly, for countries like Ethiopia struggling in order to escape from poverty and unleashing the potential of the youth for innovation and self-employment, entrepreneurship education and training programs are highly supported by the government. Accordingly, researchers in the area have been repeatedly called upon to provide theory driven practical advice to policy makers and implementers (Rae et al., 2012).

EE is believed to have a positive impact on EI and other related business management knowledge, skills and attitudes learning outcomes (Morris et al., 2013). As the human capital strand EE field of investigation posits, people who have higher level of knowledge skill and attitude or competences, which are combinations of attitude, knowledge and skill, are better achievers in the market and investment performance outcomes (Unger et al., 2011). Accordingly, researchers want to prove the relationship of those performances and cognitive resources through associating them with proximal individual learning outcomes (e.g., self-efficacy, entrepreneurial implementation cues,

entrepreneurial self-concept) of graduating students. Such proximal, individual, behaviors and cognitive learning outcomes (e.g., entrepreneurial self-efficacy or PBC) are robust predictors of EI (e.g., Schlaegel & Koenig, 2014). In general a high number of research works indicate EE has a positive impact on EE (Fayolle & Gailly, 2009; Fretschner & Weber, 2013). Such studies suggest that EE cultivates student's EI, its antecedents and related psychological entrepreneurial behaviors and competencies. The disagreements or the number of conflicting reports are few about the impact of EE, most researchers in the area agree that EE has a positive impact on EI indeed, the problem rests on what type of EE or what kind of entrepreneurial learning affects EI and its antecedents (e.g., Nabi et al 2017).

The impact of specific entrepreneurship courses on various entrepreneurial learning outcomes have been reported by researchers. For the sake of specifying the conceptual framework of this dissertation, few sample reports presented hereafter.

Tung, (2011) tested the impact of entrepreneurship courses on 411 engineering students at China, Hong Kong. Among the total population, 201 of participants took an entrepreneurship course and the rest 210 treated as a control group. The findings shows, the EI of students attending an entrepreneurship course was significantly higher than the control groups. Clark et al., (1984) also tested the impact of an introductory entrepreneurship course on students' venture creation. After the completion of the course, 80% of the study participants established a venture and 76% of the study participants reported that attending the course helped them to decide in order to enter the venture creation process.

According to Brown (1990), students who attended and completed an entrepreneurship course reported that their entrepreneurial intention has increased which they don't have before the course exposure. Though students are from business administration, Hack et al. (2016) reported that the EI of students attending an entrepreneurship course has increased. In addition to their EI, their self-efficacy and perceived attractiveness were positively affected. Hansemark (1998) has tested whether attending an entrepreneurship course differentiated psychological variables from those of students who have not attended the same course. According to his report, the locus of control and need for achievement of students attending the entrepreneurship course was higher than students assigned as a control group.

In their three days entrepreneurship course intervention, Fayolle et al. (2006a) reports a positive and significant impact on entrepreneurship intention of participants. According to this result, EI has been found dependent on the participant's level of EI before they had been attending the intervention program. Students without any previous experience of entrepreneurship and low level EI have scored higher EI after the intervention. However, those participants' with previous experience of entrepreneurship and higher score of EI during the pre-test, scores lower in EI and significantly negative. This research process was more or less similar to the research methods of Souitaris et al. (2007), Peterman and Kennedy (2003), and Oosterbeek et al. (2010), all of them employed pre-post-test measures and control groups. Both Peterman and Kennedy (2003), Souitaris et al. (2007) reported a similar finding with Fayolle et al., (2006), entrepreneurship courses have a positive impact on perceived desirability and feasibility, and EI.

However, Oosterbeek et al. (2010) reported a surprising finding. The entrepreneurial skills and traits (entrepreneurial personalities, e.g., need for achievement, locus of control, tolerance for ambiguity) of students attended a compulsory entrepreneurship was not as expected and significantly different from the control group participants. Even EI of the treatment group's was negative. This result had also supported by vonGraeveuitz et al. (2010). Latter findings reported that, during the intervention of the entrepreneurship course EI declined. Michelle and Tendai (2016) also reported that the EE course has not directly affected the EI of South African students. A similar finding is also reported from Nowiński et al., (2019), among the four country participants, only from the one (Poland), the impact of EE on EI has been obtained significantly positive. Therefore, In relation to the impact of entrepreneurship courses on EI, the findings are mixed. However, after making a thorough systematic review on EI impact studies from 2004-2016, Nabi, et al. (2017) reports an interesting recommendation, and different pedagogical interventions can be caused behind the mixed results. Hence, this study is going to test how experiential entrepreneurial learning and traditional learning methods affect EI and its antecedents.

Theory of planned behavior is the model employed for measuring main variables of the study. Accordingly, entrepreneurial intention and its antecedents, i.e., attitude towards entrepreneurship, subjective normative belief, and perceived behavioral control are considered main variables subjected to test through the experiential and traditional entrepreneurial teaching and learning methods. On the other hand, this research proposes,

EI is not a sufficient predictor of the actual behavior, rather an actual and practical clue of the intention should be added with in the model of TPB, as an immediate outcome of EI and proximal predictor of the behavior or job creation, followed by intention. This extension is informed and guided by the implementation intention concept of (Oettingen & Gollwitzer, 2010).

Additionally, entrepreneurial self-concept, which is normative and comparative self-evaluation of learners about their entrepreneurial knowledge and skill or competences in comparison others is added as mediator of PBC and intention, Intention and EIIC, and SNB and EI, as direct predictor of EI and EIIC. Both the core variables of TPB and the newly added variables measured through the model TPB. Accordingly, regardless of the type of teaching-learning methods of the present intervention, all variables included within the model have expected to be positively influenced.

2.7.1.1. Entrepreneurial intention (EI)

EI considered as a key predictor of an entrepreneurial action (e.g., Lee, et al., 2011). Intentions are an indicator of the extent to which an individual is motivated to perform certain actions and the energy he is willing to exert energy in order to achieve that intended behavior (Lorti & Castogiovanni, 2015). Ajzen (2005) and in his earlier consecutive research and conceptual works indicates, no best predictor and indicator of the thought of man's tomorrow behavior than his intention today. Others also confirmed the explanatory power of intention to action, either for entrepreneurial behavior or else (Neck & Greene, 2011; Schlaegel & Koenig, 2014; Laguia & Moriano, 2019). On the other hand, and more importantly, Krueger & Brazel (1994) suggests that intentions are highly affected by exogenous factors, like, education, and it is based on the perception that EI is learnable, which can be improved through meaningful learning packages.

2.7.1.2. Entrepreneurial attitude (Eat)

Entrepreneurship courses designed either for awareness creation or skill development. Though the degree of increment varies, entrepreneurship courses aimed at enhancing awareness and skill of students can simultaneously improve the attitude of learners towards entrepreneurship. No entrepreneurship course designed to presentation of philosophical and theoretical essences for learners without considering how that given theory and philosophy contributes development of enterprising thinking and behavior (Pittaway & Cope, 2007).

For instance, though the depth, breadth and pedagogical method varies from course to course, any entrepreneurship course contents embeds relevant entrepreneurial knowledge and skills, for example, planning, financial and marketing literacy, and relevant entrepreneurial skills and knowledge needed to become an entrepreneur. Directly, these contents (through reading or practice-oriented delivery) have significance for attitude formation or development among (Honig, 2004).

Research works in the area show that entrepreneurship courses have a positive impact on students' attitude of self-employment (e.g. Liñán & Chen, 2009; Souitaris et al., 2007; Mueller, 2011; Schlaegel & Koenig, 2014). Therefore, this study also will replicate those previously reported findings and test its relationship with EELM and ETLM.

2.7.1.3. Entrepreneurial subjective normative beliefs (*Esnb*)

Subjective normative belief is a perceived social pressure of significant others to perform or not on some behavior in intention (Solesvik et al., 2013). This influences of parents, teachers, and friends can be against or to an individual's value system, norms and beliefs. Through such dynamic process an entrepreneurial intention of an individual can be derived and shaped (Ajzen, 2001).

As TPB theorized, SNB determined by the perceived expectations of people in the referent group formed by a given person, and the strength of that individual is motivated to comply with that expectation (Fishbein & Ajzen, 1977). Therefore, SNB can be installed through two ways; through the perception/expectations of the referent people change, or the level of compliance motivation of the individual change (Seth, 2020). Learning an entrepreneurship could change students' SNB through two ways again. When people see an individual is learning an entrepreneurship they may begin thinking the learner may be interested and can be effective in his learning, and he should try those acquired skills on business or entrepreneurial activities (e.g., Connelly et al., 2011). Second, when people want to make some decisions in unfamiliar situations or fields, it is natural that they tend to seek advice or consultancy service from those they think are significant and may be worth complying (Fishbein & Ajzen (1977). In relation to this subject, EE or EL can enhance students' familiarity how to run, make or manage a business (Kuratko, 2005). Therefore, when students get more knowledge about entrepreneurship and its practices, they could tend to rely on their own self-talk and self-concept than the opinion of their referent group in order to judge the relevance of being an entrepreneur or not (Fishbein & Ajzen, 1977).

Finally, though people in the referent group think the individual has not to pursue venture creation or self-employment, the individual could have a lower motivation to comply with these expectations and persist on his thoughts and preferences. Irrespective of these views, there are a number of research findings that support the positive impact of EE or learning on students' (e.g., Mueller, 2011). However, though agreed on the importance of EE for SNB, empirical findings are scarce or scant in the area (e.g., Fayolle et al., 2006; Oosterbeek et al., 2010). Therefore, this research in its part will answer how various forms of EE or EL affects SNB of students.

2.7.1.4. Entrepreneurial perceived behavioral control (EPBC)

According to TPB, EPBC refers to perceived capability of mastering tasks required for venture creation through planned intent. This perceived capability or belief of an individual how to perform on entrepreneurial action is dependent on knowledge and skill about entrepreneurial activities and processes (Chen et al., 1998). In relation to the impact of EE on PBC, Sanchez (2013) perceived performance of students on how entrepreneurial action and necessary competences can be enhanced by EE. Other researchers in the area also report that the relationship between PBC and EI is positive (Fayolle & Gailly, 2013; Karimi et al., 2016). As far as exploration of this study, the research report on the impact of teaching or learning methods on PBC is scant. Hence, the differential impact of the EELM over the TETM will be tested on EPBC.

2.7.1.5. Entrepreneurial intention implementation cues (EIIC)

Since the 1990s to present, an abundance of research has been conducted on the impact of EE on entrepreneurial intentions and its antecedents. Most of these studies are employed using intention models of TPB (Ajzen, 2017) and EEM (Shapiro & Sokol, 1982). These models predict an action from intentions. As Schlaegel and Koenig (2014; cited in vanGelderens, et al., 2017) described, though the two models have a recommendation what sort of actions are needed for effective intention, large number of research works are solely focused on predicting and explaining intentions, which lacks a complete picture of the nexus between intention and action (Van Gelderen, et al., 2017). However, the business ventures only established if and only if intention followed by an action. This gap is recently identified and efforts are injected to strengthen empirical investigations of the link between entrepreneurial intentions and following actions (e.g., Kautonen et al. 2015; Reuel Johnmark et al. 2016; VanGelderens et al. 2015). According to reports of these researches, large numbers of research participants' who give a response that they have an intention to

engage in a business creation process do not appear with concrete actions (VanGelderens, et al., 201). Accordingly, these days, in intention or particularly in EI literature, the intention-action gap, that is intention implementation or implementation intention issue is becoming popular and an important issue of research investigation.

According to Gollwitzer & Sheeran (2006; pp.), implementation intentions are “if-then plans that connect good opportunities to act with cognitive or behavioral responses that are effective in accomplishing one’s goals. It bridges the intention to the behavior gap.” Accordingly, it clarifies or specifies the behavior that an individual will execute for attaining his goal of intention and the situation in which the person passes through.

Research in implementation intention is in its infancy. Particularly in entrepreneurial intentions, findings are scant. Surprisingly, as those scant research works indicate, the dynamics of how entrepreneurial goal intentions are transferred to related entrepreneurial actions is complex, and reported that even the association between EI and these actions are lower than reported findings in other fields of studies (Sheeran, 2002).

The concept and theoretical framework of implementation intentions is formed and organized by Gollwitzer and colleagues (e.g., Gollwitzer, 1999; Gollwitzer & Oettingen 2015; Gollwitzer & Sheeran 2006), who limited and required it to be understood as if-then plan of situational and behavioral response cues.

In this study, entrepreneurial intention implementation cue is an outcome of strong entrepreneurial intention. If a strong intention implementation cue observed among learners, it should be evidenced by a strong intention. As vanGelderens, et al., (2017; pp.5) argued, “Implementation intentions are always in the service of goal intention, do not exist in and of themselves.” Hence, Intention implementation cue acts will mediate the impact of EI to engage in business start-up processes.

2.7.1.6. Entrepreneurial self-concept (ESC)

Entrepreneurial self-concept is a new concept, only for the first time in this study it is going to be tested in entrepreneurship context under the intention model of TPB. The concept and its measure are adapted from the academic self-concept construct. Its conceptual development, extension and relationships with entrepreneurial perceived behavioral control (PBC), EI, and EIIC presented.

One of the very important construct in educational and developmental psychology, self-concept is “an individual’s mental self-representations” of physical, social, emotional and academic weaknesses and strengths that resulted from interactive experiences of an individual with others (Trautwein & Möller, 2016; pp.188). Its formation is dependent on reinforcement of significant others and self-attribution (Shavelson & Bolus;1982).

According to Shavelson *et al.*, (1976), self-concept is multifaceted, hierarchical (classified to particular and specific subareas; for example, academic self-concept can be specified to subareas of math self-concept, English self-concept, reading self-concept and entrepreneurial self-concept), and when people grow and expose themselves for various experiences self-concept also takes on a more complex and multifaceted structure.

Self-concept has many dimensions. For instance, according to Argyle (1983), four factors known to be influence development of self-concept; significant others comment, comparison with others, social roles and social identification. These factors determine the strength, impact, direction and nature of the relationship of self-concept with other belief related, cognitive, and affective or emotional constructs or variables. Hence, this research will only test the hierarchical and normative dimensions of entrepreneurial self-concept of learners.

Academic self-concept, as Wigfield and Karpathian, (1991) defined, is a self-perception or judgmental knowledge of an individual or student about his or her academic achievement. In academic self-concept, self-assessment or perception of one’s capability relies heavily on normative evaluations and reflected appraisals from very important others (e.g., Marsh et al., 1999). Many believe that academic self-concept has a critical importance to educational and psychological achievement of learners (e.g., Chen et al., 2013; Elliot & Dweck, 2005). For instance, as the meta-analysis research report of Möller et al., (2009) indicates domain-specific correlations between self-concept and school grades amount to $r = 0.40$ and above.

Branden (1994), reported that academic self-concept is considered as determinant factor in that associated with people’s daily behavioral practices, different cognitive and affective outcomes, for instance, academic achievement, self-esteem, self-efficacy, happiness etc. the earlier studies conducted by Brookover and Lezotte (1979), underlined that academic self-concept, self-reliance and academic achievement should be primary achievement of schooling. Appreciating such research reports, OECD reported that

academic self-concept is highly related with later economic success and wellbeing of students (OECD, 2003). Furthermore, others reported that academic self-concept mediates and moderates different factors to academic achievement (Chamorro-Premuzic and Furnham, 2006)

Concerning the relationship between academic self-concept and academic achievement, Marsh et al. (2018), one of the leading researcher in self-concept and belief related constructs in psychology, concludes the relationship is reciprocal and overlooked the old arguments of skill development model (prior achievement leads academic self-concept development) or a self-enhancement model(prior academic self-concept leads to academic achievement). The latter model, therefore, maintains that self-concept is malleable for improvement through educational and training intervention programs. This model is supported by various empirical research findings (e.g., Marsh et al, 2020; Marsh, 2002) and lead to the recent research findings that confirms the reciprocal nature of the relationship of academic self-concept and academic achievement (Marsh et al., 2018; Marsh & Craven, 2006; Retelsdorf, Köller, & Möller, 2014).

Since academic self-concept is multidimensional, malleable to change and improvement through education and training, characterized by experiential and normative features, entrepreneurial self-concept can satisfy all those descriptors of academic self-concept and subjected to test in the present study. As far as the recent literature on web indicates, no research conducted on academics self-concept in relation to entrepreneurship subject matter. Therefore, entrepreneurial self-concept will be tested as mediator of entrepreneurial perceived behavioral control and entrepreneurial intention, and predictor of entrepreneurial intention and its implementation cue actions.

Regarding the relationship between self-efficacy and academic self-concept a lot has been said and investigated. Both constructs have so many elements in common. Both involve perceived competences in their definition (Eccles et al., 1998), consider mastery experiences, though higher for self-concept, involve social comparison, use reflected appraisals as source of information, and predict performance, emotion, intention and motivation. However, they do have major differences that include, heavily normative vs. goal referenced, aggregate vs. context specific, hierarchical vs. loosely structured, past vs. future orientation etc. (Bong & Skaalvik, 2003).

Bong and Skaalvik (2003) stated that academic-self-concept emphasizes an individual's perceived ability or perceived self-picture in an academic area, however, self-efficacy or perceived behavioral control centers on perceived confidence of executing a certain action in academics or else. For Bong and Skaalvik (2003), self-efficacy is a precursor of self-concept, in predicting a certain performance, self-efficacy stronger than academic self-concept. However, academic self-concept is also reported as a stronger predictor of affective related learning outcomes than self-efficacy.

2.7.1.7. Entrepreneurial achievement motivation (EAM)

Need for achievement is the most studied variable among other psychological variables, for instance, self-efficacy, initiative, risk taking, and others. As McClelland (1961) posits three dimensional characteristics of need for achievement; goal setting and self-responsibility, risk taking (takes medium risks), prediction ability of future scenario and feedback entertaining capacity (Kumbul-Guler, 2008) are the causes, inter-alia of successful entrepreneurs. Hence, motivation is a key for accomplishment of higher entrepreneurial aspirations and goals.

Entrepreneurs strong motivation for achieving the highest standard of excellence, they set personally meaningful challenging goals, they do not put a blame on luck or external factors for their inability of achieving those goals rather take full personal responsibility (Shane et al., 2003). They also investigate the possible causes behind hindrances, revise their plan in light of feedback, learn from their previous experiences and work hard. Therefore, the motivation typified by need for achievement is one of the determinant factors for success of entrepreneurs (Dohse & Walter, 2012; Frank et al., 2007; Volery et al., 2013). As previous consecutive discussions of this chapter indicate entrepreneurial attitudes and capabilities including entrepreneurial achievement, motivation can be enhanced by EE and teaching (Morris et al., 2013). Hence an improved entrepreneurial motivation can enhance attitude and intention towards business start-up, particularly through an experiential entrepreneurial learning method.

Hypothesis 1:

Entrepreneurial learning methods (either Experiential or Traditional) positively influences attitude towards business creation (1a), subjective norms (1b), perceived behavioral control (1c), entrepreneurial intention (1d) entrepreneurial self-concept (1e), entrepreneurial achievement motivation (1f), and entrepreneurial intention implementation cues (1g).

2.7.2. The differential impact of experiential entrepreneurial learning method

These days, there is a call of researchers and policy makers towards the practical course delivery of entrepreneurship (Harmeling & Sarasvathy, 2013). Partly, such calls are caused by reports from the inability of traditional or conventional entrepreneurship teaching methods in producing capable and market fitting graduated students (e.g., Gibb, 2005; Hytti et al., 2004). Particularly, these entrepreneurship programs or courses are reported as supply type courses and lack the desirable effects stated by objective of courses (Pittaway & Thorpe, 2012).

Followed by calls of researchers, there is a paradigm shift of learning entrepreneurship from the traditional approach of delivery to the more experiential entrepreneurial method of learning (Sánchez, 2013). This learning method is believed to have a positive effect on entrepreneurial competences (i.e., knowledge, skill and attitude of opportunity identification, risk analysis, networking and others) and behaviors (Cope, 2005; Morris et al., 2013; Sánchez, 2013).

Compared with the supply type traditional entrepreneurial learning, the demand and competence type experiential entrepreneurial learning uses experience and practices of entrepreneurship during teaching-learning processes (Cope & Watts, 2000), here and there day today entrepreneurial practices (Cope, 2005), non-continuous events (Harmeling & Sarasvathy, 2013), failure and success idiosyncratic happenings (Minniti & Bygrave, 2001), and reflections (Cope, 2005) from experience of one's life.

Researchers in higher education learning recommend andragogy and heutagogy adult learning principle for better learning outcome than pedagogy (which is known appropriate for children). These adult learning principles are founded on experience, practice and interest of learners, and give opportunities for practicing problem solving, initiative in one's learning and reflection on one's learning experience (Klapper & Tegtmeier, 2010). Methods of teaching and learning, for instance, plan writing, feasibility study, opportunity identification, role playing, creation of mini businesses, student loan, team working, company visit and information seeking others are part of experiential entrepreneurial learning (Corbett, 2005; Chang & Rieple, 2013; Heinonen & Poikkijoki, 2006). Accordingly, this learning method is believed to better engage students than teacher-centered traditional entrepreneurial teaching-learning methods (Jones, 2010).

These days an entrepreneurship education teaching learning method departed from the practice of traditional lecture-led passive learning method has a wider support and acceptance within higher education (Jones & English, 2004). Such entrepreneurship education involves innovative learning methods highly dependent on constructivist approach, which includes; experiential learning, problem solving and project based learning (Hägg & Gabrielsson, 2019). According to Fuchs et al., (2008), for entrepreneurial learning, experiential learning is highly efficacious and can be aligned with all entrepreneurial processes. Jones and Iredale (2010) also suggested that for the sake of engaging (far from mere reading or listening of a teacher) and enhancing the motivation of learners, EE requires experiential learning styles, which is predominantly problem solving and learning through practices or doing.

As it has been discussed under previous sections, entrepreneurial behaviors or competences are results of learners' engagement or immersion in entrepreneurial activity processes that can grant for learners an experience of how being an entrepreneur grows (Lackeus & Williams-Middleton, 2015). Therefore, experiential learning can be considered as a participatory form of learning that gives learners a hurdle for testing their cognitive processes to analyze and synthesize information in an active and immersive learning context (Feinstein et al., 2002).

As research findings indicate, entrepreneurial skills can be enhanced by providing a learning context in which students can make an interaction with entrepreneurs and real life entrepreneurial activities and processes (Chang & Rieple, 2013; Fayolle & Gailly, 2012; Politis, 2005). However, the impacts of such teaching learning methods did not properly reported and identified (Balan & Metcalfe, 2012).

Hypothesis 2:

The impact of EELM on entrepreneurial attitude (2a), subjective norms (2b), perceived behavioral control (2c), entrepreneurial intention (2d) entrepreneurial self-concept (2e), entrepreneurial achievement motivation (2f), and entrepreneurial intention implementation cues (2g) is significantly higher than TETM

Hypothesis 3:

H3a: The model TPB is valid for both EELM and TETM

H3b: The relationship of EI and its antecedents is positive and significant

H3c: Entrepreneurial self-concept can mediate the relationship between PBC and EI, PBC and EIIC, SNB and EI.

2.7.3. Association of students' perceived learning outcomes and teaching-learning methods

Understanding students' learning promotes quality of learning outcomes. Practically, students' are different in their learning outcomes, understanding of content and processes of a subject matter. Hence as Lizzio, Wilson & Simons (2002), learning outcomes are specified into three: academic achievement, generic skill development and course satisfaction. Among others, generic learning outcomes are identified as qualitative learning outcomes and performances perceived by students. Such are: transferable skills, skills relevant to employability, problem solving skills, team working, communication skills, planning and analytical skills (Ramsden, 1991). These learning outcomes are obtained through questioning learners to fill out self-report closed or open-ended questionnaires, responding to the level or extent of skills improvement they acquired or developed as a result of the learning program or method they have received.

As research findings reported, teaching methods have an impact on students' learning and their learning outcomes. For instance, deep and strategic learning methods are associated with relevant learning outcomes, for instance, positive perception of course evaluation, quality transferable skills, and the surface learning methods are associated with unsatisfied learning outcomes and poor development of skills (Diseth, 2007).

The development of teaching-learning methods is aiming at supporting learners how to develop generic skills. These teaching-learning methods are designed so as to bring more productive and generative learning skills than that of the traditional methods (e.g. Tynjälä et al. 2009). Interactive and stimulating teaching methods, collaborative learning, frequent feedback and support mentioned as appropriate approaches that lead to development of generative skill among learners (Kember et al., 2007).

The effectiveness measure of teaching learning in higher education, particularly in traditional universities, is persistently dependent on student evaluations (Kember et al., 2002). This student evaluation of teaching learning can be a series of close and open-ended questions (Sproule, 2000). Depending on the dimensionality of effective teaching learning in higher education, Centra (2000), Braskamp, and Ory (1994) identify six dimensions of student rating form: course organization including planning, communications skills, teacher–student interaction and relationships, workload, assessment, and student perceived learning. Hence, inline of the student evaluation format of Centra (2000), Braskamp, and

Ory (1994), the present research emphasizes only on the last rating formats of learning assessment, i.e., students' perceived learning outcomes of entrepreneurial learning in relation: perceived job creation responsibility attribution, perceived course benefit, and entrepreneurial behavior learning outcomes. Such learning outcomes are associated with the experiential and traditional entrepreneurial learning outcomes.

Hypotheses 4:

The EELM is highly associated with learners' enhanced perceived job creation self-responsibility and provide a positive course evaluation than students learned by the TETM

Bloom's (1956) behavioral and Kraiger et al. (1993)'s constructivism taxonomy of educational and training learning outcomes are hierarchically arranged constituents which are serving as a practical guide for identifying, appropriating, organizing and evaluating the impacts of pedagogical methodological deliveries inline of general and specific learning outcomes of cognitive, affective and psychomotor domains (Alexander et al. 1991). With a similar hierarchical arrangement to Kraiger et al. 's Fisher et al., (2008) adopted the general education and learning outcome to business specific learning outcomes. Fisher et al., (2008) tested the correlational relationships between cognitive, skill and affective learning outcomes. Though Fisher et al., (2008) reported as the relationship between entrepreneurial spirit and cognitive learning outcomes are null, Kozlinska (2016) reports, the relationship between these learning outcomes in business specific situations are significantly in demand and competence in EE teaching models of entrepreneurial learning methods than the supply model . To replicate these research reports and investigates the extent of impact of and traditional entrepreneurial learning methods, the following hypotheses are developed:

Hypotheses 5:

There is a statistically significant association among cognitive, skill and affective learning outcomes as measured by student course effectiveness evaluation of generic learning outcomes

Previous studies conducted on the impact of entrepreneurial learning have a better impact on cognitive, affective and skill related learning outcomes (e.g., Hulsink (2014; Souitaris et al. (2007). The recent research finding of Kozlinska (2016) indicates demand, demand-competence and competence teaching models brings about higher levels of

learning outcomes in cognitive skill based and affective learning outcomes. Accordingly, the fact that the experiential entrepreneurial learning method involves various entrepreneurial activities in the learning process, a differential impact on cognitive, affective and skill related learning will occur than in the traditional entrepreneurial method of teaching:

Hypothesis 6:

The association between EELM and Generic learning outcomes (cognitive, skill and affective) is higher than TETM as measured by student course effectiveness evaluation of generic learning outcomes.

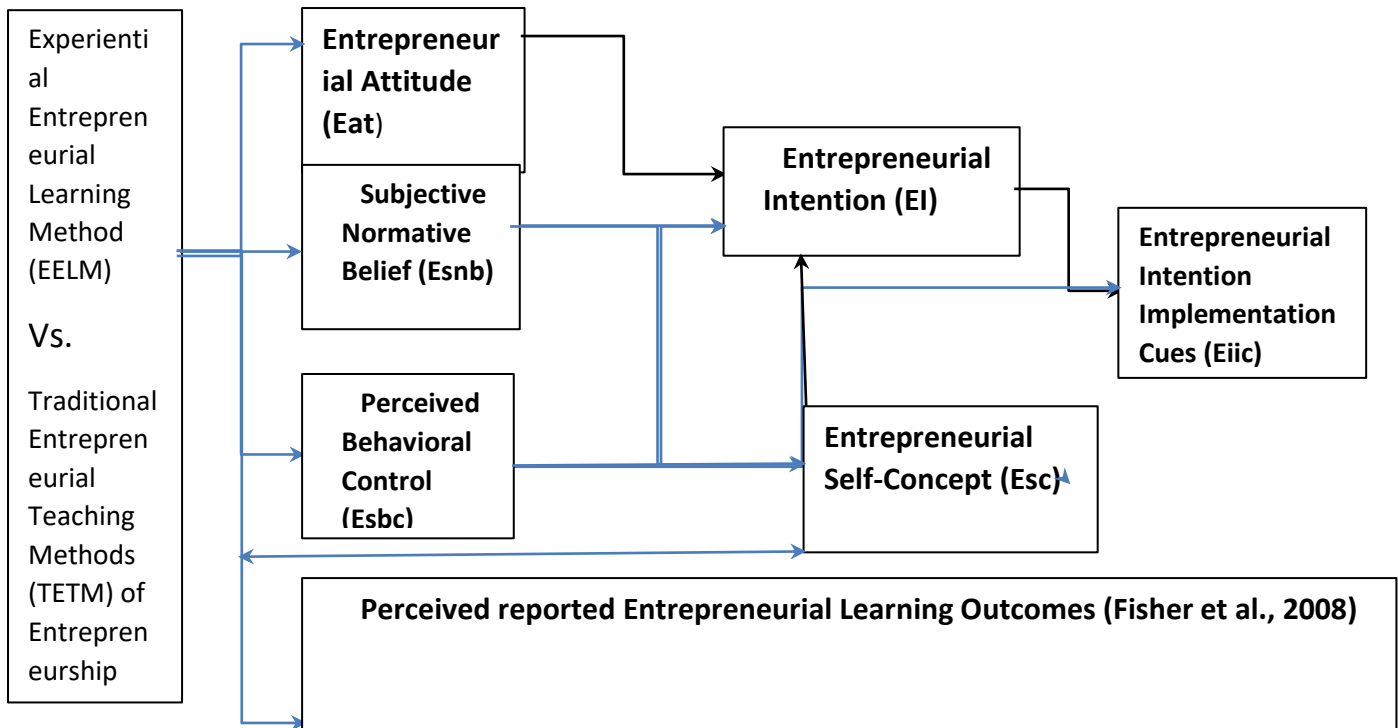


Figure 3: Research Model

CHAPTER 3: METHODS

This section presents methods of the research processes. To create common understanding about the nature of the research design and the teaching learning intervention, the research design and presentations of the course intervention of the study has discussed. Additionally, the study area, participant selection, instrument development, organizational communication and analyses process has presented.

3. RESEARCH DESIGN AND THE COURSE INTERVENTION

STRATEGY DESCRIPTION

3.1. Research Design

Whilst employing randomized pure experimental design is the best to test the objective of impact assessment research, practically, it has reported that almost impossible in an educational setting. Thus, quasi-experiment selected as the appropriate method of experimental design. According to Cook and Campbell (1979), quasi-experimental design has two main categories: nonequivalent comparison-group designs and interrupted time-series designs. In order to attain the objective of the present study, the best fitting design identified as appropriate was quasi experiment, i.e., Nonequivalent Groups Pretest-Posttest designs. Irrespective of few limitations, for instance uncontrollability of data from various groups (e.g., Lackeus, 2013), the advantage of this design over posttest design as reported by Cook and Campbell (1979) is first, with the use of both a pretest and a posttest, the temporal precedence of the independent variable to the dependent variable can be established. This leads to developing confidence to infer that the independent variable was responsible for changes in the dependent variable. Second, the use of a pretest allows us to measure between-group differences before exposure to the intervention. As Cook and Campbell (1979) argued, this could considerably reduce the threat of selection bias by revealing whether the groups differed on the dependent variable prior to the intervention. Hence, a quasi-experimental nonequivalent comparison-group design employed as design of this research.

Accordingly, as indicate by Table 2, study participants under the two departments of SWRM and RDAE recruited as experimental group of the study, assigned to learn the course

entrepreneurship and small business management through the newly designed experiential entrepreneurial learning method (EELM).

Table 2

Symbolic Representation of the Research Design

Study Group	Pretest (X ₁)	Course Intervention	Posttest (X ₂)	Impact Change Measures
Experimental (SWRM & RDAE)	EIQ	EELM	EIQ	X ₂ - X ₁
Control (Plant & Animal Science)	EIQ	TETM	EIQ	X ₂ - X ₁

X₁=First Test Record (conducted before the course starts, i.e., February first, 2019)) *X₂*= Second Test Record (conducted after the course intervention is completed, June, 2019)

However, study participants learned the same course with different teaching method, i.e., through traditional entrepreneurial teaching method, departments of plant and animal science has assigned as the control group of this research.

Study designs related to experimentation and quantification require a great deal of disciplined protocols and procedural care, so that errors kept minimal and only desired outcomes occur. Errors are inevitable in research works, the effort is for closing all suspected doors that could potentially jeopardize the procedure of the research and lead to occurrence of equivocal findings. There are several types of sources of survey errors. Thus, before going to pass the detailed procedures of instrumentation, administration and analysis, a few statements about research errors and the relation to the present study discussed as follows.

First, errors can relate to samples, including under-coverage bias and non-response bias (Thompson, 2002). The former occurs when a sample extracted from a population does not adequately represent the characteristics of the population. The latter is the bias that results when respondents differ in meaningful ways from non-respondents. Second, bias may come from the measurement, leading to response bias, such as leading questions, compliance bias, and social desirability (Podsakoff et al., 2003). The potential threats mentioned may also exist in the research methodology of this study. These biases addressed as follows.

Participants of this study both the experimental and control groups, were agriculture students who had typical academic agriculture background such as, plant science, animal science, water and soil science, and rural development agricultural extension programs. Further, while MoE assigned them to the university, their higher education entrance examination result laid under the agriculture and Natural science band (which was the fourth band among the six). Each department with in the college offers the course entrepreneurship and small business management to all final year prospective graduate students. During the time of data

collection of this research students experience to entrepreneurship was limited to this course, or, they hadn't any previous experience of formal entrepreneurial training or participation in similar events. In this sense, it was appropriate to study the impact of both the experiential and traditional entrepreneurial teaching-learning methods on the students' intentions toward entrepreneurship.

The demographic characteristics (including age, gender, work experience, year of study and role models) of both experimental and control group students were statistically homogeneous ($p > 0.5$). The salient difference between the study group was that the experimental group participants were exposed to an entrepreneurship course which was enriched by experiential learning method, whereas the control group students learned their entrepreneurship course by the existing traditional entrepreneurial teaching method. Therefore, it was appropriate to compare the experimental and control group students' entrepreneurial intention and related entrepreneurial mindset changes.

In the ongoing literature, many of the studies explored the impact of EE on entrepreneurial intention (EI), employed quantitative strategies (Rideout and Gray, 2013), and they are conducted in developed countries, therefore, generalizability limits are reported (Solesvik et al., 2013). Furthermore, as the analysis of relevant scientific studies dealing with the question of the impact of entrepreneurship education in chapter two indicated, numerous studies suffered from methodological constraints. Among others, lack of using control groups, small group (size) participants, and dependence only on ex-post analyses are among others. Considering those reported gaps, as much as possible, this dissertation strived to overcome the limitations and demonstrate improved methodology in comparison to previous studies.

Whilst the research strategy chosen for this study was dominantly quantitative, mixed method concurrent triangulations of data collection also employed. For ensuring objectivity in testing hypotheses, replicating and generalizing findings of the study, quantitative design considered as an ideal. To do so, through the pre-posttest survey method, facilitated by a structured self-completed questionnaire as a data collection instrument, the data collection conducted. Such methods reported as a good means of obtaining reliable and valid information about the relationship of EE and EI (Liñán et al., 2011).

On the other hand, to overcome the limitations of quantitative data, qualitative information had been collecting. The qualitative information, i.e., course expectations, responsibility of job creation after graduation, benefits of learning the course entrepreneurship, the importance of university support, the strength and weakness of the course learning methods collected

through open-ended items. The purpose of the qualitative data was to supplement weakness and limitations of the close-ended data. The concurrent triangulation believed to have an advantage of obtaining a deeper and broader understanding about entrepreneurial intention and the associated factors (van Burg et al., 2020).

Concerning the issue of non-response bias, during the data collection process, the students obtained an orientation about the purpose of the study, their responsibility, and the importance of their heartfelt participation. Afterwards, the course teachers of each group of study participants have taken the responsibility of following filling out processes of the questionnaires. In addition, the designs of the measurements of the main variables believed to reduce a non-response rate. Though 50% of a response rate is reported appropriate for analysis (Babbie, 2008), this study achieved 100% response rate success. Thus, nonresponse bias was not a concern of this study. However, this does not mean that all participants provided reliable and valid information for all types of items. We have noticed irregularities of responses while open-ended items triangulated with the response of close-ended items.

The instrument development processes of this study conducted with caution. Despite the psychometric quality of the core instrument adopted from Liñán and Chen (2009), reported good and supported by recent empirical works, for enhancing its fitness for the desired aim of the present study, a pilot study conducted.

To avoid errors resulting from social desirability; students were clearly and openly communicated about the importance of congruence, truthfulness and honesty while filling out the questionnaire and the extent of confidentiality. Moreover, students told that the assessment is independent of the university course evaluation and used by neither the university authorities, nor staff members other than only applicable for the study purpose.

3.2. Course Intervention Strategies

3.2.1. The Course and the Traditional Teaching Method

Under the curriculum for the Degree of Bachelor of Sciences (BSc) in Soil and Water Resources Management, Rural Development and Agricultural Extension, Animal, and Plant Science Departments of the harmonized curriculum, 2013, among others, the two specific goals of the programs described as follows;

- ❖ To produce graduates with sufficient, relevant, technical, productive and skilled in entrepreneurship who will be involved in research and entrepreneurial activities.

- ❖ Contribute to the intellectual, cultural, social, and economic development of the country.

Similarly, the curriculum of the programs valued quality; student centered teaching-learning method, participation, and commitment for learning and growth. Additionally, the program underlined that, the expected professional graduate profile of learners envisioned to be entrepreneurial in skill, and positive attitude towards self-employment/entrepreneurship in affective learning outcome. To realize this, the teaching and learning methods listed under each curriculum for the course entrepreneurship and small business management were; lecture, tutorials, home study, group discussions, intensive readings, role-play, class debates, and independent assignments. According to the syllabus, on these methodologies of teaching, the course had expected to be highly participatory that would help students to develop habits of critical thinking and problem solving.

The control group students learned the course entrepreneurship by the conventional traditional method, which has been accredited and approved by MoE and provided throughout all public universities. The course provided for all prospective graduating students of college of agriculture. The course was compulsory with a Three CrHr load in a week. The syllabus indicated that the delivery of the course should follow a student-centered method, though traditional in its practices. In the curriculum, learning-outcome measured through paper pencil tests.

In previous chapters and sections, we have shown in many studies that the teaching-learning methods of higher education institutions did not realize the change in entrepreneurial attitude and intentions to create an enterprise. Given the limitations of this teaching method, many of the higher education institutions in our country, cover their teaching-learning method with the phrase “student-centered,” but perform it in the traditional way. As one of the key issues in this research process was to evaluate the differences between entrepreneurial teaching methods in student entrepreneurial intention development and related learning outcomes, important issues related to the learning methods presented.

Students in the traditional entrepreneurial teaching method have done a lot of work in and out of their classrooms. For example, they were able to identify local business opportunities, conduct feasibility studies, start their own business at the university, developed a business plan, read books on the benefits and characteristics of

entrepreneurship, present articles about entrepreneurship in their classrooms, and discuss various entrepreneurship concepts.

Teachers in the classroom taught students extensively about business law, business types, and related issues so that they could clearly identify the individual and institutional characteristics needed to become an entrepreneur. Students needed to know the characteristics of the market, understand the marketing system, and become accustomed to marketing in any business, so they were able to bring their products and services to their university according to their skills and needs. Teachers have done the above on their own initiative to make the teaching-learning process action-oriented and to benefit students.

Teachers have supported their students as much as they can, as there has been no communication between the various stakeholders at the university. The main methods of the traditional teaching method were lectures, presentations, and group discussions, so students spent more time in their classrooms than in field-focused work.

3.2.2. The experiential entrepreneurial learning methods (EELM)

This research tested the impact of two competing entrepreneurship course-learning methods on EI of prospective graduating students, and particularly, the differential impact of EELM over TETM tested on EI of graduating students. In this section, some of the experiential entrepreneurial learning method principles employed within the experimental group described.

Prior to studying the influence of specific courses on entrepreneurial intention of students, it is appropriate to investigate if certain learning principles or methods of program/course are effective to increase students' entrepreneurial intention of learners. To do so, a thorough literature review and discussions with experts have conducted. In this section, the theoretical and practical basis of the EELM presented.

Entrepreneurial learning in process and modality can be conceived as two sided. Most of the people who have a success story in entrepreneurship may not come from the academic block. Those people may have acquired the entrepreneurial competencies and behaviors through socialization and personal experiences (Holcomb et al. 2009). On the other hand, recent literature shows students can learn entrepreneurship at educational institutes (Lackeus, 2013). Hence, due to this limited knowledge on how to teach and learn entrepreneurship, learning behavior patterns of acting entrepreneurs is under investigation

(Cope, 2011). This nature of entrepreneurial learning requires well-designed learning methods in an academic setting.

Researchers and educators in the area view entrepreneurial learning as socio-constructivist, thus, the traditional or conventional supply type teaching method of entrepreneurial competencies and behaviors is regarded as unfruitful, insufficient and unfitting with developmental needs of countries and entrepreneurial aspiration of individuals (Bruyat & Julien 2000). However, still the experiential learning method is also incapable of explaining the impact of entrepreneurship education or it explains the smaller share of variations. This means, learning of entrepreneurship for potential entrepreneurs can be different in experience and reliability. Therefore, entrepreneurial learning principles that can involve many of the experiences of acting entrepreneurs and have support from empirical findings of experiential entrepreneurial learning are selectively included in the course intervention of this dissertation project. Among others, practices oriented (learning by doing) and experiential focused learning methods described below. Such learning activities are adopted from the entrepreneurship training workshop (ETW) of EMPRETEC Model, which is recognized and approved by UNCTAD as a proven entrepreneurial learning method for entrepreneurs, nascent entrepreneurs, university and college entrepreneurship and small business management teachers, corporate and marketing managers, and prospective graduating youth of higher education (UNCTAD, 2013).

3.2.2.1. Learning by Doing

It has been reported that an adult learns best from what he/she does, and not from what he/she listens or reads (Lackeus, 2013 & Morris et al. 2012). Accordingly, through practice students could learn entrepreneurial behaviors, develop entrepreneurial intentions, and be engaged in practical activities for creating their future venture ahead of time. Accordingly, in order to ensure and practice the principle of learning by doing the following practical course teaching methods have been employed:

i. Feasibility study

(Tomato Paste Plant Case Study)

The objective of this activity was to determine whether the business idea displayed is viable or not. In order to define the viability of the proposed business, each team has developed a conclusive Business Plan), specifically the financial feasibility of Tomato Paste

Plant. The learning objective of the task has just served for improving efficiency of teamwork, planning, and goal setting for information seeking.

ii. Business plan writing

Though the findings are controversial, it is confirmed that a good business plan writing skill of students contributes to the development of entrepreneurial literacy; i.e., financial and market understanding of students (Karlan & Valdivia 2011; Martin, McNally, & Kay 2013). Different from the existing curriculum method, in the experiential course, the business plan writing served;

- As an input for assessment progress of students' learning
- As a prerequisite to students' loan processing
- As a reference point to the profitability of business creation exercise of students.
- As a means to examine the entrepreneurial intention implementation cue action or goal implementation intention of learners.
- To guide the marketing and promotion strategy of students' mini business

iii. Business creation and exercise (BCE)

The BCE exercise was aimed at development and reinforcement of the entrepreneurial behaviors, enable participants to contextualize the personal entrepreneurial competencies (PECs) learning in real business situations, and reinforce the students' personal responsibility for the creation and operation of the BCE company they initiated.

The situation that happened in the business creation exercise was a stage or scene that helped students to meet for enterprise owners (invited alumni graduated enterprise owners outside the university), BCE company owner students, and their customers. It is a place of "pattern recognition", where the triggering events stimulated students' entrepreneurial spirits, market identification skills, and competence development processes. The business creation exercise was also an opportunity for learners to test the risk of running and managing a business, working with others, and to experience the taste of owning one's business and its financial rewards. Each activity or situation has been an opportunity for students to learn a competency, acquire information, make contacts, and plan the future.

The rundown of the business creation exercise conducted in one week. Throughout the week, learners were off daily classes, exams and any tasks that could divert their attention from running their business. Before the actual BCE week happened, learners have accomplished several tasks:

- i. **Opportunity identification;** students brought several business ideas in their regular class and its viability have been filtered and evaluated through discussion with the course facilitator. After students boost their confidence in the idea of their business and its marketable opportunity, they have begun writing their business plan for the BCE week and university support seed money loan processes.
- ii. **Business plan submission;** the group or individual business plan of students was subjected for presentation in the classroom and relevant comments were provided. Based on the comment and feedback obtained from students' classmates and course facilitator teacher, the final business plan approved and the BCE license issued. Simultaneously, those students or groups who have been interested to obtain the university student loan requested to submit their business plan and in accordance with its feasibility, the course facilitator teacher was entitled to pass a decision of acceptance or not.
- iii. **Bank loan;** based on the approved business plan, the list of loan requests has been sent to the university president for business development and international relation (VPBDIR). Through the contractual agreement of paying the loan, students took the credit. While evaluating the business plan, the course teacher was required to check students CGPA > 2.00, free from any on-going disciplinary probes, and readiness for signing to score "IC" if the student couldn't pay the loan back within the time frame with unreasonable justification.
- iv. **Credit Payback;** immediately after one week of the end of the business creation and exercise week, each student, or team has presented the financial report of their business. Total Revenue, total expense, profit and loss, entrepreneurial competences practiced, strength and weakness of the business creation process have included in the presentation. The course facilitator audited each BCE report based on the business plan, initiation form of the business and financial documentations. On the day of the closure, the credit returned to the university through the course facilitator.

3.2.2.2. Learning through experience

Learning can flourish in a situation where a closer connection exists between the learning concept and the experience of learners (Baum & Bird, 2010; Krueger, 2007; Solomon, Duffy, & Tarabishy, 2002). The teaching learning activities developed for this learning model has augmented by the following experiential methods;

- i. Story telling;* each class has a designed story for each entrepreneurial learning issue. The course teacher designed and contextualized his personal business experiences and others to share students about the success and failure stories of successful entrepreneurship.
- ii. Experience sharing;* through this activity, students have obtained a chance for having a lived experience in business making from business owners. Two entrepreneurs in different times have shared their experience. During the experience sharing, invited entrepreneurs have delivered a presentation about their personal business related competences.
- iii. Business Company Visit;* students make a three-hour business company visit through readymade checklists. After their visit, they have reported the marketing strategy, promotion strategy and resource management system experience of the company through the lens of entrepreneurial competences they have learned in the class.
- iv. Service description;* representatives from financial credit providing institution (ACSI) and machinery supplier (Walia Machinery Enterprise) have made a precise description about the service they are providing to students, and success stories of university graduate credit takers were presented.

3.2.2.3. Learning environment and interactions of learning Activities

Experience-based learning is not limited to universities and classrooms. The teaching and learning process must consider these issues, as students come from the community, live in the community, and serve the community after graduation. Hence, In addition to the classroom, the teaching process of universities should provide opportunities for students to interact with several institutions outside the university and apply the theory they have learned to the outside world.

The teaching and learning process of the new method were conducting by engaging different units of the university. For example, the University Management, Vice President for Academic Affairs, Vice President for Business Development and International Relations, Center for Entrepreneurship and Inclusion, Finance, College of Agriculture,

respective Department, Student Dean's Office, and Student Union Office were part of it. Although the role and participation of these units were not equal, they have been instrumental in ensuring the course delivery as planned, to push students' willingness of accepting the course, to learn freely through devoting their full time and energy to the subject, and that the challenges of the teaching-learning process was minimized.

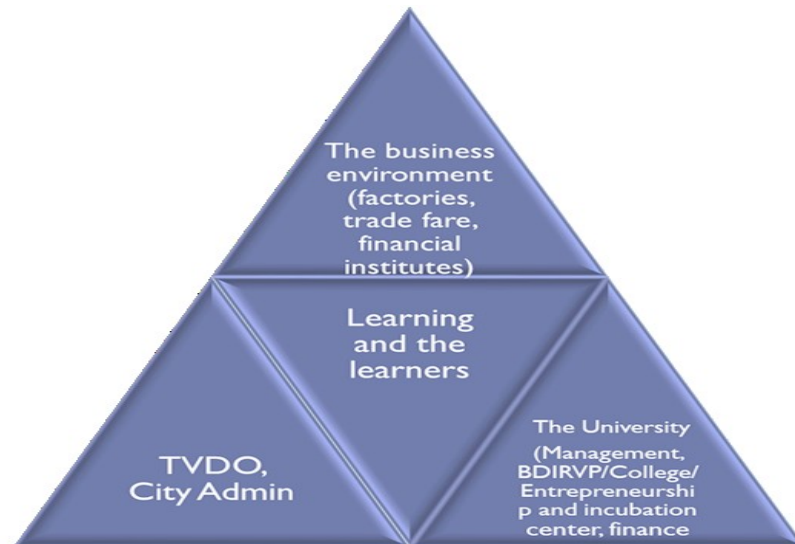


Figure 4: The experiential learning environment

In addition to the university's internal units, partners have been instrumental in the success of the course teaching-learning process. The Office of Technical and Vocational Development, Municipality, lending financial institutions, machinery suppliers, and the Trade Association were directly involved in the learning process. It gave students the opportunity to learn about various issues in these institutions, gain experience, apply the theoretical knowledge they have acquired, and be motivated to start their own business.

As we have tried to detail in different sections, the principles by which adults learn, especially in practice and experience, are two inseparable aspects of the same coin. For example, learning entrepreneurship through making a business is learning by doing principle and at the same time, it is a principle that allows students to learn from their experience. During the process of the learning, students practice a variety of businesses and gain extensive business experience.

Making an assessment about viability of certain product within the market, buying and selling, writing business plans, taking out loans, repaying debt, and turning business

opportunities into market or business are key learning strategies. These strategies are not much different from the other strategies we use to help students learn from their experiences. In fact, students could learn several action-oriented strategies about entrepreneurial processes. These methods could help students to relate and associate their new and previous experiences. Overall, the action-oriented learning process provides opportunities for students to gain broad perspective and in-depth experiences. This does not mean that the task-oriented learning process alone gives students the opportunity to learn from their experiences.

As we have tried to show the theoretical and empirical directions of research works in this area, new concepts must be easily integrated with the previous experience of learners in order for students improved in their knowledge, attitudes, and skills. For example, when we implement the new teaching-learning method, we can see how students were involved within the process. Throughout the course intervention, we have implemented a variety of teaching strategies that we had believed help students to gain a better understanding of the nature and characteristics of entrepreneurship, to learn entrepreneurs' behaviors, and begin to adopt these behaviors and competencies. We have identified successful entrepreneurs in the city where students were studying to share their experiences with students and their teachers. In this program, both students and teachers had the opportunity to ask questions, share views, and clarify ambiguities. In addition, alumni who have engaged in various business activities invited to come to the University with their products and services and participated in the Student Business Creation Week program. Through the experience sharing, students gain real experience, increase their self-confidence, and enhance their business aspirations.

Experts from credit and savings institutions invited to give a detailed presentation on loan, savings, and lease finance policy, and implementation. After graduation, students interested in borrowing money from banks or microfinance institutions have given a clear description of the loan process and the link between credit and business. As a result, all the learning activities played a key role in motivating students to become entrepreneurs and making the university entrepreneurial. Throughout the learning process, efforts have been made to train students with the new teaching methodology, as shown in Figure 5, by applying the theory to practice, relating the practice to the experience of students and significant others.

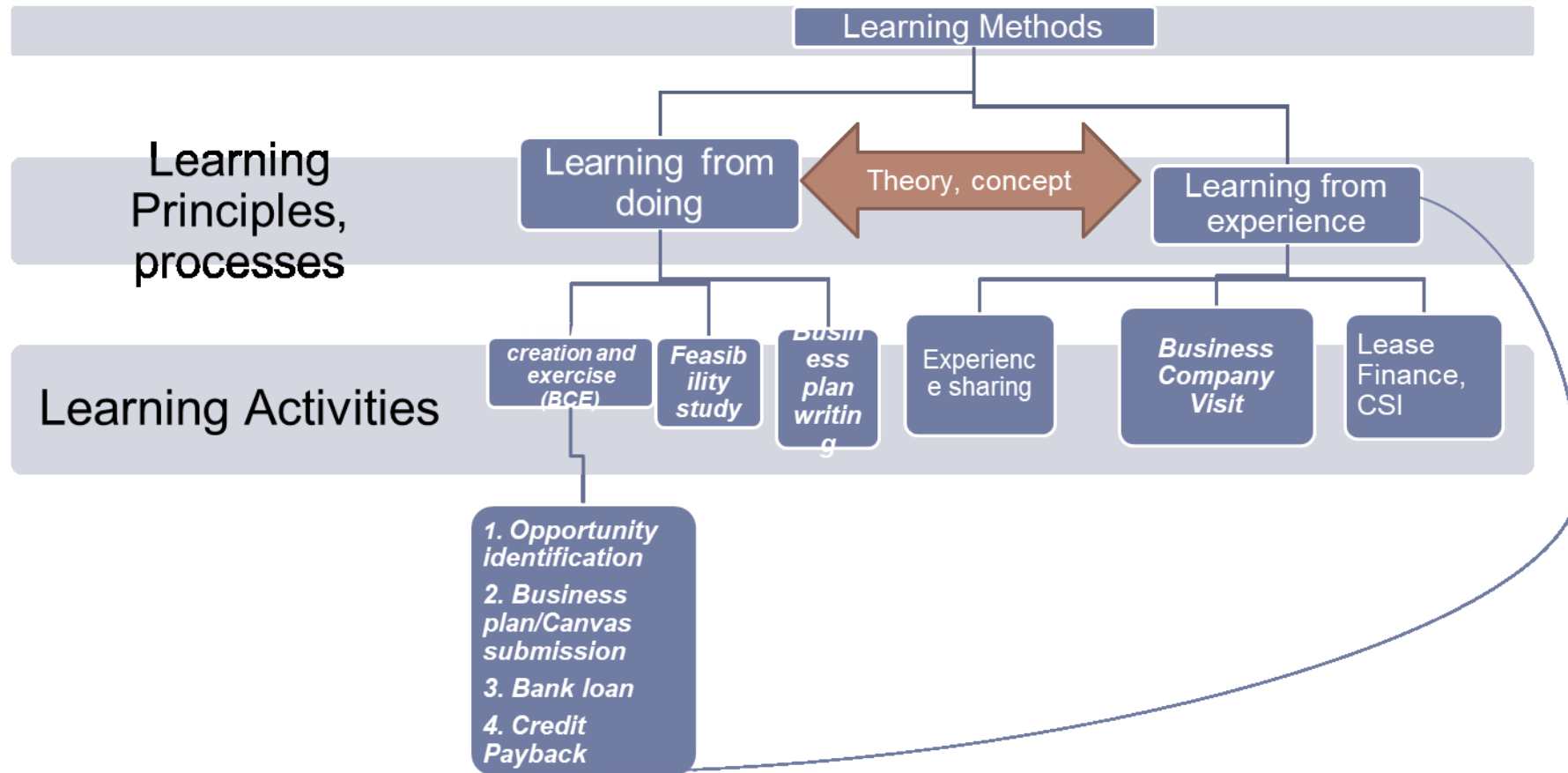


Figure 5: Experiential learning principles, activities, and learning activities relationships

3.3. Population and Participants

Previous research conducted in developed countries indicated that university graduates, particularly EE alumni, were reported more likely to have engaged in entrepreneurship at a high level (Pickernell et al., 2011). Hence, this research sought to test how entrepreneurship course methods affect entrepreneurial intention of prospective graduating students in Ethiopian Higher Education Context.

Recruiting final year university students as participants of research for testing entrepreneurial learning outcomes or intentions is reported as justifiable and acceptable (Liñán et al., 2011). The reason stated that final year students face an immediate employment problem. This problem or according to Shapero & Sokol (1982), displacement event, and career choice confusion could lead them to starting businesses, or identifying opportunities, business partners, which is a realistic and manageable option (Krueger et al., 2000; Segal et al., 2005; Shapero & Sokol, 1982). Therefore, this future job seeking personal pressing need believed to push them to provide answers for research questions in focus or better attention than their juniors do. More importantly, their responses believed to be strong predictors of an actual career choice (BarNir et al., 2011).

Finally, researchers positioned those individuals, including university graduates aged between 22-35 years, to exhibit higher propensity of starting a business if enabling factors are accessible (Liñán, 2008; Reynolds et al., 2002). Therefore, for these justifications, the population or target group of this study is prospective graduating university students of college of agriculture Wollo University.

As under the design section presented, this study was quasi-experimental design that is highly demanding of administrative costs. Hence, only a small number of participants participated. Particularly, in order to test the impact of various forms of experiential learning methods on entrepreneurial intentions and generic business related learning outcomes, using smaller number of participants was a forced choice. Therefore, study participants recruited in Four Departments of Wollo University, College of Agriculture.

In 2019, under the college of agriculture, 315 students enrolled among six departments. Out of the six, departments that were highly related with business deliberately removed, for instance, Agricultural economics, and Forestry. In those removed departments, multiple business related courses provided to learners. Team of researchers believed that such business related courses would had a jeopardizing effect on the result, and decided to did not be participating in the study. Among the five, only the four departments selected to be study

participants. Hence, using a purposive method four departments, i.e., Soil and Water Resource Management, Rural Development and Agricultural Extension, Plant science and Animal Science prospective graduating students selected.

In addition to the previous justifications, the purposive selection of the college was mainly for two reasons. First, the course entrepreneurship and small business management is a compulsory course for all departments of the college of agriculture. Therefore, to test the comparative differences of the newly designed experiential entrepreneurial learning and traditional entrepreneurial teaching method, the college was more preferable than any other colleges. Second, the time of delivery of the course schedule found suitable for the researcher's demand. The course has been scheduled for the second semester of the final year. The second reason was also so important for testing the hypotheses of this research.

Readers may be concerned that selecting only one college for the study may have a negative impact on the reliability of the results. If the participants were drawn from different universities and colleges, the researchers would also be keenly interested. But to implement this action-oriented entrepreneurship learning strategy, many challenges and institutional processes need to be addressed. In order for the teaching method to be effective, the various stakeholders inside and outside the university must agree to work together. The university is required to provide student loans for their business creation exercise. Alumni and other business people should attend the Student Business Creation Week. In order to gain business experience, students are required to visit, review, and report their observations. The financial and time resources required integrating and implementing all of these activities and partnerships are not easy.

For example, Wollo University had to allocate more than 300,000 birr to assess the impact of this project. Hence, the costs involved in the process should be taken into account when increasing the number of participating universities, colleges, and students. This does not mean, however, that the number of participants was a factor in the validity and reliability of the study. The study participants carefully selected, and the potential impact of the two teaching methods on improving student entrepreneurial intention carefully monitored. Therefore, questions regarding the number of participants should be answered according to those explanations.

Accordingly, as presented in Table 3, among the four departments, 77 female and 125 male students, 88 under the Control Group or hereafter called as The Traditional

Entrepreneurial Teaching Method (TETM) and 114 under the Experimental Group or hereafter called, The Experiential Entrepreneurial Learning Method (EELM) students were participated in the study.

Table 3

Department, Sex, and Study Group Assignment Status of Study Participants

No.	Department	F	M	Total	Participant	REMARK
1	Animal science	11	31	42	Selected	TETM
2	Forestry	25	34	59		
3	Plant Science	30	16	46	Selected	TETM
4	RDAE	20	32	52	Selected	EELM
5	SWRM	16	46	62	Selected	EELM
6	Agro Economics	22	33	55		
	Total	124	191	315		
	Total actual Participant	77	125	202		

Regarding the proportion, 65% of the graduating students of the college have participated in the study. Among these, 62% and 67% of participants were female and male respectively. Since the follow-up and course intervention was part of the regular academic schedule program, participants were fully willing and committed to be fully engaged in the teaching learning process.

3.4. Data Collection Instruments

3.4.1. Entrepreneurial intention questionnaire (EIQ)

From the late 1990s to present, entrepreneurial intention analysis has mushroomed (Liñán, Urbano & Guerrero, 2011; Linan & Chen, 2009; Liñán et al., 2016; Kozlinska, 2016; Mwiya, 2014). Because of the newness of the study field, there has not been a single agreed instrument for measuring the construct. All researchers have used their own self-developed scale for measuring their respective studies. Following this, a general criticism forwarded against each model of EI and respective measures developed by researchers.

Research results mentioned above have acknowledged the applicability of Ajzen's Theory of Planning Behavior (TPB) to entrepreneurial intention. By using the framework of TPB, researchers have measured entrepreneurial intention and its antecedents through different

numbers of items. Krueger et al. (2000) developed and used a single-item variable to measure entrepreneurial intention and its antecedents. Kolvereid and Isaksen (2006) also have measured intention through a single item; however, they employed an aggregate for measuring attitude. Some others (e.g., Autio et al., 2001) have used an unconditional measure of intention. Researchers (e.g., Fayolle et al., 2006) have asked participants in order to report their preference as compared to self-employment and organizational employment. Observing those disparities, Linan and Chen (2009) develop a standardized measuring instrument of entrepreneurial intention (EIQ).

Recently conducted researches using EIQ reported a reasonable acceptance (Costa, & Mares, 2016; Jaén et al., 2013; Jaén et al., 2013). Concerning its culture appropriateness, Linan and Chen (2009) tested it on 519 Spanish and Taiwanese prospective graduate students and reported an acceptable range of relevance.

Regarding the psychometric quality of EIQ, Linan and Chen (2009) reports that the reliability (Cronbach α) of entrepreneurial intention (EI), perceived behavioral control (PBC), subjective normative belief (SNB) and Entrepreneurial attitude (Eat) are; 0.943, 0.885, 0.773, and 0.897, respectively. Concerning its validity, Construct, discriminant and convergent validities have reported with a recommended range of acceptance. As mentioned above, its cross-cultural divergence was tested and had found inclusive. In line of these overall descriptions of EIQ, it is appropriate and justifiable to various cultural group participants, including Africa. Hence, this dissertation adopted EIQ as the core measure of this study.

3.4.1.1. Entrepreneurial intentions (EI)

In EIQ, entrepreneurial intention is measured by a Likert type scale (e.g., *I am ready to do anything to be an entrepreneur or I am determined to create a business venture in the future*) with six items. These are general sentences indicating different aspects of intention. Chen et al. (1998) also used the same way of measuring entrepreneurial intention. Thus, EIQ measures EI by Likert scales of agreement with statements ranging from one (total disagreement) to seven (total agreement).

3.4.1.2. Entrepreneurial attitude (Eat)

While measuring entrepreneurial attitude and subjective normative beliefs, EIQ has a different approach than the TPB's recommendation of considering beliefs (Kolvereid, 1996b; & Fayolle et al., 2006). In EIQ, attitude measured through an aggregate scale as intention

does. According to Ajzen's (2001) recommendation, beliefs are antecedents of an attitude, and attitudes are antecedents of an intention. Simply, by measuring attitude, one can predict intention. Thus, according to Linan and Chen (2009), in EIQ aggregate attitude can be taken as a significant predictor of intention, while beliefs were not. For this reason, an aggregate measure of entrepreneurial attitude chosen in the EIQ. Thus, EIQ measures Eat by Likert scales of agreement with statements (e.g., A career as entrepreneur is attractive for me or, If I had the opportunity and resources, I'd like to start a firm) from 1 (total disagreement) to 7 (total agreement).

3.4.1.3. Subjective normative belief (ESNB)

Subjective norms measure the respondent's perception of what people in his/her network would think if the respondent became an entrepreneur. Thus, subjective norms refer to the social and cultural pressure to perform a specific behavior. In this respect, the expectations of friends, family, peers, networks, or mentors regarding the desirability of becoming an entrepreneur are of specific importance.

According to the theory of planning behavior (Ajzen, 1991), SNB approached through an aggregate measure of the kind "what do reference people think?" Many researchers considered it as a weak predictor and omitted SNB from the model (Chen et al., 1998; Krueger, 1993). However, researchers (for instance, Kolvereid & Isaksen, 2006) have followed Ajzen's recommendation and measured it through "motives to comply" regardless of the contradictions and academic disputes persisted. EIQ has used one simpler scale in the validation process, including three groups of reference people (e.g., If you decided to create a firm, would people in your close environment approve of that decision, i.e., family, friends and significant others?) Thus, EIQ has measured Esnb by Likert scales of agreement with the following statements from 1 (total disagreement) to 7 (total agreement).

3.4.1.4. Perceived behavioral control (Epbcb)

In the entrepreneurial intention model, perceived behavioral control (PBC), which is, according to Ajzen (2002) wider than the concept of self-efficacy, has been measured through self-efficacy items (Chen et al., 1998). On the other hand, more general self-efficacy measuring instruments also employed. In this regard, Kolvereid (1996b), used a 6-item scale with good results, however, Kolvereid and Isaksen (2006) developed an 18-item scale but showed insignificant correlation between PBC and intention. Therefore, by using the argument of Ajzen's (1991) control beliefs (e.g., I can control the creation process of a new

firm) and specific efficacies (e.g. I know the necessary practical details to start a firm), would be the antecedents of an aggregate measure of PBC. Therefore, as Entrepreneurial attitude and SNB aggregate measures as considered, PBC in EIQ also be measured. The EIQ includes a 6-item scale; five of these items measure general SE, whereas one is a controllability statement. Thus, EIQ has measured Epbc by Likert scales of agreement with statements ranging from one (total disagreement) to seven (total agreement).

3.4.1.5. ***Entrepreneurial self-concept (ESC)***

Self-concept is a cognitive assessment of a person's view of him-or herself. According to Bong & Clark (1999) it is an evaluative and affective component of a person's view of his/her specific competences. As Rosen (2010), described, the evaluative component entails an assessment of ability based more on normative and comparative evaluations.

Bandura (1986) stated that Self-concept can be defined as a generalized or domain specific self-judgment embedding various forms of affects and beliefs of an individual, example, self-efficacy of feelings of self-worth and overall beliefs of an individual's competences. While discussing self-concept, Bong and Skaalvik (2003) underlined the centrality of perceived competence, its self-assuring informative nature, and underlined both specificity and multidimensionality. Specifically, self-concept refers to beliefs in one's capability to succeed, one's competence relative to one's counterparts, and one's sense of personal control over given events, (Valentine et al., 2004). As academic research results indicate, those learners who have stronger self-concept in tasks show more effort, persistence, and resilience on academic tasks, resulting in more learning and achievement (Guay et al., 2004). Adopting those conceptual and definitional feature of self-concept, this research defines entrepreneurial self-concept as perceived self-worth of doing things and compared with others, perceived self-belief of establishing one's own company after graduation i.e., opportunity hunting, information seeking, networking, self-confidence, persistence, team working and business planning.

Concerning the measurement, regardless of its subjective nature, while measuring self-concept; self-report measurement methods are most appropriate (Rosen, 2010). Among others, the well-known measures of self-concept are the one developed by Marsh, (1992) and Byrne, (1996) are the Self-Description Questionnaire (SDQ) and the Academic Self-Description Questionnaire (ASDQ) (Marsh, 1992). These measures have assessed the academic self-concept of students through item forms of (for instance, "I get good marks in English language classes," and for global self-concept evaluation items, e.g., "I can do things

as well as most people.” Such instruments serve as a reference point for further instrument development of domain specific self-concept of students.

For this study, the Math and English self-concept measuring scale of PISA, Organization for Economic Co-operation and Development (OECD, 2003) was adopted for entrepreneurial learning outcomes. While OCED’s measure focus on each subjects’ specific competence aspects, the current study includes the normative (e.g., Comparing with most of my friends, I feel I have better knowledge and skill of business opportunity identification than most of my friends) and global self-evaluation (e.g., I feel I have a good skill of business negotiation and networking) aspects of entrepreneurial self-concept. More importantly, while OCED’s focus of measurement was Math and English self-concept of students, this study adopts the instrument for entrepreneurial self-concept. Finally, in OCED’s measurement, the range of the Likert scale has been limited to 1 (strongly disagree) to strongly agree (4), whereas, the present study increases the range of options of the Likert scale from 1 (total disagreement) to 7 (total agreement). In PISA’s report the reliability of the scale has been reported, $\alpha = 0.73$ for English self-concept, and $\alpha = 0.83$ for Math self-concept. In this study Esc was measured by Likert scales of agreement ranged from 1 (total disagreement) to 7 (total agreement).

3.4.1.6. Achievement motivation (EAM)

According to McClelland’s description, need for Achievement represents expectations of performing on tasks better than an individual’s own previous accomplishment. Though in his earlier work, McClelland posited need for achievement as a trait, in his recent research findings repositioned his view and stated that, a need for achievement can be acquired through learning. Furthermore, he advanced his discussion and affirmed that need for achievement may also develop through a person’s present point of view or perception of the world (Hansemark, 1998).

Regarding its measure, a projective test, the thematic apperception test (TAT), was originally used in establishing the relationship between entrepreneurship and Need for Achievement (McClelland, 1961; McClelland & Winter, 1969). However, this method lacked objectivity and neglected by researchers. Hence, for the current study the measuring scales of Walter et al. (2011) and Luethje and Franke (2004) were adapted, i.e., Four Items from Walter et.al (2011), and Three Items from Luethje and Franke, (2004) adapted. Mwiya, (2014) used such items and reported $\alpha=0.84$ of reliability. The original scale was prepared to measuring achievement motivation in academic setting. However, the scale in this research has been adapted to entrepreneurship motivation to create a venture.

In this study Eam was measured by Likert scales of agreement with a statement (e.g., I care about performing better than others on a task), ranging from 1 (total disagreement) to 7 (total agreement).

3.4.1.7. Entrepreneurial intention implementation cues (EIIIC)

Holding a strong goal intention of “I intend to attain X!” does not necessarily lead to goal achievement, because several factors could impede people from transforming their intent towards appropriate expected behavior. As many researchers of late 1990s and recent work of (e.g., Gollwitzer & Sheeran, 2006), indicate that theories of self-regulation and motivation converge on the view that articulating an actual behavior to be achieved or reached, or setting outcome goal is a key act that will lead to goal attainment. The fundamental issue of this assumption can be stated that the strength of an individual’s intention determines implementation intention cue activities or accomplishments (Oettingen & Gollwitzer, 2001; Sheeran, 2002).

In this study, Intention Implementation cue measuring instrument was a newly added variable in Ajzen’s model of theory of planned behavior depending on the work of Gollwitzer (1993, 1999, & 2011). According to this research, strong intention of performing a given behavior precedes its implementation. If a student has a strong and genuine intention of becoming an entrepreneur or establishing his/her business venture, he/she should show some active cues of behavioral changes during the class or after the class which can be transferable for the future actual business. These expected cues of entrepreneurial behavioral changes are business related actions, for instance, business plan preparation, saving, market researching, business networking and or potential business partner identification. Accordingly, in order to measure entrepreneurial intention implementation cue act is measured by six items, which are Likert type of items (e.g., for the business that I would create after my graduation I Have identified business opportunities in my vicinity) ranged from 1 (total disagreement) to 7 (total agreement), were employed.

3.4.2. Generic learning outcomes assessment

Two general close-ended items and one open ended item included within the generic learning outcome assessment questionnaire. In order to evaluate the perceived business creation responsibility attribution, a single item is worded as “who do you expect to be responsible for you creating a job after graduation?” supposed to be responded; government and family rated as 1, Government and I am, rated as 2, and I am rated as 3 was provided.

To evaluate the benefit of the course, a Yes or No type single item, worded as “Does learning the course entrepreneurship benefited you?” has been included within the questionnaire. This item served as a precursor for assessing generic entrepreneurial learning outcomes as guided by Fisher et al., (2008). Hence followed by the course benefit Yes or No type single item, an open ended item stated as “How does learning the course entrepreneurship benefited you?” was presented. This part of the questionnaire aimed at investigating entrepreneurial learning outcomes through collecting qualitative data that finally transcribed in quantitative data. The method was extended from Braskamp, Ory, and Pieper (1994) and Rovai et al. (2006) studies, which resulted in identifying various sets of categories based on respondents' key entrepreneurial learning outcomes or themes reported. In order to identify the entrepreneurial learning outcomes qualitative research procedures maintained (e.g., Creswell, 2002). The responses had classified into different entrepreneurial behaviors and categorized in two entrepreneurial competences. Finally, each competence grouped into Cognitive, Skill, and Affective entrepreneurial learning outcomes, guided by Fisher et al., (2008). The process has been accomplished manually. The quantification processes of the qualitative data obtained from the open-ended items have consisted of analyzing the frequency of student responses of entrepreneurial learning outcome category (cognitive, skill and affective) by delivery methods (experiential traditional).

3.5. Pilot Study

Pilot study is useful for developing a study protocol, for testing the general state of a data collection tools. Pilot study is powerful for testing the data collection process, carefully capturing participants' code, improving the wording of items, enhancing instruction, and data administration setting of any study process.

Regarding the number of participants in pilot studies, there are those who say that 10% of the total participants should participate, but most researchers say that 10-30 participants are sufficient for pilot studies (Hill, 1998; Julious, 2005). Concerning the issue of selection of pilot studies, researchers forwarded a general suggestion that pilot study participants should not be allowed in order to take part within the main studies.

As suggested by Ajzen (2006), an instrument that secures a good psychometric quality is a result of selecting an appropriate item in the formative stage of the questionnaire development. Hence, before the actual administration of the data collection instrument, the

psychometric quality of each of the antecedents of entrepreneurial intentions and its immediate outcomes, i.e., EIIC, tested through a pilot study. Additionally, the two data collection instruments, i.e., entrepreneurial self-concept and entrepreneurial achievement motivation have also been included in the pilot study testing process.

The Amharic version of the data collection instrument was tested on 30 prospective graduating students of the College of Natural Science, departments of Biology, Chemistry, Math, Sport science, and Physics. Six participants from each five departments have participated. As the data analysis result of the pilot study revealed, an average CGPA and age of 2.7 and 21.5 obtained respectively.

Table 4

Item Statistics and Reliability of Measuring Scales of the Pilot Study

Items	Mean If Item Deleted	Variance If Item Deleted	Interitem r If Item Deleted	R ² If Item Deleted	α If Item Deleted	Reliability
EI1	17.03	54.999	0.615	0.578	0.909	0.91
EI2	16.53	55.43	0.724	0.798	0.892	
EI3	16.2	50.579	0.767	0.839	0.886	
EI4	16.9	55.059	0.734	0.754	0.89	
EI5	16.8	52.166	0.788	0.789	0.882	
EI6	16.53	53.223	0.845	0.808	0.875	
EAT1	12.03	20.10	0.47	0.43	0.81	0.80
EAT2	11.93	21.31	0.51	0.53	0.80	
EAT3	11.83	18.21	0.72	0.72	0.73	
EAT4	11.73	17.24	0.75	0.77	0.72	
EAT5	11.67	18.78	0.55	0.51	0.79	
SNB1	4.9	6.852	0.824	0.68	0.92	0.93
SNB2	5.23	8.461	0.873	0.778	0.89	
SNB3	4.93	6.892	0.878	0.79	0.867	
Epbc1	13.6	28.041	0.67	0.768	0.822	0.86
Epbc2	13.43	27.84	0.655	0.764	0.823	
Epbc3	12.6	27.214	0.616	0.6	0.828	
Epbc4	12.43	25.978	0.509	0.636	0.856	
Epbc5	12.47	22.051	0.804	0.683	0.788	
Epbc6	13.13	27.154	0.628	0.469	0.826	
EIIC1	9.27	25.72	0.549	0.36	0.901	0.90
EIIC2	8.8	21.821	0.698	0.612	0.884	
EIIC3	8.97	21.826	0.831	0.796	0.859	
EIIC4	9.2	22.579	0.79	0.778	0.866	
EIIC5	9.27	24.616	0.759	0.642	0.875	
EIIC6	9.17	22.764	0.728	0.579	0.876	
Esc1	13.83	36.902	0.697	0.534	0.925	0.93
Esc2	13.43	33.978	0.798	0.693	0.913	
Esc3	13.6	34.662	0.778	0.636	0.915	
Esc4	13.53	32.326	0.829	0.721	0.909	
Esc5	13.47	32.947	0.812	0.732	0.911	
Esc6	13.63	32.723	0.824	0.732	0.909	
Eam1	15.17	50.902	0.563	0.789	0.727	0.78
Eam2	15.57	61.978	0.303	0.708	0.793	
Eam3	16.63	65.551	0.393	0.381	0.766	
Eam4	16.53	54.602	0.661	0.7	0.703	
Eam5	16.07	49.237	0.752	0.868	0.671	

Items	Mean If Item Deleted	Variance If Item Deleted	Interitem r If Item Deleted	R ² If Item Deleted	α If Item Deleted	Reliability
Eam6	16.2	58.372	0.483	0.64	0.746	

Regarding the psychometric quality of the instrument, only reliability calculated. The content and face validity of the instrument evaluated by experts and linguists as well. The reliability result of of the pilot study of all variables presented in Table 4.

As presented under Table 4, the reliability of EI, Eat, Esnb, Epsc, EIIC, Esc, and Eam were 0.94, 0.80, 0.93, 0.86, 0.90, 0.93, and 0.78 respectively. All the adapted and adopted scales were found within the range of recommendation of good scale, and have been used for the final and actual data collection of the study.

3.6. Data Collection and Organizational Communication Processes

The actual data collection of this research has been conducted in two stages: pre-course intervention test and post-course intervention. The first phase, i.e., the pre-course intervention test data collection conducted on February 2019 (i.e., beginning of the second semester of the university academic year schedule). Whereas, the post-course intervention test data collection held on June 15, 2019 (end of the academic year of the university schedule). During the first phase of data collection, institutional rapport formation and securing work permits were of the challenging, but successful jobs. The intervention of the new course teaching method demanded an active participation and cooperation of more than four independent organizations. These organizations were Wollo University, Dessie City Administration Technique and Vocational Development Office (TVDO), Mayor Office, Dessie Branch, Amhara Credit and Saving Institution (ACSI), Waliya Capital Goods Finance Business S/C, and Equipment Supplying Enterprises. For the sake of obtaining their full cooperation and engagement, formal meeting and agreement were mandatory before the intervention began.

Based on the application of the researcher, the management of Wollo University (i.e., the home base of the researcher and the study area) has provided its willingness to cooperate with the intervention of the experiential entrepreneurial learning method among the experimental group of study participants, student loan access, and the BCE week organization. By mentioning the purpose of the research project, the Academic Vice President (AVP) office of

the university issued a letter to the college of agriculture in order to implement the new course method for selected research participants.

Based on the decision of the university management AC of College of Agriculture evaluated the work guide and intervention strategy the teaching method inline of the following issues:

- Similarity and differences of the new and existing teaching methods
- Appropriateness of the new course teaching method to the academic program and the course of the university.
- The evaluation procedure of the new course model
- The discipline and appropriateness of the course teacher assigned for facilitating the course
- The mechanisms of resolving students' concern and complains

By appreciating the concern of AC members of the college, the researchers responded to all concerns and basic questions. Accordingly, the AC of the college of agriculture approved the intervention of the new course method and the assigned course facilitator. Based on the decision and direction of the AC, each department's head, student representatives and the researcher have provided a responsibility of managing the process of course administration and intervention.

Researchers recommended that pre-notice information increased participation from three to Five percent (e.g., Dillman et al., 2009). A pre-notice provides a sense of respect, honor, sense of desideration and readiness from the side of participants. Accordingly, earlier two days of the actual administration of the pretest scale, participants of the study called and provided all the necessary information. Particularly, participants briefed about the purpose (for instance, its importance for curriculum revision, creating entrepreneurial university and the importance of the new teaching method in order to enhance entrepreneurial skill of students) of the study through their respective department heads (in the presence of the researcher). Students obtained all the relevant information about how the questionnaires filled the role of their respective course facilitator teachers and department heads, the college and the university.

Followed by the introduction and description of the purpose of the research and processes of the intervention, participants of the study have been invited to be part of the study process and the questionnaire was dispatched for each student (under the guide and support of course teachers) based on their identification number. In order to alleviate data missingness and increase response rate of questionnaires, for those students who did not attend the meeting an

extra briefing session organized and awareness about the purpose of the study was created. Accordingly, the pretest data collection successfully conducted on February 2019.

The fact that the research processes of this project requires the participation various stakeholders, the university management delegates the office of Vice President for Business Development and International Relation (VPBDIR) in order to facilitate the research process and its integration with business incubation center of the university, Finance, Dessie City Administration Technique and Vocational Development Office (TVDO) and Mayor Office. As per the delegation provided by the university management, the Business Development vice president office has approved the student loan request, permitted the business creation exercise week, in collaboration with Technique and Vocational Development office (TVDO) of Dessie City administration, sent an invitation letter to selected model enterprise owners for their participation in the BCE week trade fare event. After all those processes and collaborative efforts of different stakeholders, the BCE week had been effectively conducted. Following a similar procedure of the pretest data collection, the post-test intervention data collection organized on June 15, 2019. Since each group of the study had information about the purpose of the study, with some reminders and cautions, the course teachers of each study group have managed all the processes of the posttest data gathering.

3.7. Analysis Procedures

Data analysis procedures comprise statistical analyses of the questionnaire data with the computer software Statistical Package for the Social Sciences (SPSS) and AMOS. First, data has been tested for selection and non-response bias (see under result section 4.1.2 and 4.1.3). Second, variables of the study analyzed to test the assumption retention of respective parametric and none-parametric statistical analysis methods. Third, scales tested for reliability and validity through proper procedures. .

The statistical tests selection of the present study depended on expert literature (Acton, Miller, Fullerton, & Matlby, 2009) and statistical tests in scientific articles that were undertaken in comparable situations (e.g. Oosterbeek et al., 2010; vonGraevenitz et al., 2010).

The common traditional statistical methods employed in contesting groups of study participants with a pre-posttest measure of data are ANOVA on the gain scores, ANCOVA, ANOVA on residual scores, and Repeated measures ANOVA. The purpose of using pretest scores in all of these methods is to reduce error variance and produce more powerful tests

than designs with no pretest data (Stevens, 2012). With such nonrandomized control-group design, the groups compared cannot be assumed equivalent on the pretest. According to Dimitro & Rumrill (2003), the advantage of this design over the rest is that it involves intact groups (i.e., keeps the participants in natural settings), thus allowing a higher degree of external validity. Therefore, the data analysis with this design has used ANCOVA statistical procedure. The main hypotheses of the study have been tested by ANCOVA, Chi-square, and SEM-path analysis.

First, the group test-retest Mean difference hypotheses tested by ANCOVA. Second, generic learning outcome evaluation (including the open-ended qualitative data) was tested by Chi square test. Since the purpose of the learning outcome assessment aimed at testing the association of the course learning methods and corresponding behavioral changes, chi-square found an appropriate test. In order to analyze data obtained from the open-ended items about generic learning outcomes, standard qualitative research procedures used (e.g., Creswell, 2002). Responses have categorized according to The Ten EMPREC's Model of Entrepreneurial competencies and behaviors. The ten categories of entrepreneurial competence learning outcomes also categorized again into three major learning outcomes (cognitive, skill and affective) as prescribed by Fisher et al. (2008). The process was conducted on an excel sheet manually. The tally of the learning outcomes quantified and analyzed by a Two-way contingency Multiple Response Data analysis method. Hence, the chi-square cross tabulation statistic used to determine if the frequency counts of entrepreneurial generic learning outcomes were significantly associated with course delivery methods.

Third, the prediction of antecedents of entrepreneurial intention and its implementation cues determined by SEM-path analysis. To test the inter-relationships among independent and dependent variables, by using the statistical analysis package AMOS 18.0 (Analysis of Moment Structures), SEM pass analysis employed. Path analysis is a subset of SEM, which is a multivariate procedure that examines multi-relationships between one or more independent variables, and one or more dependent variables (Ullman & Bentler, 1996).

The use of the SEM path analysis is pertinent in this study because it can simultaneously estimate a series of multiple regressions equations derived from our research model for modeling the students' entrepreneurial intentions. In multiple regression analysis, all independent variables assumed to affect the dependent variable directly. On the other hand, path analysis can test models with multiple dependents, and to model mediating variables

(Anderson & Gerbing, 1988). Thus, indirect relationships have been calculated in the modeling process. In the path model, the relationship between any two variables indicated by a coefficient, which is computed by controlling for all other relationships. Another advantage of SEM path analysis is that this technique examines the goodness of fit for different nested models, indicating if the proposed model is good or not (Kline, 1998). Therefore, by applying the path analysis technique, this study sought to develop a model to explain the extent to which entrepreneurship learning- teaching models have an impact on the students' entrepreneurial intention and its implementation cues towards creating a venture.

In order to ensure the collected data were appropriate for further analysis, preparatory tests had examined. These tests entail checking for MVA, nonresponse bias, test of normality, multicollinearity, reliability, and validity of the data. For all preparatory tests and tests in the analysis section, the standard cut-off point for accepting hypotheses was $\alpha=0.05$.

3.7.1. Missing value analysis

Missing value analysis has been conducted for the present data. Table 5 depicts that there is no missed value reported across all variables. Thus, no doubt of statistical errors that potentially could distort findings of this study resulted from response bias.

Table 5

Missing Value Analysis

Variable/Test	EELM (N=114)		TETM (N=88)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<i>Posttests</i>				
EI	5.59	1.13	3.66	1.21
Eat	5.72	0.98	4.43	1.32
Esnb	3.81	1.91	3.39	1.58
Epbc	5.45	0.96	3.89	1.14
EIIC	4.95	1.11	2.41	0.95
Esc	4.98	1.18	3.65	1.46
Eam	5.50	1.06	4.12	1.50
<i>Pretests</i>				
EI	3.01	0.91	2.78	1.09
Eat	3.10	1.19	2.88	1.07
Esnb	2.33	1.31	2.15	1.27
Epbc	2.63	1.19	2.49	1.16
EIIC	2.12	1.01	2.04	0.94

	EELM (N=114)		TETM (N=88)	
Esc	3.02	0.95	2.86	1.03
Eam	3.14	1.26	3.14	1.40
No Missing Value Reported				

3.7.2. Outliers

Outlier test of the present data was detected by using box plots, univariate z test, and multivariate Mahalanobis distance measure by a Chi square test respectively. Accordingly, univariate cases for which Z-value is greater than ± 3.2 , and multivariate cases whose Mahalanobis distance Chi-square value of $X^2(7, 200) = 24.322$; $p > 0.001$) for each pre and posttest score is transformed through mean estimation.

3.7.3. Normality

One important assumption of parametric tests is the normality of variables. Although there are numerous methods that are helpful for checking normality of variables, for the current data, skewness and kurtosis indicators were employed. As indicated by Table 6, the calculated skewness and kurtosis value of each variable is within the range of normality assumption, i.e., $> \pm 2$.

Table 6
Normality Test of the Post and Pre-Test Measure

	EELM (N=114)		TETM (N=88)	
Variables	Skewness	Kurtosis	Skewness	Kurtosis
Posttest				
EI	-.908	.608	.081	-.417
Eat	-.958	1.548	-.340	.098
Esnb	-.042	-1.245	.216	-.546
Epbc	-.456	.450	-.005	.218
EIIC	-.660	-.442	.004	-1.196
Esc	-.507	-.138	.365	-.186
Eam	-.414	-.952	-.052	-.826
Pretests				
EI	.034	-.841	.540	.377
Eat	.126	-.814	-.044	-.708
Esnb	.681	-.649	1.143	1.230
Epbc	.620	.046	.769	.513
EIIC	1.022	.851	.607	-.598
Esc	.115	-.476	-.135	-.819

	EELM (N=114)		TETM (N=88)	
Eam	.188	-.869	.326	-.263

On the other hand, Kolmogorov-Smirnov and Shapiro-Wilk's test of normality indicates the assumption is retained among most of the covariate variables, whereas the post-tests failed to satisfy the test.

3.7.4. Multicollinearity

The collinearity of variables diagnosed through two ways. The first is tolerance, which measures the correlation between the independent variables and varies between 0 and 1, with 0 being an indication of a very strong relation between the examined independent variables. Collinearity is indicated if the tolerance value is "very low" (Brace, Kemp, & Snelgar, 2016). Variance Inflation Factor (VIF) is an alternative indicator of collinearity, where large values indicate a strong relationship between independent variables. However, different researchers in the area have argued differently, the rule of thumb of VIF ranges from greater than 2, to 7. The tolerance and VIF statistics were calculated and indicated high tolerance values of >0.595 and low VIF <1.6 and therefore, as depicted under Table 7 multicollinearity was not evident in this research.

Table 7
Mult-colleairiiti Coefficients of Pre- and Posttest of Measured Variables

Variable tested	EELM (N=114)		TETM (N=88)	
	Tolerance	VIF	Tolerance	VIF
Posttest				
EI	.31	3.22	.49	2.04
Eat	.59	1.69	.44	2.25
Esnb	.69	1.46	.64	1.56
Epbc	.45	2.22	.73	1.36
EIIC	.38	2.65	.69	1.45
Esc	.45	2.23	.41	2.44
Eam	.50	1.98	.43	2.34
Pretest				
EI	.69	1.45	.48	2.08
Eat	.64	1.55	.48	2.10
Esnb	.67	1.50	.70	1.44
Epbc	.54	1.84	.50	1.99
EIIC	.59	1.70	.67	1.49
Esc	.76	1.31	.84	1.18
Eam	.68	1.47	.65	1.54

3.7.5. Homogeneity of regression slope

The homogeneity regression slope of the two groups was non-insignificant. Therefore, the data have not met the assumption. However, the analysis has retained most of the assumptions (except perceived behavioral control in experimental group and entrepreneurial motivation in the control group) of homogeneity of regression slopes within groups, (i.e., between the dependent variable and the covariates. Thus, it was statistically tolerable to pursue the analysis of the current data by ANCOVA.

3.7.6. Homogeneity of variance

The homogeneity of variance of each variable measured from each group. As presented in Table 8, the variances of pretests or covariates (except entrepreneurial intention) have met the assumption. However, the variance of three of the post-test measured variables (i.e., attitude, subjective normative belief, and achievement motivation) has not met the assumption. Therefore, the homogeneity variance of posttests (the three mentioned) is determined through two mechanisms.

Table 8

Levene's Test of Equality of Error Variances (Pre and Posttests)

	EI	Eat	Esnb	Epbc	EIIC	Esc	Eam
<i>Pretests</i>							
F	1.1	2.21	.52	.01	.05	1.66	.19
df1	1	1	1	1	1	1	1
df2	200	200	200	200	200	200	200
Sig.	.296	.138	.471	.922	.824	.2	.656
<i>Posttest</i>							
F	.133	5.36	7.78	1.76	1.21	2.46	11.87
df1	1	1	1	1	1	1	1
df2	200	200	200	200	200	200	200
Sig.	.716	.022	.006	.185	.272	.118	.001

First, the variance of each measured variable should not be greater than the other variable. Second, the maximum variance of any of the measured variables divided by the lowest variance value of the measured variable should not be greater than two. In order to do so, the

variances of the measured variables assessed independently for pre and post data. Finally, as indicated by table 9, the assumption of homogeneity of variance retained.

Table 9

Variance of Study Variables

Variance	Posttests, (N=202)						Pretests							
	EI	Eat	Esnb	Epbc	EIIC	Esc	Eam	EI	Eat	Esnb	Epbc	EIIC	Esc	Eam
	2.3	2.0	3.2	2.1	2.3	2.1	2.1	1.7	1.3	1.7	1.4	1.0	1.0	1.8

3.7.7. Tests of reliability

Table 10 provides Cronbach α value and inter-item relationship of coefficients of all scales which are at minimum >0.85 . As a general rule of thumb, scales are considered to be internally consistent when the Cronbach α is above 0.6. Accordingly, as it is presented under table 9, the reliability of pretest scores were .88, .88, .89, .89, .89, .88, and .85; for EI, Eat, SNB, PBC, EIIC, Esc, and Eam were reported respectively.

Table 10

Reliability of Pre-Post Tests of Measuring Scales

Items	Inter Item r	Cronbach	Inter Item r Cronbach a test	
			Pretest	Posttest
EI1	0.73	0.88	0.84	0.94
EI2	0.67		0.82	
EI3	0.71		0.81	
EI4	0.71		0.83	
EI5	0.68		0.82	
EI6	0.67		0.79	
EAT1	0.62	0.88	0.78	0.91
EAT2	0.76		0.77	
EAT3	0.75		0.82	
EAT4	0.74		0.81	
EAT5	0.67		0.74	
EAT6	0.62		0.78	
SNB1	0.79	0.89	0.78	0.89
SNB2	0.82		0.87	
SNB3	0.77		0.74	
PBC1	0.66		0.80	
PBC2	0.73		0.80	
PBC3	0.71		0.86	
PBC4	0.70	0.84		
PBC5	0.77	0.74		
PBC6	0.70	0.79		
EIIC1	0.66	0.89	0.82	0.95
EIIC2	0.78		0.85	
EIIC3	0.76		0.88	
EIIC4	0.78		0.87	
EIIC5	0.73		0.88	
EIIC6	0.63		0.78	
Esc1	0.70	0.88	0.75	0.92
Esc2	0.72		0.81	
Esc3	0.69		0.74	
Esc4	0.70		0.78	
Esc5	0.68		0.82	
Esc6	0.69		0.80	

<i>Items</i>	<i>Inter Item r</i>	<i>Cronbach</i>	<i>Inter Item r</i>	<i>Cronbach a test</i>
<i>Pretest</i>			<i>Posttest</i>	
Eam1	0.68	0.85	0.78	0.93
Eam2	0.62		0.80	
Eam3	0.63		0.75	
Eam4	0.64		0.86	
Eam5	0.65		0.80	
EAM5	0.56		0.77	

On the other hand, Cronbach $\alpha = .94, .91, .89, .93, .95, .92$ and $.92$ value of reliability were reported for the posttest measures of EI, Eat, SNB, PBC, EIIC, Esc and Eam respectively. Therefore, it is acceptable to assume that the scales used in this study are internally consistent.

3.7.8. Construct validity

As reported under the pilot study section of this chapter, the face and content validity of the instruments assessed through the feedback of experts during the development stage of the questionnaire. Since the numbers of participants in the pilot study were few, construct validity was not examined. By using the recommendation of Sanders et al. (2015), factor analyses conducted to evaluate construct validity i.e. assess the extent to which items in a scale measure the same construct theme.

Before determining the result of principal component analysis, the fitness of the data and sample for factor analysis evaluated. As Bartlett's Test of Sphericity (Table 10) indicated, there was an appropriate correlation among variables ($\chi^2 = 7138.4$; $DF=703$, $p < .00$). On the other hand, the sample sufficiency test indicator test of Kaiser-Meyer-Olkin's (KMO) value of 0.95 indicated it exceeded the recommended value of 0.50 (Kaiser, 1974).

Table 11
KMO and Bartlett's Test of Measuring scales

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.954
Bartlett's Test of Sphericity	Approx. Chi-Square	7138.458
	df	703
	Sig.	.000

The dimension reduction result of principal component analysis (PCA) revealed that a seven component solution with a cumulative total variance explained of 77.3% has been observed. Table 12 also indicates that the variance explained per factor was 13.0% , 12.7% , 11.4% ,

11.4%, 11.0%, 10.7%, and 7.1% for EIIC, Esc, Eam, Eat, EI, PBC, and SNB respectively. Therefore, the preparatory statistical tests have indicated that this study retained the assumptions of statistical analysis proposed to the hypotheses.

Table 12
Factor Analysis of Construct Validity Assessment (posttest)

Items	Component						
	1	2	3	4	5	6	7
EIIC5	0.78						
EIIC4	0.78						
EIIC3	0.77						
EIIC1	0.71						
EIIC6	0.70						
EIIC2	0.68						
Esc5		0.74					
Esc6		0.74					
Esc2		0.73					
Esc3		0.73					
Esc1		0.70					
Esc4		0.69					
Eam5			0.80				
Eam4			0.79				
Eam6			0.78				
Eam2			0.68				
Eam1			0.62				
Eam3			0.57				
EAT3				0.80			
EAT1				0.78			
EAT2				0.76			
EAT5				0.75			
EAT4				0.74			
EI4					0.76		
EI5					0.70		
EI2					0.68		
EI6					0.67		
EI3					0.66		
EI1					0.61		
PBC4						0.73	
PBC3						0.71	
PBC6						0.69	
PBC1						0.68	
PBC2						0.64	
PBC5						0.63	
SNB2							0.92
SNB1							0.88
SNB3							0.81
Eigenvalues after rotation	4.94	4.85	4.33	4.32	4.19	4.08	2.71
Variance explained by individual factor after varimax rotation (%)	13.0	12.7	11.4	11.4	11.0	10.7	7.1
Total Variance Explained: 77.37%	EIIC	Esc	Eam	Eat	EI	PBC	SNB

3.8. Ethical and Legal Considerations

Regarding ethics in educational research, most definitions either explicitly or implicitly emphasize the importance of subjecting oneself and the research process for customarily and legally binding rules in protecting social values of and health of study participants (Sieber 1993; Morrow & Richards 1996). Hence, this research conducted with an ethic of identifying and valuing all research participants of the study. Adherence to this ethic of research implies the following responsibilities on the part of the researcher for this study; voluntary informed consent of study participants, openness and disclosure about the processes and end results of the study, right to withdraw during the study process, and incentives for all (if any). On the other hand, the research finding will be dispatched for supporting organizations as per the stated agreement. All previous works included in this study acknowledged and referenced based on APA 7th edition guidelines. If any irregularity of citation and referencing observed, for sure, no deliberate addition and omission. Finally, the researcher will be responsible for all misconducts caused by this dissertation either by academic policy disciplinary measures of the University or will comply with Regional and federal laws and regulations of the country.

CHAPTER 4: RESULTS

This study has intended to test the differential impact of experiential entrepreneurial learning method on entrepreneurial intentions of higher education prospective graduating students compared to the Traditional entrepreneurial Teaching Method.

This chapter reports results of the data analyses. The result of the study has based on the data obtained from 202 final year students who admitted and completed the course entrepreneurship and small business management at Wollo University, College of Agriculture.

The chapter begins its presentation by showing some important demographic characteristics of participants, pretest equivalence of study group mean difference and course expectation tests. The result presentation follows tests of mean differences of course models by entrepreneurial intention (EI) and its antecedents, relationship of EI antecedents, the dependability of TPB and the mediated effects of EI and EIIC has presented. Finally, data analysis of the type of teaching/learning methods and its association to generic learning outcomes in line of students' course evaluation is presented.

4.1. Basic Information

4.1.1. Demographic characteristics

As shown in table 13, 78(38%) and 36(17%) of the EELM group participants were male and female respectively. On the other hand, 47(23.3%) and 41(20.3%) of the TETM group participants were male and female respectively.

Table 13

Basic Information of Participants

Group	SEX		LOAN	CGPA	AGE
Experimental	Male	N	78	78	76
		Mean		3.01	22.22
		Std.Deviation		.49	1.302
		% of Total N	38.6%	38.6%	38.4%
Control	Female	N	36	36	36
		Mean		2.64	21.67
		Std.Deviation		.32	.76
		% of Total N	17.8%	17.8%	18.2%
Experimental	Male	N	47	47	45
		Mean		3.08	22.56
		Std. Deviation		0.55	1.289
		% of Total N	23.3%	23.3%	22.7%
Control	Female	N	41	41	41
		Mean		2.77	21.71
		Std. Deviation		0.45	.901
		% of Total N	20.3%	20.3%	20.7%

In the same Table (13), the average age of participants in the EELM were 22.2 and 21.6 for male and female respectively, 22.5 and 21.7 for male and female in the TETM group participants respectively. Concerning the CGPA of participants, 3.01 and 2.46 for male and female EELM group participants respectively, and 3.08 and 2.77 for male and female TETM group participants respectively reported in the same table.

4.1.2. Pre-course intervention EI test results

Before participants exposed to their respective entrepreneurship courses, the EI of study groups examined. This test aimed at examining if there were potential differences in entrepreneurial intentions because of prior experience or other factors that could have affected the EI of study participants and so that minimizing biased outcomes.

Table 14
Mean and Standard deviation of Study Groups (Pre-test)

	EI		Eat		Esnb		Epbc		EIIC		Esc		Eam	
	CG	EG	CG	EG	CG	EG	CG	EG	CG	EG	CG	EG	CG	EG
<i>N</i>	88	114	88	114	88	114	88	114	88	114	88	114	88	114
<i>M</i>	2.78	3.01	2.88	3.10	2.15	2.33	2.49	2.63	2.04	2.12	2.86	3.02	3.14	3.14
<i>SD</i>	1.09	0.91	1.07	1.19	1.27	1.31	1.16	1.19	0.94	1.01	1.03	0.95	1.40	1.26

Table 15
ANOVA Table of Pre-test Result of EI and Its Antecedents between Study Groups

Source of Differences		Sum of Squares	DF	Mean Square	F	Sig.
EEI	Between Groups	2.546	1	2.546	2.584	.110
	Within Groups	197.015	200	.985		
	Total	199.560	201			
EAT	Between Groups	2.315	1	2.315	1.789	.183
	Within Groups	258.878	200	1.294		
	Total	261.193	201			
SNB	Between Groups	1.660	1	1.660	.992	.321
	Within Groups	334.744	200	1.674		
	Total	336.404	201			
PBC	Between Groups	1.006	1	1.006	.729	.394
	Within Groups	275.833	200	1.379		
	Total	276.839	201			
EIIC	Between Groups	.326	1	.326	.340	.560
	Within Groups	191.689	200	.958		
	Total	192.015	201			
ESC	Between Groups	1.234	1	1.234	1.270	.261
	Within Groups	194.394	200	.972		
	Total	195.627	201			
EAM	Between Groups	.000	1	.000	.000	.997
	Within Groups	350.905	200	1.755		
	Total	350.905	201			

As table 14 and 15 indicate, there was a none significant mean difference between EELM and TETM group of study participants in entrepreneurial intention and its antecedents. As indicated at Table 15; *EI*, $F(1, 201) = 2.58$; $p > 0.11$; *Eat*, $F(1, 201) = 1.78$, $p > 0.183$; *Esnb*, $F(1, 201) = 0.992$; $p > 0.321$; *Epbcb*, $F(1, 201) = 0.730$; $p > 0.394$; *EIIC*, $F(1, 201) = .341$; $p > 0.560$; *Esc*: $F(1, 201) = 1.28$; $p > .259$; and *Eam*, $F(1, 201) = .00$; $p > .996$. Thus, based on the statistical output evidenced, there were no pre-course intervention statistical differences between the two group participants in their EI and its antecedents. Hence, the selected participants can be considered as appropriate as arranged experimental and control groups. Thus, in this regard, selection bias was not evident.

4.1.3. Association of study groups and course expectations

In order to test whether course expectation of participants is significantly associated with study groups or not, and to minimize selection bias of study groups Chi-square test was employed. As indicated in table 16, to the question “what do you expect to have after the completion of the course entrepreneurship and small business management?” participants assigned as control group responded that 27.3% “I have no any expectation”, 38.6%; “knowledge of entrepreneurship”, and 34.1% of them business creation or running their own business respectively.

Table 16

Association Between Course Expectation and Study Groups

			Group		Total
			TETM	EELM	
CourEXp	Have No any Expectation	Count	24	38	62
		Expected Count	27.0	35.0	62.0
		% within Group	27.3%	33.3%	30.7%
	Knowledge of Entrepreneurship	Count	34	40	74
		Expected Count	32.2	41.8	74.0
		% within Group	38.6%	35.1%	36.6%
	Business Creation	Count	30	36	66
		Expected Count	28.8	37.2	66.0
		% within Group	34.1%	31.6%	32.7%
Total	Count	88	114	202	
	Expected Count	88.0	114.0	202.0	
	% within Group	100.0%	100.0%	100.0%	

On the other hand, for the same item, participants assigned as an experimental group responded that 30.7%; “I have no any expectation”, 35.1%; “knowledge of

entrepreneurship”, and 31.6%”; “business creation or running their own business”. As the test of association between the type of group and the three course expectations indicated in Table 17, the result was statistically non-significant; ($\chi^2=.861$; $df=2$, $p>.650$).

Table 17

Chi-Square Tests of Independence Between study Groups and Course Expectation

	Value	DF	Asymp. Sig. (2-sided)
Pearson Chi-Square	.861 ^a	2	.650
Likelihood Ratio	.866	2	.649
Linear-by-Linear Association	.573	1	.449
N of Valid Cases	202		

Therefore, it can be concluded that the group assignment of participants was independent of course expectation, or it can be concluded that the findings of this study related with entrepreneurial intention of participants was independent of course expectation of study groups.

4.2. The Impact of Entrepreneurship Course Education on EI

The impact of the entrepreneurship course facilitated by both experiential and traditional teaching-learning methods on Entrepreneurial intention (EI) and its antecedents were measured by paired t-test. The descriptive statistics (i.e., Mean) result of both groups presented in Table 18 shows that the post measured EI, Eat, Esnb, Epsc, EIIC, Esc and Eam Mean score of both the EELM and TETM group of participants were higher (except the EIIC of TETM study groups) than the pre-course intervention measured Mean scores.

Table 18

Mean and Standard Deviations of Impacts of Entrepreneurial Learning Methods

Variables	TETM Groups		EELM Groups	
	M	SD	M	SD
El _t	3.66	1.21	5.59	1.13
El _{t-1}	2.78	1.09	3.01	0.91
Eat	4.43	1.32	5.72	0.98
EAT ₋₁	2.88	1.07	3.10	1.19
Esnb _t	3.39	1.58	3.81	1.91
Esnb _{t-1}	2.15	1.27	2.33	1.31
Epsc _t	3.49	1.37	5.45	0.96
Epsc _{t-1}	2.49	1.16	2.63	1.19
EIIC _t	2.41	0.95	4.95	1.11
EIIC _{t-1}	2.04	0.94	2.12	1.01
Esc _t	3.65	1.46	4.98	1.18

	TETM Groups		EELM Groups	
Esc _{t-1}	2.86	1.03	3.02	0.95
Eam _t	4.12	1.50	5.50	1.06
Eam _{t-1}	3.14	1.40	3.14	1.26
N		88		114

X_t = post test result
X_{t-1} = pretest result

In order to test the significance of the higher mean score observed under table 18, paired t-test employed. Accordingly, as shown in Table 19, the impact of the traditional entrepreneurship course teaching method was statistically significant on EI, $t(87) = 5.27$; $p < .00$, Eat; $t(87) = 7.82$; $p < .00$, Esnb; $t(87) = 6.06$; $p < .00$, EPBC; $t(87) = 5.45$; $p < .00$, EIIC, $t(87) = 5.45$; $p < .006$, Esc; $t(87) = 3.94$; $p < .00$, and, Eam; $t(87) = 4.57$; $p < 0.00$.

Table 19

Paired t-test Results of TETM and EELM Groups

Attributes	TETM Group					EELM Group				
	M	SD	T	DF	Sig.	M	SD	t	DF	Sig.
EI _t – EI _{t-1}	0.88	1.57	5.27	87	0.00	2.59	1.39	19.82	113	0.00
Eat – EAT _{t-1}	1.54	1.85	7.82	87	0.00	2.62	1.60	17.47	113	0.00
Esnb _t – Esnb _{t-1}	1.24	1.92	6.06	87	0.00	1.48	2.14	7.35	113	0.00
Epbct – Epbct _{t-1}	1.01	1.73	5.45	87	0.00	2.81	1.53	19.57	113	0.00
EIIC _t – EIIC _{t-1}	0.37	1.23	2.80	87	0.01	2.83	1.48	20.47	113	0.00
Esc _t – Esc _{t-1}	0.78	1.86	3.94	87	0.00	1.96	1.42	14.74	113	0.00
Eam _t – Eam _{t-1}	0.98	2.01	4.57	87	0.00	2.37	1.65	15.31	113	0.00

In the same vein, all the variables were statistically improved for the EELM study group participant: EI, $t(113) = 19.82$; $p < 0.00$, Eat, $t(113) = 17.47$; $p < 0.00$, Esnb, $t(113) = 7.35$; $p < 0.00$, Epbct, $t(113) = 19.57$; $p < 0.00$, EIIC, $t(113) = 20.47$; $p < 0.00$, Esc, $t(113) = 14.74$; $p < 0.00$, and Eam, $t(113) = 15.31$; $p < 0.00$.

4.3. Measuring the Differential Impact of EELM

4.3.1. Mean differences of entrepreneurship course methods on EI and its antecedents

The differential impact of EELM on the three entrepreneurial intention antecedents, as modeled by Ajzen (1991) i.e., entrepreneurial attitude (Eat), subjective normative belief (SNB) and perceived behavioral control (PBC) as a proximal indicator of strong intention to establish one's venture were measured and tested by ANCOVA. As the descriptive statistics results of the measured variables indicated in Table 20, the mean and standard deviation of study participants learned entrepreneurship by the traditional entrepreneurship teaching method scored: Entrepreneurial Attitude ($M= 4.43, SD = 1.3$), Subjective Normative belief ($M=3.4, SD=1.6$) and Perceived Behavioral Control ($M=3.89, SD=1.14$). On the other hand, study participants learned entrepreneurship by experiential entrepreneurial learning method scored: Entrepreneurial Attitude ($M= 5.7, SD = .94$), Subjective Normative belief ($M=3.8, SD=1.9$) and Perceived Behavioral Control ($M=5.4, SD=.96$).

Table 20
Mean and Standard Deviation of EELM and TETM Groups' EI and Its Antecedents

Variables	Group	Mean	Std. Deviation	N
Eat	TETM	4.43	1.32	88
	EELM	5.72	0.94	114
	Total	5.16	1.30	202
SNB	TETM	3.39	1.58	88
	EELM	3.81	1.91	114
	Total	3.62	1.78	202
PBC	TETM	3.89	1.14	88
	EELM	5.45	0.96	114
	Total	4.77	1.30	202
Esc	TETM	3.65	1.45	88
	EELM	4.97	1.18	114
	Total	4.39	1.46	202
Eam	TETM	4.12	0.12	88
	EELM	5.50	0.14	114
	Total	4.98	0.12	202
EI	TETM	3.7	1.2	88
	EELM	5.6	1.1	114
	Total	4.8	1.5	202
EIIIC	TETM	2.4	1.2	88
	EELM	4.9	1.1	114
	Total	3.8	1.3	202

The Mean score of all the three antecedents of entrepreneurial intention was higher for participants learned by the Experiential Entrepreneurial Learning Method (EELM). The

differential impact of EELM on Entrepreneurial achievement motivation (Eam) and Entrepreneurial Self-concept) was also measured compared to the impact of traditional entrepreneurial teaching method.

As the descriptive statistics result reported under table 20 shows, study participants in the traditional Entrepreneurial Teaching Method TETM group scored an entrepreneurial self-concept: ($M=3.66$, $SD=1.45$), and Entrepreneurial achievement motivation: ($M=4.1$; $SD=1.5$). On the other hand, study participants learned entrepreneurship through experiential entrepreneurial Learning Method scored an entrepreneurial self-concept: ($M=5.1$; $SD=.98$) and an entrepreneurial achievement motivation: ($M=5.5$, $SD=1.1$). In the same vein, Entrepreneurial Intention (EI) and Entrepreneurial Intention Implementation Cue activities of study participants learned by the two teaching methods examined. Based on the information indicated in Table 20, the study participant students assigned in the TETM score mean and standard deviation for Entrepreneurial Intention: EI ($M=3.7$, $SD=1.2$), and for entrepreneurial intention implementation cues: ($M=2.4$; $SD=1.2$). On the other hand, those students learned entrepreneurship by the experiential method scored mean and standard deviation for entrepreneurship intention: ($M=5.6$; $SD=1.1$), and entrepreneurial intention implementation cues ($M=4.9$, $SD=1.1$). As the stated Mean scores depicted comparing the two teaching/learning entrepreneurial methods, students who learned entrepreneurship through the experiential method scored higher mean in all measured variables than students who learned entrepreneurship by the traditional teaching method.

Followed by the mean score presentation, by controlling all pretests, the significance of the mean difference of study groups by EI and its antecedents was measured by ANCOVA. As the ANCOVA test result presented in Table 21 indicates, a significant mean difference in Eat and Eabc between EELM and TETM groups were obtained: Eat, $F(1, 197) = 66.02$; $P < 0.00$; *Partial Eta Squared* = 0.255; PBC, $F(1, 197) = 106.22$; $P < 0.00$; *Partial Eta Squared* = 0.35. On the other hand, though the mean score of subjective normative belief of study participants learned by the EELM was higher ($M=3.8$, $SD=1.9$ Vs. $M=3.5$, $SD=1.3$), the difference was not statistically significant; $F(1, 197) = 2.53$; $P > 0.11$; *Partial Eta Squared* = 0.013.

Table 21
ANCOVA test of EELM and TETM Groups' and Its Antecedents

Dependent Variable		Sum of Squares	Df	Mean Square	F	Sig.	Partial Eta Squared
Eat	Contrast	84.69	1	84.69	66.02	0.00	0.25
	Error	252.73	197	1.28			
SNB	Contrast	7.82	1	7.82	2.53	0.11	0.013
	Error	609.58	197	3.09			
PBC	Contrast	114.28	1	114.28	106.22	0.00	0.35
	Error	211.94	197	1.08			
Esc	Contrast	87.02	1	87.02	50.33	0.00	0.20
	Error	342.35	198	1.73			
Eam	Contrast	95.70	1	95.70	58.76	0.00	0.23
	Error	322.46	198	1.63			
EI	Contrast	177.26	1	177.26	129.59	0.00	0.40
	Error	270.83	198	1.37			
EIIC	Contrast	317.71	1	317.71	290.44	0.00	0.60
	Error	216.59	198	1.09			

Similarly, the two variables, particularly, entrepreneurial self-concept added on the model of and achievement motivation for entrepreneurship were tested with similar procedure of the ANCOVA. As indicated by table 21, there is a significant mean difference in entrepreneurial self-concept (Esc) and entrepreneurial achievement motivation (Eam) of the study participants learned entrepreneurship by EELM and TETM; entrepreneurial self-concept, $F(1, 198) = 50.33$; $P < 0.00$; *Partial Eta Squared* = 0.20; entrepreneurial achievement motivation, $F(1, 198) = 58.76$; $P < 0.00$; *Partial Eta Squared* = 0.23. The ANCOVA test indicated that students who learned entrepreneurship by the experiential entrepreneurial learning method had an improved or enhanced entrepreneurial self-concept and achievement motivation than students who learned by the traditional entrepreneurial teaching method.

Finally, the compared Mean difference (indicated in Table 21) of the two groups' EI and EIIC also measured by ANCOVA. As shown by Table 20 a significant mean difference in entrepreneurial intention (EI) and its implementation cues (EIIC) between students learned entrepreneurship by EELM and TETM were obtained, EI; $F(1, 198) = 129.59$; $P < 0.00$; *Partial Eta Squared* = .40; EIIC); $F(1, 198) = 290.44$; $P < 0.00$; *Partial Eta Squared* = 0.60. Hence, compared to the traditional entrepreneurial teaching method, one can conclude that experiential entrepreneurial learning method can enhance entrepreneurial intention and its implementation cue activities of students.

4.3.2. Testing TPB through the two competing entrepreneurship course teaching methods

The TPB model has been tested using SEM path analysis with AMOS 18.0. In the path model, attitude, perceived behavioral control and subjective normative belief considered as an exogenous variable and intention and intention implementation cues were considered as endogenous variables.

Based on the information provided in Table 22, a significant correlation between entrepreneurial perceived behavioral control and attitude for EELM group ($r=0.251$, $p<0.00$) and TETM group ($r= 0.37$, $p<0.00$) were obtained. On the other hand, a significant correlation between attitude and subjective normative belief ($r=0.34$, $p<0.00$) and perceived behavioral control and subjective normative belief (0.21 , $p<0.00$) for the TETM group of study participants were recorded.

Table 22
Correlations of EI Antecedents by Study Groups

Variables	EELM (N=114)			TETM (N=88)		
	Eat	Esnb	Epbc	Eat	Esnb	Epbc
Eat	1			1		
Esnb	0.15	1		.341**	1	
Epbc	.251**	0.173	1	.369**	.210*	1

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

*. Correlation is significant at the 0.05 level (2-tailed).

$X^2 = .698$; $df = 4$; $p = 0.952$; $GFI=.99$; $AGFI=.95$; $NFI=.97$; $CFI=.1.00$; $TLI=.96$; $RMSEA=.00$

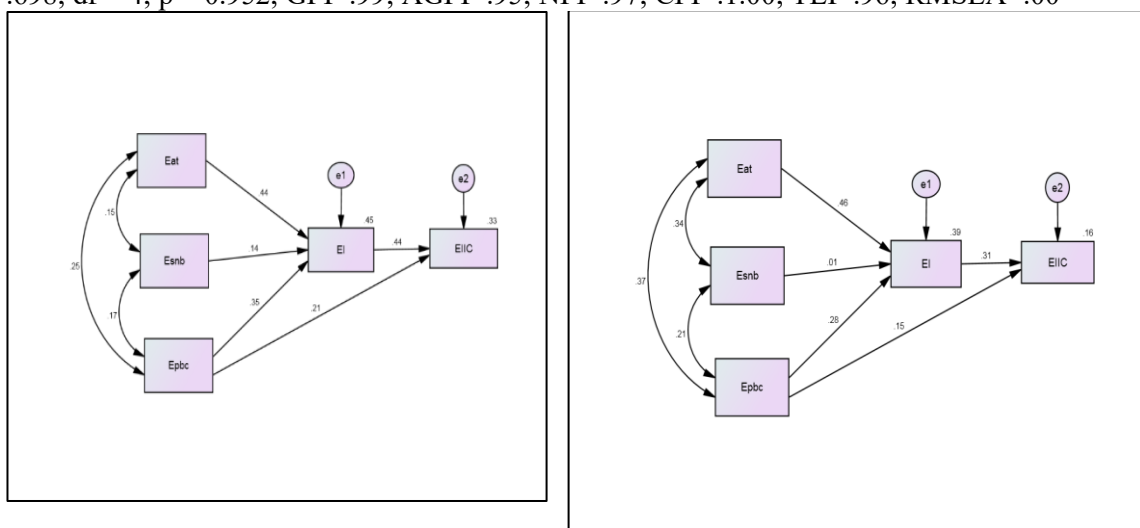


Figure 5. Entrepreneurship Course Teaching Method Group Standardized Estimates (EELM (left) and TETM (right)).

According to the results, as shown in Figure 4, the model testing for configurable invariance revealed that chi-square value was 0.621, which was not significant ($p > 0.05$). The rest model fit indices also suggested good model fit: GFI=.99; AGFI=.95; NFI=.97; CFI=.1.00; TLI=.96; RMSEA= .00. From this information, an inference can be drawn that the hypothesized multi-group model of TPB was fitting both the new and the existing entrepreneurship course model study participants group. Having established goodness-of-fit for the unconstrained model, the test process was further proceeded to test for the invariance of structure across the two groups. Table 23 comprises the comparison of the unconstrained model and two constrained models: structural weights and structural residuals models, where the structural weights and residuals are set to be equal across two groups (Byrne, 2010). The results indicate that though the parameters of the model were constrained, the three models have no significant difference $X^2(5, N = 202; = 7.80; p > 0.167; = 13.77; p > 0.25)$. Further, when the structural weights model was assumed to be correct, the structural covariance model was also not significantly different $X^2(6, N = 202; = 5.97; p > 0.426)$, providing further evidence that the three models were homogeneous. Thus, the TPB model under study was invariant across the two groups.

Table 23

Comparing the Unconstrained and Constrained Models

Model	DF	CMIN	P	NFI Delta-1	IFI Delta-2	RFI rho-1	TLI rho2
<i>Assuming model Unconstrained to be correct</i>							
Structural weights	5	7.804	.167	.040	.041	.079	.088
Structural covariances	11	13.775	.246	.070	.072	.081	.090
<i>Assuming model Structural weights to be correct</i>							
Structural covariance	6	5.971	.426	.031	.032	.002	.002

The TPB model is robust and valid across different groups of students. Therefore, it was appropriate to use TPB to study the entrepreneurial intention of students participated in the study. The impact of the two entrepreneurship teaching-learning methods on entrepreneurial intention was helpful in order to examine the nature of relationships of entrepreneurial intentions and its antecedents.

According to the test of regression reported in Table 24, entrepreneurial attitude and perceived behavioral control were found a significant predictor of entrepreneurial intention for both the experiential entrepreneurial learning method, i.e., $\beta = 0.38, p < 0.00; = 0.24,$

Table 24

Regression Weights and Level of Significance of the EELM and TETM course model effects

		EELM Group (N=114)					TETM Group (N=88)				
Variable		Estimate	S.E.	C.R.	P	R ²	Estimate	S.E.	C.R.	P	R ²
EI	<--- Eat	.381	.066	5.790	***		.392	.080	4.891	***	
EI	<--- Esnb	.126	.048	2.612	.009		.012	.073	.163	.871	
EI	<--- Epbc	.241	.069	3.503	***		.264	.087	3.048	.002	
EIIC	<--- EI	.422	.091	4.640	***		.245	.086	2.857	.004	
EIIC	<--- Epbc	.253	.082	3.066	.002		.109	.082	1.329	.184	
EI						0.402					.389
EIIC						0.312					.161

$p < .00$, respectively, and the traditional entrepreneurial teaching method study group participants: ($\beta = 0.39$, $p < .00$; $\beta = 0.26$, $p < .00$) respectively. However, subjective normative belief was found to be a significant predictor of entrepreneurial intention for the traditional entrepreneurial teaching method group participants alone; $\beta = 0.13$, $p < 0.01$, and insignificant for the experiential entrepreneurial learning method group of participants; $\beta = 0.012$, $p > 0.87$.

The rest two unique findings of the present study, as shown in Table 24 and Figure 4, are entrepreneurial intention has significantly predicted its implementation cues: in the EELM group, $\beta = .42$, $P < 0.00$, and in the existing TETM group, $\beta = 0.25$, $p < 0.004$). Contrary to the significant predictive capability of EI to EIIC for both teaching-learning method groups, entrepreneurial intention implementation cue was only significantly predicted from perceived behavior control in the new EELM group, $\beta = 0.25$, $p < .002$, and insignificant for the existing TETM group of participants, $\beta = .11$, $p < 0.18$. In the same table, predictors of entrepreneurial intention and entrepreneurial intention implementation cues have explained 40.2% and 31.2% and 38.9% and 16.1% of the variation of each predicted variable in the experiential and traditional entrepreneurial teaching learning method groups study participants respectively.

4.3.3. Relationships between entrepreneurial self-concept and EI and its antecedents

Entrepreneurial self-concept as mediator of perceived behavioral control and entrepreneurial intention, entrepreneurial perceived behavioral control, intention implementation cues, subjective normative belief, and entrepreneurial intention measured through path analysis (see Graph 5). To show the relationships, the influence of the two entrepreneurship course-

teaching methods on the mediating factor (entrepreneurial self-concept) presented on table 25.

The path analysis process revealed that the structural model fit index i.e., the chi square was non-significant X^2 (201, =8.33; $p>0.22$). The fact that the chi-square value is highly sensitive to sample size and it is not a reliable model fit index; other multiple good-of-fit indices also employed. Accordingly, GFI=.99; AGFI=.91; NFI=.97; CFI=0.99; TLI=.95; RMSEA=.044 have been obtained. Thus, the model can be considered as an identified model that can describe the impact of the meditational role of entrepreneurial self-concept.

Based on the path analysis result presented in table 25, entrepreneurial perceived behavioral control has significantly influenced entrepreneurial self-concept ($\beta =0.35$, $p<.002$) for the study groups who learned entrepreneurship by the EELM. However, entrepreneurial self-concept was not significantly predicted from entrepreneurial perceived behaviors; control for study groups who have learned entrepreneurship by the existing traditional method ($\beta =0.198$ $p<.07$).

$$X^2 = 8.3; \quad df = 6; \quad p = .217; \quad GFI=.99; \quad AGFI=.91; \quad NFI=.97; \quad CFI=0.99; \quad TLI=.95; \quad RMSEA=.044$$

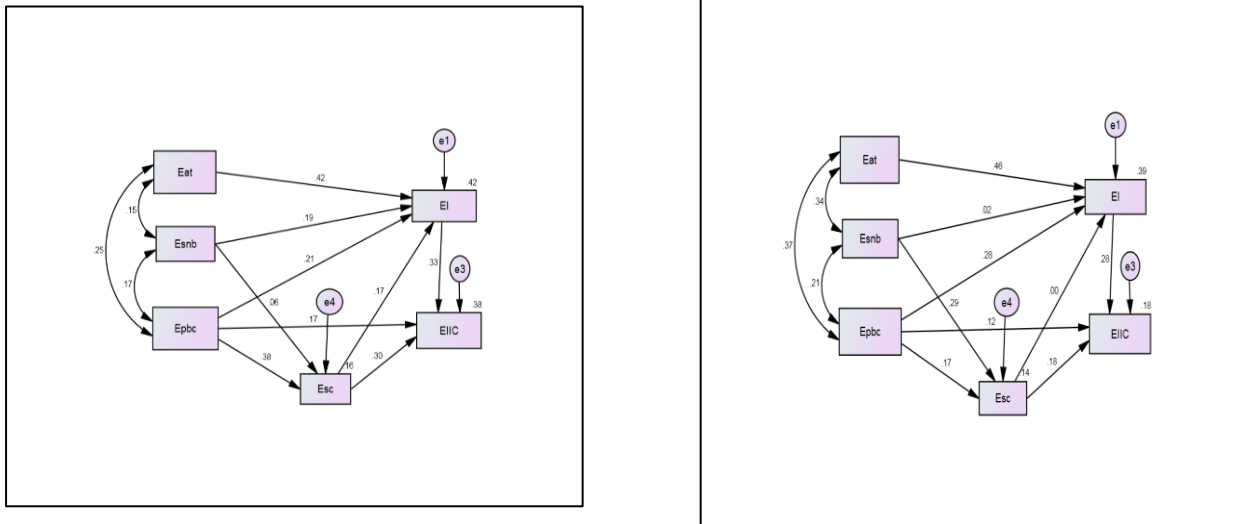


Figure 6; The EELM (right side) and TETM (left side) entrepreneurship course model standardized estimates (research model)

Table 25

Regression Weights and Level of Significance of the EELM and TETM Course Model Effects

		EELM					TETM					
Variable		Estimate	S.E.	C.R.	P	R ²	Estimate	S.E.	C.R.	P	R ²	
Esc	<-- Epbc	.35	.08	4.36	***		.198	.115	1.717	.09		
Esc	<-- Esnb	.04	.06	.66	.508		.284	.099	2.887	.004		
EI	<-- Esnb	.12	.05	2.54	.011		.012	.077	.162	.87		
EI	<-- Epbc	.19	.07	2.66	.010		.265	.088	3.006	.003		
EI	<-- Esc	.16	.08	2.13	.034		-.002	.076	-.030	.98		
EI	<-- Eat	.36	.06	5.66	***		.392	.080	4.899	***		
EIIC	<-- Epbc	.17	.08	2.04	.041		.088	.082	1.071	.28		
EIIC	<- Esc	.31	.08	3.69	***		.117	.065	1.790	.073		
EIIC	<- EI	.35	.09	3.93	***		.220	.084	2.619	.009		
ESC						0.16						0.14
EI						0.42						0.39
EIC						0.38						0.18

On the other hand, the subjective normative belief of study participants who learned entrepreneurship by the existing traditional teaching method has significantly affected their entrepreneurial self-concept, $\beta = 0.28$, $p < .004$). However, this was not true for the student participants who learned entrepreneurship by the new experiential learning method, $\beta = 0.38$, $p < .051$).

Regarding the effects of entrepreneurial self-concept on entrepreneurial intention and its implementation cues (see table 24), in EELM group of study participants the impact was significantly higher, $\beta = 0.16$, $p < .034$; $\beta = 0.31$, $p < .00$ respectively. Contrarily, for students who have learned entrepreneurship through the traditional entrepreneurial learning method, the effect of entrepreneurial self-concept on EI and EIIC was insignificant, $\beta = 0.002$, $p < .076$; $\beta = 0.12$, $p < .073$) respectively.

In the new experiential entrepreneurial learning method, when entrepreneurial self-concept mediated the relationship of entrepreneurial perceived behavioral control (see Table 25), predictors of entrepreneurial intention and its implementation cues have explained 42% and 38% of each variable's variance respectively. Predictors of Esc have also explained 16% of its variance. On the other hand, in the existing method 39% and 18% of variance of EI and its implementation cues (EIIC) explained by predictors of each variable. Furthermore, 14% of the variance of Esc explained by its predictors. When Esc added to the model, the change of the influence in entrepreneurial intention implementation cues for the new experiential entrepreneurial learning method group of study participants was two times higher than the existing traditional entrepreneurial teaching method group of study participants.

Table 26

The Indirect Effects of PBC, SNB and Esc on EI and EIIC

	Experiential Course			LDT Course		
	Epbcb	Esnb	Esc	Epbcb	Esnb	Esc
Esc						
EI	.057*	.006	.000	.000	-.001	.000
EIIC	.195**	.056*	.056*	.081**	.036	-.001

* Significant $\alpha=0.05$

** Significant $\alpha=0.01$

The indirect effect of entrepreneurial perceived behavioral control and subjective normative belief on entrepreneurial intention and its implementation cues mediated by entrepreneurial self-concept were measured. As the path analyzes result of SEM presented in Table 26 indicated, for the EELM group of students, the indirect of Epbcb on EI and EIIC mediated by Esc was statistically significant ($\beta= 0.057$; $p<0.05$, & $\beta= 0.195$; $p <0.01$) respectively. To the same group of participants, the indirect effect of subjective normative belief on entrepreneurial implementation cues mediated by Esc was statistically significant ($\beta=0.056$; $p<0.05$). ESC has also a significant indirect effect on EIIC mediated by EI ($\beta= 0.056$; $p <0.05$). In the same table, for students who learned entrepreneurship by the traditional teaching method, the indirect effect of their Esc and Epc on EIIC mediated by the existing group of students, the indirect effect of ESC and EPBC on EIIC mediated by EI was statistically significant ($\beta= 0.056$; $p <0.05$, & $\beta= 0.081$; $p <0.01$).

4.3.4. Association between entrepreneurial learning methods and learning outcomes

4.3.4.1. Association of perceived job creation attribution and entrepreneurship course models

To test the association of entrepreneurial learning-teaching method to the learning outcome of perceived job-creation responsibility attribution, a Chi square test employed. Since the newly designed experiential entrepreneurial learning method expected to improve the perceived job creation responsibility attribution, an association between self-responsibility of job creation and the experiential learning method is obviously expected.

For students participated in the study, the question “who do you expect to be responsible for you creating a job after your graduation?” was presented with three options; Government and family, Government and the student him/herself and the student him/her.

Table 27

Association of Entrepreneurial learning Methods and Perceived job Creation Responsibility of Study Groups

		Perceived Job Creation Responsibility			Total	
		Government/Family	Government and I am	I am		
Group	TETM	Count	42	21	25	88
		Expected Count	28.8	20.5	38.8	88
		% within Group	47.7%	23.9%	28.4%	100.0%
		Adjusted Residual	4.0	.2	-3.9	
	EELM	Count	24	26	64	114
		Expected Count	37.2	26.5	50.2	114
		% within Group	21.1%	22.8%	56.1%	100.0%
Total		Adjusted Residual	-4.0	-.2	3.9	
		Count	66	47	89	202
		% within Group	32.7%	23.3%	44.1%	100.0%

Based on the single item question, participants of the study who learned entrepreneurship by the existing traditional teaching method responded (see Table 27) that Government/ family 42(47.8%), Government and I am 23(23.9%), and I am 25(28.4%). Almost half of participants within the group have believed that the government has a responsibility of creating a job for university graduating students. On the other hand, the proportion of participants learned by the new experiential learning method responded to the same question that Government/ family 24(47.8%), Government and I am 26(23.9%), and I am 64(56.1%) is responsible to the job creation of students after their graduation. Accordingly, within the experiential learning method group of participants that responded they are responsible for self-job creation were larger in proportion compared to the optional attributions government and family.

The association of the entrepreneurial learning methods and students' response of perceived job creation responsibility attribution were tested. Therefore, as shown in table 27, the association between the type of entrepreneurship course teaching-learning method and the response of study participants' perceived job creation self-responsibility was statistically significant, or job creation expectation of students and the entrepreneurship course teaching-learning methods were associated ($\chi^2 = 19.51$; $df=1$, $p<.00$; $r= 0.31$; $p<0.00$). The size effect of Phi and Cramer's value of relationship between the course models and the perceived job creation self-responsibility response of students was also found significant ($r=0.31$; $p<0.00$) with a moderate level of strength.

Table 28
Chi square Test of Association between Entrepreneurship Teaching Method and Perceived Job Creation Responsibility Response of Study Groups

	Value	Df	Asymp. Sig. (2-sided)	Effect Size	
				Value	Sig.
Pearson Chi-Square	19.508 ^a	2	.000	Nominal by Nominal Phi	.311 .000
Likelihood Ratio	19.833	2	.000	Cramer's V	.311 .000
Linear-by-Linear Association	19.391	1	.000		
N of Valid Cases	202				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 20.48.

As the overall test of Chi square indicates, a statistically significant association among the three types of alternatives of perceived job creation self-responsibility and the two entrepreneurship course-teaching methods. However, the fact that six separate analyses under table 28 conducted, one cannot be sure which type of combination was statistically significant. Hence, post hoc tests, for the sake of identifying where the significance differences within the Chi square cells conducted. Accordingly, by using the adjusted residuals, the statistical proportion of the combinations of the factors were determined by Bonferroni corrected value at alpha level of $0.05/6 = 0.01$.

Table 29 presents Bonferroni corrected p value and transformed X^2 results of the data obtained from the study groups about their perceived job creation responsibility responses. Four of the six cells indicated in Table 29, were the product of “government/Family ” and “I am” responses by the combination of the existing and new entrepreneurship course teaching method groups of participants. The cell associated with existing traditional teaching method group of students attributed job creation responsibility for “Government/Family”, had a positive adjusted residual values, indicating that there were a statistically significant more participants (47.7%) than would be expected by chance; $X^2 (2, N = 202) = 16.0, p < .00$. Similarly, the cell associated with the new experiential entrepreneurial group of study participants attributed job creation responsibility for “I am”, a had positive adjusted residual values, indicating that there were a statistically significant more participants (56.1%) than would be expected by chance; $X^2 (2, N = 202) = 15.21, p < .00$.

Table 29

Bonferroni corrected p value of perceived job creation between EELM and TETM

			Perceived Job Creation Responsibility			Total
			Government/Family	Government and I am	I am	
Group	EELM	Count	42	21	25	88
		Expected Count	28.8	20.5	38.8	88
		% within Group	47.7%	23.9%	28.4%	100 %
		Adjusted Residual	4.0	.2	-3.9	
		χ^2	16	.04	15.21	
		<i>Bonferroni corrected p</i>	<i>0.00</i>	<i>0.86</i>	<i>0.00</i>	
	TELM	Count	24	26	64	114
		Expected Count	37.2	26.5	50.2	114
		% within Group	21.1%	22.8%	56.1%	100%
		Adjusted Residual	-4.0	-.2	3.9	
χ^2		16	.04	15.21		
	<i>Bonferroni corrected p</i>	<i>0.00</i>	<i>0.86</i>	<i>0.00</i>		
Total	Count	66	47	89	202	
	% within Group	32.7%	23.3%	44.1%	100%	

This indicates that the new experiential entrepreneurial learning method was highly associated with the impact of enhancing the perceived responsibility of job creation after students graduate. Contrarily, the two cells associated with both attributions, i.e., the responsibility of creating a job is for “government/family” versus “I am”, had negative adjusted residual values (-4.0. & -3.9, respectively), indicating that there were fewer (21.1%) participants in the “Government/family” responses to the new experiential entrepreneurial learning method group of study participant students, and ‘I am’ response (28.4%)s) for existing traditional entrepreneurial teaching method group of study participant students than would be expected by chance.

4.3.4.2. Association of entrepreneurship course models and course importance evaluation

Each group of learners has evaluated the benefits of learning the course entrepreneurship by “Yes” or “No” type single item, and followed by an open ended item worded as “what importance has learning entrepreneurship made to you?”

Table 30
Course Teaching Methods and Learning Benefit Evaluation of Study Participants

		Course learning benefit evaluation		Total	
		No	Yes		
Group	Control	Count	21	67	88
		Expected Count	10.0	78.0	88.0
		% within Group	23.9%	76.1%	100.0%
	Experimental	Adjusted Residual	4.9	-4.9	
		X ²	24.1	24.1	
		Bonferroni corrected p	0.00	0.00	
Total	Control	Count	2	112	114
		Expected Count	13.0	101.0	114.0
		% within Group	1.8%	98.2%	100.0%
	Experimental	Adjusted Residual	-4.9	4.9	
		X ²	24.1	24.1	
		Bonferroni corrected p	0.00	0.00	
Total	Count	23	179	202	
	Expected Count	23.0	179.0	202.0	
	% within Group	11.4%	88.6%	100.0%	

As indicated by table 30, to the single close ended question, “Does learning the course entrepreneurship benefited you?”, 76.1% of study groups who have learned entrepreneurship course by the existing traditional entrepreneurial teaching method have responded “Yes”, and 23.9% of them responded “No”. On the other hand, for the same question, 98.2% of study groups who have learned entrepreneurship by the newly designed entrepreneurial learning method have responded “Yes”, and 1.8% of them responded “No”.

The significance of the association of the teaching or learning method and students’ course benefit evaluation has been tested by chi square test. As depicted in table 30, the association of the course teaching-learning methods and the course benefit evaluation of study group participants were statistically significant, ($\chi^2 = 24.06$; $df=2$, $p<.00$; Phi and Cramer’s V size effect= .34; $p<0.00$).

The significant association reported above indicates that the entrepreneurship course teaching methods and students’ course learning benefit evaluation were dependent or associated with each other. The size effect of Phi and Cramer’s value of the relationship between students learned entrepreneurship by different pedagogical methods and their course benefit evaluation response has also been found significant ($r=0.34$; $p<0.00$) with a moderate level of strength.

Table 31

Effect Size of Course Teaching Types on Course Benefit Evaluation Responses

	Value	Df	Asymp. Sig. (2-sided)	Effect Size	
				Value	Sig.
Pearson Chi-Square	24.061 ^a	1	0.00	Nominal by Nominal Phi	0.345 0.00
Continuity Correction	21.919	1	0.00	Cramer's V	0.345 0.00
Likelihood Ratio	26.374	1	0.00		

However, since the statistical significance reported about the course benefit assessment was the overall test of an association between the course teaching method and their evaluation of course benefit as “Yes” or “No”, as performed earlier, the retest had conducted on each cell through adjusted residuals and Bonferroni corrected value of alpha level, i.e. $0.05/4 = 0.0125$. The cell associated with existing TETM group participants, of responded “No”, for the question “Does learning the course entrepreneurship benefited you?”, had positive adjusted residual value (4.9), indicating, that there were a statistically significant more participants (23.9%) than would be expected by chance; $\chi^2(1, N = 88) = 24.1.0, p < .00$. This implies that a significant number of participants who have learned entrepreneurship by the existing traditional entrepreneurial teaching method evaluated the course as unhelping for job creation than it was expected. On the other hand, the cell associated with the newly designed experiential entrepreneurial learning group participants, of responded “Yes”, for the question “Does learning the course entrepreneurship benefited you?”, had a positive adjusted residual value (4.9), indicating, that there were a statistically significant more participants (98.2%) than would be expected by chance; $\chi^2(1, N = 114) = 24.1.0, p < .00$. Thus, one can conclude that the association between students learned entrepreneurship by the experiential entrepreneurial learning method and their course evaluation of its importance was significantly higher than the expected. Contrary to the result shown in table 30, the two cells, associated with the “Yes or No”, responses of course benefit evaluations of the negative adjusted residual values (-4.9) indicate that, there were a statistically significant fewer participants (76.1%) within “Yes” responses of the TETM, and statistically fewer ‘No’ responses (1.8%) of the course benefit evaluation of EELM groups than would be expected by chance.

4.3.5. Association of entrepreneurial learning methods and learning outcome

Learning outcomes of the entrepreneurial learning methods measured by open ended and closed ended questions. In order to measure entrepreneurial mind setup of participants, scales administered and outcomes analyzed in earlier sections of this chapter. On the other hand, open-ended items provided for measuring how the course benefited them. This strategy planned to collect the entrepreneurial learning outcomes mentioned by each course takers point of view.

According to the earlier analysis of each course teaching method by its benefit, Yes and No responses, 98.2% of participants learned by the new experiential entrepreneurial learning method, and 76.1% of study participants who have learned entrepreneurship learned by the existing traditional teaching method have reported that the course has benefited them.

In order to understand the depth and breadth of participants' evaluation about the importance or benefit of the course, an open-ended single item administered. The item was an extension of the earlier analyzed item, "Does learning the course entrepreneurship benefited you?" study participants have been requested to enumerate some sort of benefits they thought important. Those listed learning multiple responses of participants have been organized and a theme was created through recommendation and learning outcome classification of Fisher et al., (2008). The three taxonomy of learning cognitive, skill and affective based learning outcomes have served as main thematic underpinnings of the learning outcome of entrepreneurship. The ticked categorized theme of learning outcomes has transformed into descriptive statistics and analyzed by multi-way response crosstabs.

As Table 32 indicates, for the question, "How does learning the course entrepreneurship benefited you?" cognitive related 76(93.8%) skill related 44(54.3%)

Table 32

Entrepreneurial learning outcome frequency of Multiple Responses within Study Groups

Entrepreneurial Learning Outcomes		Group		Total
		TETM	EELM	
Cognitive learning outcome	Count	76	91	167
	% within Group	93.8%	82.0%	
Skill learning outcome	Count	44	99	143
	% within Group	54.3%	89.2%	
Affective learning outcome	Count	42	97	139
	% within Group	51.9%	87.4%	
Total	Multiple Count	81	111	192

and affective 42(51.9%) related learning outcomes were counted or mentioned by study groups who learned entrepreneurship by the traditional entrepreneurial teaching method.

On the other hand, among study groups learning entrepreneurship by the experiential learning method, the learning outcomes counted or mentioned were skill 99(89.2%), affective 97(87.4%) related, and knowledge related 91(82%) learning outcomes as a benefit of learning entrepreneurship.

Regarding the relationship of learning outcomes (see table 33), a statistically significant high correlation ($r=0.34$; $p<0.01$) was found between affective and skill related learning outcomes followed by skill and cognitive ($r=0.257$; $p<0.01$) and affective and cognitive ($r=0.219$; $P<0.05$) learning outcomes among the EELM group study participants. In the same vein, the correlation between affective and skill related learning outcomes was high and statistically significant ($r=0.319$; $p<0.01$) followed by affective and cognitive learning outcomes ($r=0.247$; $p<0.05$).

Table 33
Correlation of Learning Outcomes and the Respective entrepreneurial Teaching Methods

	Experimental Group			Control Group		
	1	2	3	1	2	3
Learning outcomes	1			1		
Cognitive Learning Outcome	1			1		
Skill Learning Outcome	.26**	1		.13		
Affective Learning Outcome	.22*	.35**	1	.25*	.32**	1

** Correlation is significant at the 0.01 level (2-tailed); * Correlation is significant at the 0.05 level (2-tailed)

On the other hand, in order to examine the weight of impact of the entrepreneurship course types and learning outcomes, logistic regression employed. Table 34 presents the result. The result shows that there was a statistically significant change in cognitive (Wald=7.614, $p<0.00$; Exp (B) =0.25), skill (Wald=15.92, $p<0.00$; Exp (B) =4.9) and affective related (Wald=16.58, $p<0.00$; Exp (B) =5.0) learning outcomes of students who are assigned in the newly designed experiential entrepreneurial learning method group.

As the odds ratio Exp (B) indicates, participant students learned by the EELM have mentioned cognitive related learning outcomes as benefits of the course 0.25 times higher than the existing TETM group of study participants.

Table 34

Logistic Regression of Learning Outcomes on the Types of Entrepreneurial Learning Methods

Variables		B	S.E.	Wald	f	Sig.	Exp(B)
Step 1 ^a	Cognitive Learning Outcome	-1.367	.495	7.614	1	.006	.255
	Skill Learning Outcome	1.599	.401	15.919	1	.000	4.947
	Affective Learning Outcome	1.610	.395	16.579	1	.000	5.001
	Constant	-.855	.467	3.349	1	.067	.425

On the other hand participant students learned by the new EELM have mentioned affective and skill related learning outcomes as benefits of learning the course entrepreneurship 5 and 4.9 times higher than the existing entrepreneurship course taker study participants respectively.

CHAPTER 5: DISCUSSIONS

An Overview

The problem of this research was examining the two competing entrepreneurial learning methods of entrepreneurship courses , i.e., experiential and traditional methods, how each method affects entrepreneurial intention and, particularly, to what extent the experiential entrepreneurial learning method differentially affects entrepreneurial intention of prospective graduating bachelor students.

Having an extensive review on entrepreneurial learning literature, human constructivism, particularly experiential learning, and Theory of Planned Behavior served as the theoretical and practical basis of this study. Based on TPB, to determine the extent of the impact of the two entrepreneurial learning methods a conceptual model of education-entrepreneurial intention developed. Prior to testing the conceptual model, the effectiveness of entrepreneurial learning in enhancing entrepreneurial mindset up or entrepreneurial attitude or intention exhaustively reviewed.

However, as various literature works in the area indicates, though the dominant literature in the area indicated that entrepreneurship education enhances entrepreneurial intention, there is no one and commonly agreed for granted effective entrepreneurial teaching method in higher education. In line with these arguments the present study, which is comparative, has been conducted between the two competing entrepreneurship course-teaching methods among prospective graduating college of agriculture students. Hence, this dissertation investigated whether students who learned entrepreneurship by the newly designed experiential entrepreneurial learning method had higher level of entrepreneurial intentions, attitudes, perceived behavioral control, engaged in practical entrepreneurial implementation cue activities towards venture creation, and positive and better entrepreneurial learning outcomes in assessing the course entrepreneurship than the existing traditional entrepreneurial learning method.

During the discussion of related literature under chapter two, it has been described that experiential learning has a meaningful impact on higher education teaching learning, particularly to fields related with entrepreneurship, which requires practice, experience, and dynamism in growth and development (e.g., Heinonen & Poikkijoki, 2006). Therefore, based on the support of such confirmatory research findings, the present study also

conducted and examined how much experiential entrepreneurial learning method affects higher education prospective graduating students' entrepreneurial attitude and their venture creation capability compared to the conventional one way, teacher driven and lecture focused traditional entrepreneurial teaching method.

The venture creation approach (highly related with the present experiential learning method of the course entrepreneurship) is usually built on psycho-educational learning theoretical principles, which allow earners to differentiate “ripe and raw” while reflecting upon the real life situation, the learned concepts, and to use entrepreneurial leanings during their business creation processes.

To achieve the prescribed objectives and reaching the higher order learning outcomes of the course, students learned the entrepreneurship course through action oriented learning strategies. For instance, feasibility study, business plan writing, and business creation exercises were among the learning strategies of the course. On the other hand, depending on the recommendation of theoretical and practical research findings (e.g., Baum & Bird 2010; Krueger, 2007), experiential learning strategies has been used as means of delivering the new method, for instance, storytelling, experience sharing, field visit, business company visit and service description.

The implementation of learning strategies mentioned under the experiential entrepreneurship course integrated with the business incubation center of the university and other stakeholders; Technique and Vocational Development of Dessie City Town Administration, Municipality, East Amhara Credit Service Institute, Waliya Capital Goods Finance Business S/C.

According to Ollila and Williams-Middleton, (2011) such integration provides both opportunities and challenges, both of which are addressed by utilizing conventional problem-oriented and solution-focused learning philosophies in the long process of the learning. Thus, while understanding and questioning the discussion of findings of the present study, previous findings, and theoretical framework of this study, the way the course intervention organized should be taken into consideration. The discussion of findings presented along the main hypotheses of the study.

Accordingly, firstly, the impact of the two competing entrepreneurship course models on the entrepreneurial intention development of learners discussed. Secondly, the differential impact of the newly designed entrepreneurial learning method on venture creation intentions of study participants briefly presented. Finally, the association of course

teaching methods and learning outcomes, followed by the effects of each course model on entrepreneurial intention precedents has also been discussed.

5.1. The Impact of Entrepreneurial Learning Methods on EI Development of Students

The impact of the two competing entrepreneurial learning methods on entrepreneurial intention of prospective graduating students measured. In order to measure the impact of each course model, paired t-tests employed. Accordingly, both the existing and newly designed entrepreneurial teaching-learning methods were significantly ($p < 0.00$) improved entrepreneurial intention (EI), entrepreneurial attitude (Eat), subjective normative belief (Esnb), entrepreneurial perceived behavioral control (Epbcb), entrepreneurial self-concept (Esc) and entrepreneurial achievement motivation (Eam). Regardless of the magnitude of differences of the post-pre course intervention mean scores of each measured variable under each study group for EI, Eat, Esnb, Epbcb, EIIC, Esc, and Eam; a significant mean difference between the post-pre course intervention scores obtained for both the traditional and experiential learning method group of study participants. However, some research reports (e.g., Bae et al. 2014) indicated minimal positive effects of entrepreneurship education on entrepreneurial intention and its antecedents, when the impacts of the pre- and post-measurements compared, the present study reported higher effects.

According to research results, entrepreneurship education impact studies have univocal nature. Only very few recent studies, reported a negative impact of entrepreneurship education in entrepreneurial intention and its antecedents (e.g., Lorz, 2011; Nabi et al., 2018; Oosterbeek et al., 2010; Souitaris et al., 2007). Whereas, consistent with the present study, many others reported a positive impact (e.g., Bae et al. 2014; Fayolle, 2013; kozlinska, 2016; Kuratko 2005; Mwiya, 2014; Mukesh, Pillai & Mamman, 2019; Nabi et al. 2017; Tung, 2011). Specifically, the present study showed a positive effect of entrepreneurial learning-teaching methods on entrepreneurial intention, personal attitude, perceived behavioral control, and subjective norms. This result was also consistent with previous research results (e.g., Duggasa, 2012; Otuya et.al, (2013). Supporting the present research, these researchers argued that an impactful entrepreneurship education is dependent on action oriented learning. Other researchers (e.g., Moris, 2017) also argued that structured lecture based entrepreneurship course delivery also has positive learning outcomes.

Among others, the two mentioned reasons of the equivocal finding of positive impact of entrepreneurship education on entrepreneurial intention development were reported to lack of

control group (e.g., Nabi et al. 2017), and lack of controlled pre-course intervention measures of the study variables (Bae et al. 2014). The present study designed to overcome both of the limitations mentioned through non-equivalent control group pre-post measure quasi-experimental research design. In this regard, this study brings a unique insight about the extent of the impact of entrepreneurship education on EI, EIIC, Eat, Esnb, Epbc, Esc, and Eam. In addition to the methodological robustness of the study, the findings of the present study proved that entrepreneurial learning methods in any form, either through traditional or experiential, in which students have a maximum freedom of task management, practice and learning experience is the main course delivery approach has significant impact on entrepreneurial intentions, attitudes and perceived behavioral controls. However, it should be known that the impacts of both methods were not similar in their effect size. The next section of the discussion presents the differential impact of the experiential entrepreneurial learning method on EI and its antecedents compared to the traditional entrepreneurial learning method.

5.2. The Differential Impacts of Experiential Entrepreneurial Learning Method on EI and Its Antecedents

To determine the effectiveness of the newly designed experiential entrepreneurial learning method, a comparison study with the existing traditional entrepreneurial teaching method conducted. This happened between two groups of students who have learned entrepreneurship courses through the experiential learning and traditional teaching methods. The impact tested on students' attitude toward entrepreneurship, subjective norm, perceived behavioral control, entrepreneurial achievement motivation, entrepreneurial self-concept, entrepreneurial intention and entrepreneurial intention implementation cues. While analyzing the mean differences of all measured variables, ANCOVA employed. Accordingly, a significant mean difference in entrepreneurial attitude and perceived behavioral control of the study groups were obtained; Entrepreneurial attitude; $F(1, 197) = 66.02$; $P < 0.00$; Partial Eta Squared = 0.255; Entrepreneurial perceived behavioral control; $F(1, 97) = 106.22$; $P < 0.00$; Partial Eta Squared = 0.35. The ANCOVA test indicated, the impact of the experiential entrepreneurial learning method was better than the existing course model to enhance entrepreneurial attitude and perceived behavioral control of learners. On the other hand, though the mean score of subjective normative belief of participants learned by the EELM was higher ($M=3.8$, $SD=1.9$ Vs. $M=3.5$, $SD=1.3$) than those participants learned by the existing TETM, the difference was not statistically significant; $F(1, 197) = 2.53$; $P > 0.11$;

Partial Eta Squared = 0.013. Similarly, as presented under the result section, the mean difference of the two entrepreneurial learning method groups obtained statistically significant. The results reported that entrepreneurial intention; $F(1, 198) = 129.59$; $P < 0.00$; *Partial Eta Squared* = 0.40; Entrepreneurial intention implementation cues; $F(1, 198) = 290.44$; $P < 0.00$; *Partial Eta Squared* = 0.60; entrepreneurial self-concept; $F(1, 198) = 50.33$; $P < 0.00$; *Partial Eta Squared* = 0.20; entrepreneurial achievement motivation (Eam), $F(1, 198) = 58.76$; $P < 0.00$; *Partial Eta Squared* = 0.23.

As the consequent ANCOVA test results indicated, except in SNB, the EI, Eat, Epbc, Esc, and Eam of students learned the course entrepreneurship by the experiential entrepreneurial learning method were significantly improved more than students who have learned the same entrepreneurship course by the existing traditional entrepreneurial teaching method. In this research, such differential achievement of students prominently can be attributed to the nature of the newly designed experiential entrepreneurial learning method. In this regard, there are different arguments how experiential learning meaningfully and desirably affects the mind, heart and hand of learners compared to the conventional traditional lecture dominated teaching method of higher education. Irrespective of their limited capability of explaining the causal link or relationship of how experiential or action oriented entrepreneurial learning affects entrepreneurial intentions and related learning outcomes, there are a number of research findings reported in line of the present research finding, few are presented as follows.

While arguing against the effect of the lecture based entrepreneurship course delivery and supporting the action oriented entrepreneurial learning methodology, Higgins and Elliott (2011) have reported that the traditional classroom pedagogy (dominantly lecture based) is less effective in installing actionable entrepreneurial learning outcomes. Similarly, Bae et al. (2014) and Nabi et al. (2017) have also argued that the traditional pedagogy is questionable in enhancing entrepreneurial intention. Heinonen and Poikkijoki (2006) also reported that compared with different types of experiential learning method, the traditional lecture driven entrepreneurship course delivery could inhibit development of entrepreneurial skills in general and critical thinking in particular. In addition to these reports, which are consistent with the present study findings, many other also reported that an action oriented (equivalent with an experiential learning method) entrepreneurial learning is effective for higher order learning outcomes (e.g., Järvi, 2015; Ho et al., 2018; Neck, Greene, & Brush, 2014).

Mukesh, Pillai, and Mamman (2020) and Padilla-Angulo (2019) have also reported a consistent finding with the present study in entrepreneurial intention and perceived behavioral control of learners. According to this research finding, among the study groups, those who exposed to action learning pedagogy (highly related with experiential learning method) achieved a significantly high level of entrepreneurial perceived behavioral control and entrepreneurial intention compared to those with traditional classroom pedagogy. An entrepreneurial learning emphasized to students learning and lessened classroom based tasks and a learning environment which is limiting the role of teachers in driving an entrepreneurial learning is reported effective for development of various entrepreneurial behaviors, skills and positive attitudes. For instance, an entrepreneurship education program providing learners for testing their potentials and experimenting an actual business making through learning by doing practices could acquire an enhanced and developed business making or business venture creating skill; new start-ups, (e.g., Rasmussen & Sorheim, 2006), increase entrepreneurial intention, control beliefs and entrepreneurial engagement (e.g., Ho et al. 2014, & Vanevenhoven & Ligouri, 2013).

The size effect of the experiential entrepreneurial learning method on EI and its antecedents observed in different range; *Partial Eta Squared* =0.35 (35%), 0.40 (40%), 0.20 (20%), 0.25 (25%), 0.60 (60%) and 0.23 (23%) on entrepreneurial perceived behavioral control, entrepreneurial intention, entrepreneurial self-concept, entrepreneurial attitude, entrepreneurial intention implementation cues and entrepreneurial achievement motivation respectively. According to Cohen's (1988) effect size classification, the effects of the experiential method on entrepreneurial implementation cue activities (EIIC) can be considered as medium or between medium and large (*Partial Eta Squared* = 0.6), followed by the medium lower size effect of entrepreneurial intention which accounts (*Partial Eta Squared* =0.4) and entrepreneurial perceived behavioral control. Among others, higher entrepreneurial intention, perceived behavioral control and attitude is considered as effectiveness of entrepreneurial learning or education (e.g., (Solesvik et al., 2013; Guerrero, Lavín & Álvarez, 2009) and a robust indicator of venture creation (e.g., Rauch & Hulsink, 2015).

The effect size of the new experiential entrepreneurial method of learning entrepreneurship mentioned above should be interpreted cautiously. According to research works conducted between the effects of the compulsory and elective courses, elective courses are reported having a high positive impact on EI, ESNB, and EPBC (Karimi et al., 2016). However, the

findings of the present study attested the effectiveness of compulsory entrepreneurship courses on the mentioned entrepreneurial intention factors facilitated by experiential learning.

Before culminating discussion, it is appropriate to say that an important insight obtained from this section to the entrepreneurial intention and its learning or teaching methods. Regardless of the limitations reported, for example, number of participants, measurement issues, intervention procedures, and the appropriateness of statistical tests, the findings reported in this study contributed to the existing knowledge in different ways. The new variables added to the model of TPB, i.e., entrepreneurial self-concept and entrepreneurial intention implementation cues broaden our perspectives and helped us to open our eyes how to examine entrepreneurial learning outcomes as a predictor an actual venture creation.

On the other hand, as indicated above, though a significant improvement observed in subjective normative belief for both entrepreneurial learning methods, there was no a differential impact or significant difference between the new experiential and existing entrepreneurship courses $F(1, 197) = 2.23; P > 0.12; \text{Partial Eta Squared} = .011$. In line of this finding, a number of researchers reported that a subjective normative belief has not improved in entrepreneurship education. According to these groups of researchers, there was no significant direct relationship between EI and ESNB (e.g., Autio et al. 2001; Krueger et al., 2000).

Either the experiential or the traditional entrepreneurial teaching-learning methods could enhance students' familiarity with how to run and manage a business (Kuratko, 2005). Therefore, when students get more knowledge about entrepreneurship and its practices, they could tend to rely on their own self-talk and self-concept than the opinion of their referent group in order to judge the relevance of being an entrepreneur or not (Montano & Kasprzyk, 2002). Though people in the referent group think the individual has not to pursue venture creation or self-employment, the individual could have a lower motivation to comply with these expectations and persist on his thoughts and preferences. Irrespective of those views, a number of research findings supported the positive impact of EE or learning on students' entrepreneurial intentions and its antecedents (e.g., Mueller, 2011). However, though researchers converged about the importance of EE on enhancing SNB, empirical findings are scare or scant in the area (e.g., Fayolle et al., 2006; Oosterbeek et al., 2010). Hence, the insignificant result observed between the experiential and traditional learning methods, or the unobserved differential impact of the experiential learning method on the subjective

normative belief of study participants can partly attributed to those previously stated explanations.

5.3. Testing TPB through the Competing Entrepreneurship Course Models

Having confirmed that the entrepreneurial learning methods increased the entrepreneurial intentions of study participant students, a further step has been taken to answer how either course models influenced each antecedent. To answer this inquiry, this part of the dissertation developed an educational entrepreneurial intention model based on TPB and tested the model through SEM path analysis. Based on the findings presented in this dissertation, strong support for the entrepreneurial intention model can be claimed. The applicability of the TPB to entrepreneurial intention development through experientially enriched entrepreneurship course or program had received wide practical support in the past, with some exceptions (Kolvereid & Isaksen, 2006). The findings on both the TPB model and our hypothesized model discussed below.

According to Ajzen (2005), the three antecedents of entrepreneurial intention (attitude toward entrepreneurship, subjective normative beliefs on entrepreneurship, and perceived behavioral control of job creation) are not equally important to intention across all phenomena; one compensates the other rather. Through the making of the intention process, one antecedent may share the covariance of the other two (Ajzen, 2005; De Vries et al., 1988). All researchers in the area agreed that the three antecedents are dependent on each other. Inline of the theoretical positions and empirical findings, the present study has also confirmed that a significant correlation between entrepreneurial perceived behavioral control and attitude among study participants of both the experiential learning ($r=0.251$, $p<0.00$) and traditional entrepreneurship teaching method ($r= 0.37$, $p<0.00$) groups. On the other hand, a significant correlation between attitude and subjective normative belief ($r=0.34$, $p<0.00$) and perceived behavioral control and subjective normative belief (0.21 , $p<0.00$), in the traditional entrepreneurial teaching method group was obtained. Regardless of its statistical significance, SNB also has a positive relationship with attitude and PBC among the experiential entrepreneurial learning group of study participants. The positive relationships among the three antecedents of EI reported and supported by many researchers. However, in the present study, as presented before, in experiential entrepreneurial learning method, SNB was not significantly associated with attitude and PBC. At this stage, it is not appropriate to explain

why SNB has a positive but a non-significant relationship to attitude and PBC while an entrepreneurship course facilitated by an experiential learning method, despite the fact that it was significantly associated to the traditional entrepreneurial teaching method. In this regard, many researchers (e.g., Autio et al., 2001; Krueger et al., 2000) reported that the relationship of SNB with intention, attitude, and PBC is weak. The present research also replicated the insignificant relationship of SNB with attitude and PBC when entrepreneurship education facilitated by experiential entrepreneurial learning method. Therefore, the finding in this regard is univocal and needs further investigation.

The SEM path analysis results showed that the intention model (i.e., TPB) was valid for representing entrepreneurial intention development of students. Adequate model fit obtained, and the significant paths from the three antecedents to entrepreneurial intention have found. However, subjective normative belief had a positive insignificant impact on entrepreneurial intention of the existing course model ($\beta=0.097$, $p>0.054$, which was almost closer to 0.05) and the existing entrepreneurship course group ($\beta=0.012$, $p>0.87$) participants. Regarding the relationship of SNB in the TPB model, consistent with the finding of the study, its impact on intention has been reported weak. Due to this research dispute some researchers have omitted it from the model (e.g., Peterman & Kennedy, 2003; Veciana et al., 2005) and some others reported that its effect was non-significant (e.g., Krueger et al., 2000).

On the other hand, the newly added variable entrepreneurial intention implementation cues, which has been considered as the closest predictor of actual job creation and immediate outcome EI, has significantly predicted entrepreneurial intention and perceived behavioral control of students learned by the newly designed experiential learning method course (experimental group). This finding was consistent with the theoretical direction (Gollwitzer, 1999) and empirical report of implementation intention plan critical cues of how intention could be realized through answering questions; when, where, and how students will carry out the intended action and the correspondence between intended and actual behavior (Gollwitzer & Oettingen, 2013; Gollwitzer & Sheeran, 2006). Accordingly, though similar findings in the relationship of entrepreneurial intention and entrepreneurial intention implementation cues reported, among students learned by the existing traditional teaching oriented method, perceived behavioral control has not predicted entrepreneurial intention implementation cues ($\beta=0.11$, $p>0.184$). Therefore, the full model of TPB can be considered robust for entrepreneurship course model enriched by experiential learning method in predicting learners' intention and its critical cues, which in turn lead to realization of job creation.

Predictors of entrepreneurial intention (attitude, SNB and PBC) have explained 40.2% (the EELM) and 38.9% (the TETM) of its variance. Accordingly, Attitude, PBC and SNB has explained 28.5%, 8.1% and 3.6% (the EELM); and 32.2% and 6.6% (TETM) of the variance of entrepreneurial intention respectively. Among the antecedents, the larger share of explaining entrepreneurial intention attributed to attitude. This has supported by various previous research works (e.g., Gird & Bagraim, 2008; Malebana, 2014). However, when compared with those researches, in the present research PBC has not explained intention as large as attitude. The smaller contribution of PBC in explaining variance of EI obtained in this research is also deviated from the research model of Ajzen's TPB. According to Ajzen (1985 & 1991), perceived behavioral control explains 20-40% variance of intention. SNB found to be the lowest predictor and explanatory variable of entrepreneurial intention. This finding also coincided with many researchers (e.g., Muller, 2011; Otuya et al., 2013).

Concerning the amount of the share that antecedents of EI holds, the present finding is inline with previous empirical findings. Among others, most studies on entrepreneurship intention have found a value of R^2 between 20% and 40%: for example, 55.5% (Linan and Chen, 2009) 35% (Krueger et al., 2000), 45% (Tkachev & Kolvereid, 1999), 30.3% (Autio et al., 2001), 32% (Souitaris et al., 2007), 27% (Gird & Bagraim, 2008), and 38% (Van Gelderen et al., 2008). It has been noted that the contribution of subjective norm in the TPB was generally found weak in previous research (Autio et al., 2001). As the contribution of individual predictors of entrepreneurial intention is depicted, the values of the path coefficients obtained in this research are consistent with previous studies. For instance, the range of path coefficients of attitude found between 0.215 ($p < 0.001$) and 0.306, subjective normative belief range between 0.028 ($p < 0.05$) to 0.356 ($p < 0.001$), and perceived behavioral control range from 0.16 ($p < 0.001$) to 0.380 (Autio et al., 2001; Gird & Bagraim, 2008; Souitaris et al., 2007, Tung, 2011) on entrepreneurship education.

Our findings imply that, integrating the learning methodology and content of entrepreneurship education or course, and the inter-relationships of the three antecedents of TPB improve the amount of explained variance in entrepreneurial intention. In this regard, our learning method-entrepreneurial intention model is effective to explain the formation of the students' intention to start up through entrepreneurship education.

On the other hand, entrepreneurial intention and perceived behavioral control has explained 33% (the new course) and 16.1 (existing course model group) of entrepreneurial intention

implementation cues. Individually, entrepreneurial intention (29.8%) and perceived behavioral control (3.3%) of the new course model group, and entrepreneurial intention (16.1%) of the existing course model group have explained the variance of entrepreneurial intention implementation cues of participants of the study. The relationship between intention and its implementation critical cue (IIC) found 0.76. In line of the present research, Ajzen, Czasch and Flood (2009) have reported that intention can account for substantial variance in actual behavior. Others reported that the correlation is as high as 0.90 (King, 1975) and 0.96 (Smetana & Adler, 1980), although in most cases, predictive accuracy is more modest. In a meta-analytic review of 185 studies conducted in the framework of the theory of planned behavior, Armitage and Conner (2001) and Sheeran (2002) reported that, on average, 27% of the variation in behavior explained by behavioral intentions. On the other hand, meta-analyses works have shown that intentions account for between 20% and 30% of the variance in a behavior (Conner & Sparks, 2005; Hagger et al., 2002; Sheeran, 2002; Armitage & Conner, 2001; Albarracin). Therefore, the result obtained under the present study has coincided with those theoretical and empirical reports. Of course, intention implementation cue could not be taken for granted for the occurrence of the actual business creation behavior of students. .

As many researchers agreed, measuring the actual entrepreneurial behavior of prospective graduating students is almost impossible, that is why TPB has developed. While discussing the relationship between entrepreneurial competences and an actual behavior expected in business, Man et al. (2002) suggested that unusable ownership of competences does not certainly make an entrepreneur competent, only one's behavior and actions can be shown through competences. With no argument, the latter statement could be coincided with the relationship of entrepreneurial intention and actual behavior. Context dependent temporal intention may not push an individual or a student to realization of any certain behavior, including business venture creation. However, the critical clues of an implementation intention could be helpful for predicting the actual behavior. In this research the implementation intention cue was considered as the closer immediate indicator of actual behavior (creating a venture after graduation) of students. Regardless of the strength of the association between the intention and the actual behavior, students with strong intention of creating a venture after graduation are preceded by critical cues of venture creation (e.g., business planning, looking for finance sources, identifying business partners etc.).

5.4. The Effect of Entrepreneurial Self-concept as Mediator in the Model of TPB

In this study, entrepreneurial self-concept measured whether it can mediate variables of TPB. By depending on the inherent relationships of perceived behavioral control (self-efficacy) and self-concept and the normative nature of subjective normative belief and self-concept, the association and mediational role of self-concept was tested. Hence, the three relationships, i.e., the relationship between ESNB and EI, EPBC and EI, and EPBC and EIIC mediated by ESC, and a new development emerged.

The relationship of perceived behavioral control (self-efficacy) and self-concept is an ongoing debatable issue. Regardless of the conceptual variance of the nature and feature of the relationship of the two variables, the present study has revealed that perceived behavioral control within the experimental group of students (learned entrepreneurship through experiential learning methodology) has significantly predicted entrepreneurial self-concept of students. In a different context and thematic issue, Pajares and Miller (1994) demonstrated that subject specific (e.g., math) self-efficacy (perceived behavioral control) was able to predict students' subject specific (e.g. math) self-concept scores.

Subjective normative belief has significantly affected entrepreneurial self-concept of students ($\beta = 0.28$, $p < 0.004$). This finding was in line with previous works. The impacts of normative belief on students' self-concept were supported by empirical works (e.g., Bong & Clark, 1999). The fact that self-concept is relatively dependent upon one's immediate significant others (e.g., parents and friends), the finding has also coincided with findings of Parker et.al, (2014) and Marsh (2016). However, this was not true for the new course experiential entrepreneurial learning method participants ($\beta = 0.38$, $p < 0.51$).

Regarding the effects of entrepreneurial self-concept on entrepreneurial intention and its implementation cues, in the new course model its impact was significant ($\beta = 0.16$, $p < 0.034$; $\beta = 0.31$, $p < 0.00$) respectively. Taking entrepreneurial intention and its practical implementation cues as learning outcome of the course, the present finding supported by numerous works on different academic research works (e.g., Marsh, 2016). The effect of self-concept on achievement has been reported bidirectional; self-concept affected achievement at one time, and achievement has affected self-concept on other times. For instance, Guay, et al. (2010) reported that students who had higher levels of academic self-concept had higher grades. This relationship also reported by researchers in the area (e.g., Archana & Chamudeswari, 2013).

In the new experiential learning course model, while entrepreneurial self-concept mediated the relationship of entrepreneurial perceived behavioral control, predictors of entrepreneurial intention and its implementation cues has explained 42% and 38% of each variable's variance respectively. The amount of the variation of EI explained by its predictors has increased by 2% from the previous model (the model without the mediator, i.e., self-concept). Predictors of Esc have also explained 16% of its variance. On the other hand, in the existing traditional teaching course model, 39% and 18% of variance of EI and its implementation cues (EIIC) has explained by predictors of each variable 14% of variance of Esc has also explained by its predictors. The change of the influence in entrepreneurial intention implementation cues for the new course was two times higher than the existing course model. This implies that the new course is by far better than the existing course in improving EIIC.

Among a group of students who learned entrepreneurship through the experiential method of learning, the indirect effect of entrepreneurial perceived behavioral control on EI and EIIC which was mediated by entrepreneurial self-concept was statistically significant. For the same group of participants, the indirect effect of subjective normative belief on entrepreneurial implementation cues (EIIC) mediated by ESC was statistically significant. ESC has also a significant indirect effect on EIIC mediated by EI. Finally, for the existing group of students, the indirect effect of ESC and EPBC on EIIC mediated by EI was statistically significant.

As Pajares and Miller (1994), reported self-efficacy or PBC is a predictor of self-concept. The relationship was true to the present study. According to Guay, et al. (2010) higher-level self-concept leads to high academic self-concept. Based on such logical analogy and empirical direction, a new perspective for entrepreneurship can ploughed. The findings for this research showed that the level of entrepreneurial perceived behavioral control of students learned by the EELM, have get an improved entrepreneurial intention and its implementation. Particularly, this was true when the model mediated by ESC than those study participants learned by the existing traditional teaching method.

The issue of entrepreneurial self-concept is new for entrepreneurship literature. With clear differences, its normative perceived comparative nature may be associated with subjective normative belief of TBP. The normative feature of self-concept, in which a student is comparing his/her entrepreneurial competences, behaviors, mastery capacities, or venture

creation capability, opportunity identification, exploration and mining skill, risk calculation and management skills, with others can be a source of the affective feature of students entrepreneurial self-concept. Hence, researchers in this area can advance their research on how entrepreneurial self-concept can substitute subjective normative beliefs within the theoretical model of TPB.

On the other hand, ESC has been found a good predictor of EI, and EIIC. The relationship between perceived behavioral control and entrepreneurial self-concept was also a new development emerged in this study for the entrepreneurial learning literature. Hence, the new modeling and relationships observed could be researched in a multidisciplinary and mixed research approach.

5.5. Entrepreneurship Course Teaching-Learning Methods and Learning Outcome Assessment

5.5.1. Association of students' perceived job creation responsibility attribution and entrepreneurship course teaching methods

Higher education course delivery is usually subjected to student evaluation. This is a tradition of almost all higher education programs (Yusuf et al., 2010). The course evaluation formats and purposes vary from institute to institutes or program to programs. Content, assessment strategies, generic learning outcomes, course teaching methods, and teachers' course facilitation skill of instructors are concerned with student evaluation, and administered after completion of the course. This study was concerned with generic learning outcomes of the student evaluation. With respect to its limitation of depth and breadth, through the investigation, promising insights and support of previously discussed findings has been obtained from students' learning assessment.

The association between development of perceived job creation responsibility of learners and the respective entrepreneurship course models was measured. Accordingly, the present study indicated that the association between the type of entrepreneurship course teaching-learning methods (experiential and traditional teaching) and the attribution of perceived job creation responsibility development was statistically significant, or perceived job creation expectation of prospective graduating students and the type of teaching method the entrepreneurship course facilitated were dependent or associated ($\chi^2 = 19.508$; $df=1$, $p < .00$; $r = .311$; $p < 0.00$). The size effect of Phi and Cramer's value of relationship between the course models and the

perceived job creation responsibility response of students has been found significant ($r=0.311$; $p<0.00$) with a moderate level of strength.

The Bonferroni corrected ($\alpha (0.05/6) = 0.008333$) post hoc test (identified the significance differences within cells) indicated that the experiential entrepreneurial learning course model was highly associated with an enhanced perceived self-responsibility of job creation of graduating students than students learned by the lecture based entrepreneurship course; $X^2 (2, N = 114) = 15.21, p < .00$. On the other hand, the lecture based entrepreneurial learning course model was significantly associated with learners' attribution of perceived job creation responsibility for government/family than students learned entrepreneurship course by experiential learning method; $X^2 (2, N = 202) = 16.0, p < .00$. There is no previous research conducted on this issue, particularly, in entrepreneurial learning. However, in EMPRETEC's entrepreneurship workshop (ETW) model, in which experiential learning method is the predominant training principle, the attribution of entrepreneurs are considered as internal, or they are self-attributing for their success and failure. According to literatures of motivation, self-efficacy, self-concept, and academic achievement, success and failure of students is highly related with their belief style (Weiner, 2010).

Based on the earlier discussions of this section, it has presented that the experiential entrepreneurial learning method differentially affects the entrepreneurial perceived behavioral control (highly associated with entrepreneurial self-efficacy), entrepreneurial self-concept of study participants. Therefore, the association found between the experiential entrepreneurial learning method and students' self-responsibility of perceived job creation could not be a surprise.

5.5.2. Association of entrepreneurship course teaching methods and course importance evaluation of students

Both the experimental and control group of learners have evaluated the benefits of learning the course entrepreneurship by "Yes" or "No" type single item, and followed by an open ended item worded as "what importance has learning entrepreneurship made to you?" The result was reported that the association of the course models (the existing and the new entrepreneurship course) and the benefit evaluation of students was statistically significant, ($\chi^2 = 24.06$; $DF = 2, p < .00$; Phi and Cramer's V size effect = .34; $p < 0.00$).

A significant number of participants who have learned entrepreneurship by the existing course model have evaluated the course benefit as unhelping for job creation than it was expected; $X^2 (1, N = 88) = 24.10, p < .00$. On the other hand, the association between the

new entrepreneurship course model and students' evaluation of its importance for job creation was significantly higher than the expected; $X^2(1, N = 114) = 24.1.0, p < .00$.

Followed by the Yes or No responses of study participants, a broader and deeper and that could elicit generic learning outcome of an entrepreneurial learning, an open ended item was provided for students and evaluated their learned entrepreneurial behaviors through a Chi square test. While analyzing the data, a standard qualitative research procedure, as provided by Creswell (2002), employed. Responses categorized according to The Ten EMPREC's Model of Entrepreneurial competencies and behaviors. Study participants requested to enumerate some sort of benefits of learning the course entrepreneurship they thought were important learning outcomes. Those listed learning multiple responses of participants have been organized and a theme was created through Bloom's 1956/64 educational taxonomy of learning, which was adapted to business specific situations by Fisher et al. (2008). The three taxonomy of learning outcomes; cognitive, skill and affective based learning outcomes have served as main thematic underpinnings of the learning outcome. Accordingly, responses of participants mentioned as benefits of learning the course entrepreneurship course (e.g., entrepreneurial knowledge, awareness and knowledge of personal fit with entrepreneurial career) categorized as cognitive learning outcome. On the other hand, learning outcomes (e.g., opportunity identification, information seeking and planning, persuasion and networking, teamwork and risk management) categorized as skill learning outcomes. Finally, learning outcomes (e.g., motivation, independence, self-confidence, and self-esteem) grouped under affective learning outcome of learning the course entrepreneurship.

For the question, "How does learning the course entrepreneurship benefited you?" 76 (93.8%) of study participants learned by the existing traditional entrepreneurial teaching method have mentioned awareness about business creation as the benefit of learning the course. Similarly, 44(54.3%) of students learned entrepreneurship by the traditional teaching method mentioned planning and networking as benefits of the course entrepreneurship. In the same group, 42(51.9%) of participants mentioned motivation and self-confidence as benefits of learning the course entrepreneurship.

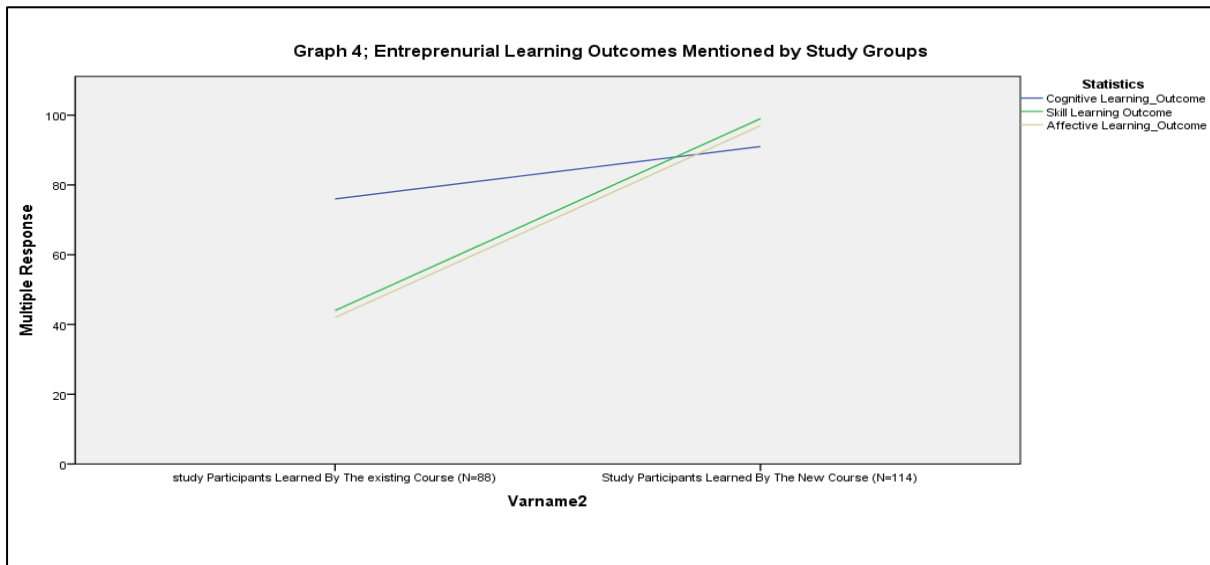
On the other hand, 99 (89.2%) of students learned entrepreneurship by the EELM mentioned affective related learning outcomes, i.e., motivation, networking and persuasion, team working, independence, self-confidence and self-efficacy as benefits of learning the course entrepreneurship. Similarly, 97 (87.4%) of these group of participants mentioned entrepreneurial skill, i.e., opportunity identification, information seeking, business plan

writing, teamwork and networking as benefits of learning the course entrepreneurship. Compared to the latter two learning outcomes, awareness about business creation and entrepreneurial knowledge (conceived as cognitive learning outcome) were the least mentioned 81(92%) as benefits of the course entrepreneurship by the EELM group of students.

Among others, the most frequent learning benefit response provided by the experiential learning group was networking, teamwork and motivation to start a business. This result supported by Jarošova, Bakic-Tomic and Šikic (2007). According to this research report, students learned by experiential learning method than the traditional has been found better in interpersonal relationship, teamwork and conflict management. Kennedy (2017) also reported that students learned business communication by experiential learning method found better in business practical knowledge than those students learned by the traditional method of learning. In the same vein, Levant, Coulmont, and Sandu (2016) have also reported that students learned by the experiential learning method were better in self-assessment and self-understanding than the traditional learning method. Hence, the present research finding is successful in replicating the association between the entrepreneurial learning methods and the corresponding business related learning outcomes.

Comparing the two entrepreneurial learning methods and learners with their respective reported gains of learning the course entrepreneurship, large number of students 99 (89.2%), marked by the green color of graph 4 learned by the new experiential learning method have frequently mentioned the affective related learning outcomes as benefits of learning entrepreneurship followed by the skill related 97(87.4%). However, a large number of students 76 (93.8%), marked by blue line of graph 4, learned entrepreneurship by the existing traditional teaching method have mentioned entrepreneurial knowledge and awareness (i.e., cognitive) as the top listed benefit of learning the course.

A statistically significant high correlation ($r=0.34$; $p<0.01$) was obtained between affective and skill related learning outcomes followed by skill and cognitive ($r=0.257$; $p<0.01$) and affective and cognitive ($r=0.219$; $P<0.05$) learning outcomes among the experiential entrepreneurial learning method group study participants. In the same vein, the correlation between affective and skill related learning outcomes was high and statistically significant ($r=0.319$; $p<0.01$) followed by affective and cognitive learning outcomes ($r=0.247$; $p<0.05$).



Graph 7: *Generic Learning Outcomes Mentioned By Study Groups*

The likelihood of learning outcomes under each taxonomy per the entrepreneurial learning method determined by logistic regression. Accordingly, those students learned by the new experiential learning method have mentioned skill and affective related learning outcomes as benefits of the course 5.0 and 4.9 times (respectively) higher than that of students learned entrepreneurship by the existing traditional teaching method course taker study participants. Though the odds ratio (β) was lower than degree of likelihood of 0.5, cognitive related learning outcomes mentioned by the experiential learning method group of study participants 0.25 times higher than those of students who learned entrepreneurship by the existing traditional teachings method.

Consistent with the present study, using business creation exercise as part of their training program (i.e. experiential EE setting), and post-test survey, Fisher et al. (2008) reported a highly significant positive correlation between the cognitive and skill-based learning composites ($r=0.73$, $p<0.01$), and affective and skill-based learning composites ($r=0.32$, $p<0.05$). However, entrepreneurial spirit (affect) insignificantly related to the cognitive learning composites. Compared with the research report of Fisher et al. (2008), though the level of correlation coefficient of the present finding was lower (0.73 vs. 0.26), it was significant at 0.01. On the other hand, compared with the findings of the latter study which reported insignificant relationships, the present study has reported a higher and positive significant relationship between affective and cognitive learning outcome ($r= 0.219$; $p<0.05$). Kozlinska (2016) has conducted a comprehensive and comparative study between samples of

students and graduates amounting to 559 individuals in total (N=218 in Estonia and N=341 in Latvia) on an impact of entrepreneurship education (experiential vs. lecture based delivery). According to this research report, the correlation between cognitive and skill, cognitive and affective, and skill and affective has been found significantly related; $r=0.513^{**}$, 0.39^{**} and 0.42^{**} respectively. Using those relationships, congruent with the finding of the present study, Kozlinska (2016) reported that experiential EE is associated with higher skill-based and affective outcomes than traditional EE. In this regard, the present study was consistent with Kozlinska's finding.

In conclusion, the most pressing and important issues emerged in these research are multifaceted. Primarily, though entrepreneurship education in general can enhance or positively influence entrepreneurial intention and related variables, the differential impact of experiential learning has been found incomparable with the traditional entrepreneurial teaching method. Experiential entrepreneurial learning method meaningfully can mediate appropriate students' learning of affective and skill learning outcomes than the traditional teaching method. Secondly, this study contributed a lot for TPB in different ways. The study showed that posing the model TPB on intention could not give a clear and full picture and a true meaning for the research process in intention. Hence, extending the model to entrepreneurial intention implementation cue activities or implementation intention stage as an immediate predictor for an actual behavior can be a good step. Similarly, predictors of EI, particularly, SNB can be subjected to revision and replacement. For instance, in our investigation, the normative feature of entrepreneurial self-concept was found to contribute more to the model than SNB and strongly associated with EI, attitude, PBC and EIIC.

CHAPTER 6: SUMMARY, CONCLUSIONS, RECOMMENDATIONS, AND IMPLICATIONS

This chapter provides a summary of the major findings, conclusions, implications, recommendations, and future directions. The chapter begins with a brief overview of the study, followed by a summary of the findings in relation to the research questions and conclusions of the study. Finally, implications, recommendations, and future directions set.

6.1. Summary

The purpose of this study was to examine the differential impact of experiential learning method on entrepreneurial intention of graduating students and reframing the entrepreneurship course teaching-method that provided to higher education bachelor students. Accordingly, the following research questions raised in the study:

- i. Do Entrepreneurial learning methods (either Experiential or Traditional) positively influence EI, its antecedents, and EIIC?
- ii. Is there a significant mean difference between the impact of EELM and TETM on EI, its Antecedents, and EIIC?
- iii. What is the relationship of EI, its antecedents and EIIC in accordance with TPB for the two entrepreneurship teaching-learning methods?
- iv. What is the relationship of entrepreneurial self-concept, perceived behavioral control, subjective normative belief, EI and its implementation cues through TPB?
- v. Is there any association between the types of learning methods and students course effectiveness evaluation in perceived job creation responsibility and generic learning outcomes?

The research design of the present study was a quasi-experimental nonequivalent comparison-group design. Data for the study were drawn from 202 Wollo university colleges of agriculture prospective graduate students. In order to collect the data about entrepreneurial intention, attitude, perceived behavioral control, subjective normative belief, the EIQ of Linan and Chen (2009) adopted. Through the adoption process, the issues of culture appropriateness and language have customized. The wording of statements and terminologies were appropriated inline of the culture and language ability of participants.

On the other hand, data collection instruments concerning entrepreneurial self-concept, entrepreneurial achievement motivation, and entrepreneurial intention implementation cues

were adapted from various sources of literature and FGD discussions. The variables, particularly entrepreneurial self-concept, and EIIC are new issues. Hence, based on recommendations from previous works and limited efforts of testing these variables, the scale of each variable has developed.

The data gathering intervention conducted for four months. Accordingly, the pre-course intervention data collected on February 2019 and the post course intervention entrepreneurial intention measured on June 15/2019.

About the statistical tests used in the study, while measuring the impact of each course model on entrepreneurial intention of each group of study participants, test-retest difference between two sample t-tests employed. On the other hand, the differential impact of experiential learning method on the entrepreneurial intention of study participants, compared with those of study participants who learned entrepreneurship by the existing traditional entrepreneurial teaching method tested by ANCOVA. On the other hand, the association of perceived job creation responsibility of learners and the type of entrepreneurial learning method tested by Chi-square. In the same vein, the association of reported learning outcomes (cognitive, affective and skill) with the type of entrepreneurial learning method was tested by multiple response chi-Square analysis, and the likelihood of multiple responses of the measured learning outcomes for each course model tested by logistic regression. Finally, the relationships of variables (the direct and indirect effects, included in the TPB (intention, IIC, attitude, PBC and SNB) were tested by path analysis of SEM.

Accordingly, this study revealed the following findings;

- i. Both the newly designed experiential entrepreneurial learning and traditional entrepreneurial teaching methods have significantly improved entrepreneurial intention and its antecedents.
- ii. A significant mean difference in EI and its antecedents between the study groups learned entrepreneurship by the EELM (Experimental Group) and TETM (Control Group) obtained. However, there was no significant mean difference in subjective normative belief (SNB) between the study groups.
- iii. The intention model (i.e., TPB) was valid for representing entrepreneurial intention development of students.
- iv. Entrepreneurial self-concept has significantly mediated the relationship of EI and EIIC, and its antecedents

- v. The association between the type of entrepreneurial learning method and the perceived job creation responsibility attribution development and course benefit evaluation of study participants' responses were statistically significant or perceived job creation expectation and course benefit evaluation of prospective graduating students and the type of entrepreneurial learning method the course entrepreneurship facilitated by were dependent or associated.

6.2. Conclusions

Based on the summary provided above, the following specific conclusions drawn from findings of the present study:

1. Both the newly designed experiential entrepreneurial learning and traditional entrepreneurial teaching methods have significantly improved the:

(a) Attitude towards entrepreneurship, (b) Perceived behavioral control of venture creation, (c) Subjective normative belief of significant others, (d) Entrepreneurial self-concept, (e) Entrepreneurial achievement motivation (f) Entrepreneurial intention in order to start ones venture after graduation, and (g) Entrepreneurial intention implementation cue. However, the size effect of the two entrepreneurial learning methods is different. The findings presented as appeared in this section of two.

2. A significant *Mean* difference in EI and its antecedents between the study groups who learned entrepreneurship by the EELM and TETM have obtained. The size effect of the experiential entrepreneurial learning method found higher than the existing traditional entrepreneurial teaching method in: (a) entrepreneurial intention, (b) Entrepreneurial intention implementation cues, (c) Entrepreneurial attitude, (d) Entrepreneurial perceived behavioral control, (e) Entrepreneurial self-concept, and (f) Entrepreneurial achievement motivation of respective study groups. However, there was no significant mean difference in (g) subjective normative belief (SNB) between the study groups. Both the significant size effect of the two entrepreneurial teaching methods and the latter non-significant finding can be considered as a new opportunity for questioning “how and why?”

3. The intention model (i.e., TPB) is valid for representing entrepreneurial intention development of students.

3.1. For both of the study groups, among entrepreneurial intention antecedents, a significant correlation between AT and PBC is obtained. On the other hand, the correlational

relationship of SNB and PBC, SNB and EAT are statistically significant for the TETM or control group alone. Literatures in TPB show, that regardless of the impact of endogenous and exogenous factors, the three variables are associated. Hence, the significant and non-significant associated findings (the relationships of EI antecedents to the type of teaching- learning method) obtained in this study can open a new insight to challenge the model (TPB).

3.2. All predictors of entrepreneurial intention, i.e., attitude, SNB and perceived behavioral control have been obtained as a significant predictor of entrepreneurial intention (EI). Predictors of entrepreneurial intention (Attitude, SNB and PBC) explain 40.2% (the EELM Group) and (38.9% the existing TETM) of its variance. Attitude, PBC and SNB explained 28.5%, 8.1% and 3.6% (EELM Model) and 32.2%, 6.6% and 1% (TETM Model) of the variance of entrepreneurial intention respectively.

3.4. Entrepreneurial intention and perceived behavioral control explained 31.2% (EELM Model) and 16.1% (TETM Model) of entrepreneurial intention implementation cues. Entrepreneurial intention (25.7%) and perceived behavioral control (5.7%) of the EELM, and entrepreneurial intention (14.5%) and PBC (1.7%) of the TETM model explained the variance of entrepreneurial intention implementation cues of participants of the study respectively. The newly added variable within the TPB model, i.e., EIIC shows a significant change in the prediction and variance explained by respective predictors across the two entrepreneurial learning methods.

4. Entrepreneurial self-concept has significantly mediated the relationship of EI and EIIC, and its antecedents:

The indirect effect of SNB (only for TETM) on EI is statistically significant. However, the indirect effect of PBC (only for EELM) on EI and EIIC is statistically significant. When ESC added to the model (as mediator of SNB-EI and PBC-EI) of TPB, the effect increases by 1.8% and 6.7% for EI and EIIC respectively.

5. The association between the type of entrepreneurial learning method and the perceived job creation responsibility attribution development and course benefit evaluation of study participants' responses are statistically:

5.1. The experiential entrepreneurial learning method is highly associated with an enhanced perceived self-responsibility of job creation of study participants than students learned entrepreneurship by the traditional entrepreneurial teaching method. Contrary to this finding,

students who have learned entrepreneurship by the traditional teaching method have attributed the job creation responsibility for the government/ family.

5.2. A statistically significant high correlation is obtained between affective and skill related learning outcomes followed by skill and cognitive (non-significant for the TETM group), and affective and cognitive learning outcomes for both the EELM and TETM.

5.3. Comparing the two teaching models, the experiential entrepreneurial learning method is associated to the affective related entrepreneurial learning outcomes followed by skill related learning outcomes. However, the traditional entrepreneurial teaching method is associated to cognitive related entrepreneurial learning outcomes as mentioned by study participants. As tested by logistic regression, students learned the course entrepreneurship by the experiential learning method has mentioned skill and affective related learning outcomes as benefits of the course 5.0 and 4.9 times (respectively) higher than the existing TETM study participants.

6.3. Recommendations and Practical implications

The contribution of this study is mainly to offer an entrepreneurial learning model to foster an entrepreneurial intention of higher education students. This theory driven learning method and the empirical results have important theoretical and practical contributions.

6.3.1. Theoretical contribution

6.3.1.1. Contribution to the TPB model

This study reveals that TPB is appropriate to apply in entrepreneurial learning to explain the entrepreneurial intention of higher education students. The findings contribute to the consistency of TPB by providing additional empirical evidence on entrepreneurship education and learning research. The findings of the study also show significant and or positive inter-relationships among the three antecedents of intention (attitude, subjective normative beliefs and perceived behavioral control. The two predictors of intention, i.e., attitude and perceived behavioral control have explained the larger share of intention. Contrary to the postulation of TPB, Subjective normative belief has not significantly predicted entrepreneurial intentions (as measured after the experiential entrepreneurial learning method has been used as a course facilitating method).

According to TPB, predicting distal behavior is only dependent from intention and perceived controllability of that behavior. In this research by taking recommendations of fewer research

beginnings on implementation intention, the model has been extended and the variable intention implementation cues, as immediate outcome of strong intention and proximal indicator of the actual behavior (creating a business venture) was added. The result indicated that the entrepreneurial intention of students learned by the experiential method showed an observable practical behavioral change of venture creation than their counterparts. In the same vein, the perceived controllability of intention implementation cues of the experimental group was higher than the control group. From this relation, two important themes emerged. First, the present research proved that mere subjective report of an intention could not be taken for granted to the emergence of an actual behavior without having or showing appropriate intention implementation critical cues. Hence, the model needs to add variables that can mediate intention to action bridge as this study revealed. Second, as indicated under the discussion and conclusion section of this dissertation, students who have learned entrepreneurship by the experiential entrepreneurial method are better in affective and skill related learning outcomes. Hence, thinking the intention model without appropriate intervention strategies found worthless.

In general, the present study contributes to TPB in two ways. (1) Our finding joins the position that SNB cannot significantly predict entrepreneurial intention, or its contribution has been the weakest than attitude or PBC. (2), the intention model posed at intention extended to its immediate outcome Intention implementation cues (IIC). (3) Entrepreneurial self-concept (which is the new ads of the model in the present study) can mediate the relationship of SNB to EI, PBC to EI, and PBC to EIIC.

6.3.1.2. Contribution to entrepreneurship education

This study is the first study in the field of entrepreneurial learning that provides in-depth insight into how an entrepreneurship course enriched by experiential learning methodology impacts the entrepreneurial intention, and its antecedent factors, generic entrepreneurial learning outcomes and perceived job creation of graduating students. The findings of the study could serve as opportunities of broadening the perspective that sides the literature arguing as entrepreneurial knowledge, skills, effects are trainable, and these learning can change the entrepreneurial attitudes, which determine the intention to create new ventures.

This study suggests an intention-focus; practical, experiential learning methodology has a differential impact on the attitude, perceived controllability, and execution of specific entrepreneurial competences. In this sense, entrepreneurial intention and its implementation

cues or other related endogenous variables of learners can be enhanced through improving attitude toward entrepreneurship, perceived behavioral control, entrepreneurial self-concept, and entrepreneurial achievement motivation which in turn, can be developed through well designed entrepreneurship course model enriched by experiential learning principles. Therefore, entrepreneurship education planned to be induced through higher education entrepreneurship courses should be framed and guided by the learning methods prescribed to practical experiential learning methodology.

6.3.2. Practical contribution and implications

The practical contributions of this dissertation mainly concern educators, trainers, teachers, and higher education in the delivery of entrepreneurship courses. The present research shows practical feasible ways on both how to design learning strategies and deliver an effective entrepreneurship course through experiential learning methodology framework. The findings suggest a target-shooting practical learning methodology while designing an entrepreneurship curriculum for entrepreneurship (which is a blended learning strategy of enhancing entrepreneurial knowledge, skills and personal entrepreneurial competencies) is so important. Accordingly, the learning strategies tested in this study could be taken as an important causal factor that can affect the entrepreneurial learning behavior of prospective graduating students. The target shooting approach of delivering an entrepreneurship course gives a practical clue for educators, teachers and trainers while planning how to execute the course delivery in theory driven learning principles and collaboration with the inside university units and outside university communities.

TPB is a reliable framework for examining and evaluating the entrepreneurial learning outcomes of students that teachers and educators could use throughout the administration of the course. On the other hand, entrepreneurial learning could be fruitful in a learning environment where its process opens a room for practical experience of learners. These practical experiences only happen when experiential learning principles meaningfully practiced, mediated, or touched the mind, heart and hand of learners through provision of access to resource, freedom, choice and power for learners. This can be true when higher education is striving for becoming entrepreneurial in their strategies and practices.

The present research has clearly indicates teaching an entrepreneurship course in higher education for entrepreneurship (for business venture creation) demands an integrated, communicated, and cooperative learning environment with university units and stakeholders

outside the university. Accordingly, the management, business development departments, business incubation centers, units of director of students' service, colleges and departments providing the course entrepreneurship of universities should work in well designed and communicated command of chain which aligned by a policy and legal document or working manual.

On the other hand, the present research shows how university stakeholders could participate in the course delivery of entrepreneurship. To obtain higher level of cooperation and result from the course delivery, signing MoU agreement between the university and stakeholders, can be an efficient and effective means of transforming theory into practices and perceived challenges and fear of failures in to practical lived experiences that ultimately enhance the entrepreneurial intention of learners. This can be realized through provision of student loan, organization of trade fare, synchronization, and integration of entrepreneurial course content, learning method, assessment, and practices with university business incubation, enterprise and other related units.

Teachers or instructors from a specific college or department should not provide teaching entrepreneurship as a course. What matters is course facilitators' business experience, knowledge of practical learning methods, passion for entrepreneurship and proven experience of certification (long and short-term training) in entrepreneurial learning. Therefore, higher education institutes should carefully plan, support, evaluate, and revise the way entrepreneurship courses provided for prospective graduating students.

Providing an entrepreneurial learning opportunity for students and widening the exposure to the entrepreneurial practices improve the entrepreneurial intention and behavior of students. This can be done through various ways. For instance, provision of two and more entrepreneurship courses, infusion of entrepreneurial practices in various courses, simulation, opening of incubation centers in colleges/institutes/schools or university wide talent and innovation management units.

Rethinking and timely evaluation of entrepreneurship education, its delivery and follow up of the performance of alumni in the market is a key for improvement of the course delivery, effectiveness of higher education policies and plans, unemployment reduction of the country and employability of graduates of the university.

Entrepreneurial learning is dynamic, heuristic and sometimes, intuitive. Therefore, on one hand, entrepreneurship educators should consult educational-psychologists while developing course curriculum pedagogies. On the other hand, educational psychologists should update

their knowledge of theory and practices in order to consult those programs and be able to provide a knowledge and skill that can meet the demand of the current fast growing economies, unpredictable market, highly complicated technological advancement and innovations vis-à-vis various business demand of students join higher education.

Finally, researchers in entrepreneurial learning, intention, and TPB can consider the following takeaways from this research:

- Increasing the volume of intervention can have a significant impact and change on entrepreneurial intention of students.
- Increasing the diversity of measuring instruments of entrepreneurial intention can lead to replication and validation of the impact of experiential learning method
- Linking the association between the recorded entrepreneurial intentions of prospective graduates with their future actual venture creation behavior through a longitudinal research can only minimize the gaps and increase the robustness of the model TPB and the rest intention models.
- Providing access to student loans, opportunity for business creation exercises, exposure to the market outside the university, and provision of freedom and self-management in learning under the close supervision course facilitators can be an attractive area of investigation.

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APPENDICES

Appendix A: English version of the pretest questionnaire

Bahir Dar University
College of Education and Behavioral Science
Department of Psychology

Dear Participant

This data collection is part of the project aimed at reframing an entrepreneurial learning method in higher education through evaluating the impacts of the teaching learning methods of the course entrepreneurship and small business management. Hence, you are selected as an informant participant of the research process. Your participation is a key for the effectiveness of the research outcome and its application in the later phase.

Since the data you are going to provide is highly valued for the study and crucial in the filling process of the questionnaire, please consider the following preliminary information gently.

Kindly be informed that the data collection will take place in two phases; before the course intervention and immediately after the completion and submission of the grade of the course, which spans four months or at the beginning and end of this semester.

- Please make sure that I can match this questionnaire with the one you will fill at the end of the semester or completion of the course. Please provide your name or the same pseudonyms both times.
- Please exclusively use the possible answers provided. Do not use interim values, otherwise, I might not be able to consider parts of your data or the complete questionnaire in the analysis.

Thank you

Yasin Mohammed

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0912056165

Supervisor: Professor Reda Dargie

Full Name _____

University ID No. _____

Mob. No. 1 _____

Mob. No, 2 _____

E-mail _____

1. Demographic Information

- 1.1. Age: _____
- 1.2. Sex: Female Male
- 1.3. Religion _____
- 1.4. Field of study: _____
- 1.5. Semester Cumulative Grade Point Average(CGPA) _____
- 1.6. Parents' occupation: Mother _____
Father _____
- 1.7. Parents' Educational Level: Mother _____ Father _____
- 1.8. Residence: Urban _____ Semi _____ Urban Rural _____

Section Two: expectations and Previous Experiences

2.1. What do you expect from the course Entrepreneurship and Small Business Management?

A. I have no precise expectation

B. I have a general interest and want to learn more about entrepreneurship. This will help to decide whether becoming an entrepreneur is an option for me.

C. I could imagine becoming an entrepreneur. Therefore, I want to learn the necessary skills and competencies.

D. I am determined to start my own business. Therefore, I want to learn the necessary skills and competencies.

E. Others (describe if any)

2.2. Previous Experience

Statements**Alternative Responses**

1.1.	Are there any entrepreneurs within your family or among your acquaintances?	Yes	No
1.2.	Do your parents (or one of your parents) work in a small enterprise or in a start-up company?	Yes	No
1.3.	Have you ever worked in a small company?	Yes	No
1.4.	Have your parents (or one of your parents) ever started a company?	Yes	No
1.5.	Have you already started your own business?	Yes	No
1.6.	Have you ever considered starting your own business? (e.g. gathered information, written a business plan)	Yes	No
1.7.	Do you frequently have contact with entrepreneurs?	Yes	No
1.8.	Have you ever attended any courses, seminars or informative meetings about entrepreneurship?	Yes	No
1.9	Are there any entrepreneurs within your family or among your acquaintances?	Yes	No

Section Three: Entrepreneurial Intention Questionnaire (EIQ)

In this section, entrepreneurial intention measuring items are presented. The items are supposed to measure the impact of entrepreneurial learning/ teaching methods on entrepreneurial intention and corresponding learning outcomes of students. Therefore, evaluate your business related behavior you feel you have acquired as a result of learning the course Entrepreneurship and Small Business Management through statements provided. Regarding Agreement Level Numbers: 1 means the lowest level of agreement; each time you increase the level by 2, 3, 4, etc.. and 7, your level of agreement on the behavior described increases from a relatively low level of agreement to a high level.

- Please, respond to the items by sincerely marking the appropriate answer, or writing above the line when necessary. Choose **only one answer** to each question. In value-scales, 1 always represents the lowest level, while 7 always indicates the highest level.

No.	Statements	Evaluation alternatives						
3.1.	EI	1 always represents the lowest level, while 7 always indicates the highest level.						
3.1.1.	I am ready to do anything to be an entrepreneur	1	2	3	4	5	6	7
3.1.2.	I will make every effort to start and run my own business	1	2	3	4	5	6	7
3.1.3.	I have serious thought about starting firm	1	2	3	4	5	6	7
3.1.4.	I am determined to create a business venture in the future	1	2	3	4	5	6	7
3.1.5.	My professional goal is to be an entrepreneur	1	2	3	4	5	6	7
3.1.6.	I have got intention to start a business someday	1	2	3	4	5	6	7
3.2	EAT							
3.2.1.	A career as entrepreneur is attractive for me	1	2	3	4	5	6	7

3.2.2.	If I had the opportunity and resources, I'd like to start a firm	1	2	3	4	5	6	7
3.2.3.	Among various options, I would rather be an entrepreneur	1	2	3	4	5	6	7
3.2.4	Being an entrepreneur would entail great satisfactions for me	1	2	3	4	5	6	7
3.2.5	Being an entrepreneur implies more advantages than disadvantages to me	1	2	3	4	5	6	7
3.2.6	I am determined to achieve my desire to be entrepreneur	1	2	3	4	5	6	7
3.3	SNB							
3.3.1.	My closest family members think that I should pursue a career as an entrepreneur	1	2	3	4	5	6	7
3.3.2.	My closest friends think that I should pursue a career as an Entrepreneur	1	2	3	4	5	6	7
3.3.3.	People that are important to me think that I should pursue a career as an entrepreneur	1	2	3	4	5	6	7
3.4	PBC							
3.4.1.	To start a firm and keep it working would be easy for me	1	2	3	4	5	6	7
3.4.2.	I am prepared to start a viable firm	1	2	3	4	5	6	7
3.4.3.	I can control the creation process of a new firm	1	2	3	4	5	6	7
3.4.4.	I know the necessary practical details to start a firm	1	2	3	4	5	6	7
3.4.5.	If I tried to start a firm, I would have a high probability of succeeding	1	2	3	4	5	6	7
3.4.6.	I know how to develop an entrepreneurial project	1	2	3	4	5	6	7
3.5	(EHC)							

	For the business that I would create after my graduation:								
3.5.1.	I have prepared a business plan	1	2	3	4	5	6	7	
3.5.2.	I Have identified business opportunities in my vicinity	1	2	3	4	5	6	7	
3.5.3.	I have identified financial sources	1	2	3	4	5	6	7	
3.5.4.	I have identified my business partners	1	2	3	4	5	6	7	
3.5.5.	I have identified the business type that I will be engaged	1	2	3	4	5	6	7	
3.5.6	<i>I have begun saving some amount of my pocket money</i>	1	2	3	4	5	6	7	
3.6	ESC								
3.6.1.	I feel that I have a greater ability to hunt business opportunities than most of my friends	1	2	3	4	5	6	7	
3.6.2.	I feel that I am confident enough that I have the knowledge of how to write a feasible business project than most of my friends.	1	2	3	4	5	6	7	
3.6.3.	I believe that most of my friends/parents have a confidence that I will be capable in creating my own venture after graduation	1	2	3	4	5	6	7	
3.6.4.	I feel that I am good at business negotiation and personal relationships.	1	2	3	4	5	6	7	
3.6.5.	I believe that most of my friends/parents perceive that I am a hard worker.	1	2	3	4	5	6	7	
3.6.6.	I feel that I have a habit of making things in new or better ways than most of my friends.	1	2	3	4	5	6	7	
3.7	EAM								
3.7.1.	I always enjoy putting myself at work	1	2	3	4	5	6	7	
3.7.2.	I often think of ways to create my own business venture.	1	2	3	4	5	6	7	
3.7.3.	I set goals before I do work; I evaluate my effectiveness in terms of those goals.	1	2	3	4	5	6	7	

3.7.4.	Although I am not better than others, I am satisfied as long as today's results are better than yesterday.	1	2	3	4	5	6	7
3.7.5.	As long as the type of work I do is personally satisfying, I don't care about others negative opinion	1	2	3	4	5	6	7
3.7.6.	It is my habit to think that I have done the right thing in addition to the results I have achieved	1	2	3	4	5	6	7
3.7.7.	I would rather do tasks which appear challenging than the ones in which I feel confident +	1	2	3	4	5	6	7

Appendix B: English Version of the posttest questionnaire

Bahir Dar University
College of Education and Behavioral Science
Department of Psychology

Dear Participant

This data collection is part of the project aimed at reframing an entrepreneurial learning method in higher education through evaluating the impacts of the teaching learning methods of the course entrepreneurship and small business management. Hence, you are selected as an informant participant of the research process. Your participation is a key for the effectiveness of the research outcome and its application in the later phase.

Since the data you are going to provide is highly valued for the study and crucial in the filling process of the questionnaire, please consider the following preliminary information gently.

Kindly be informed that the data collection will take place in two phases; before the course intervention and immediately after the completion and submission of the grade of the course, which spans four months or at the beginning and end of this semester.

- Please make sure that I can match this questionnaire with the one you will fill at the end of the semester or completion of the course. Please provide your name or the same pseudonyms both times.
- Please exclusively use the possible answers provided. Do not use interim values, otherwise, I might not be able to consider parts of your data or the complete questionnaire in the analysis.

Many thanks for your time,

Yasin Mohammed
haruny53@gmail.com
0912056165
Supervisor: Proff. Reda Dargie

Full Name _____
University ID No. _____
Mob. No. 1 _____
Mob. No, 2 _____
E-mail _____

2. Demographic Information

- 2.1. Age: _____
- 2.2. Sex: _ Female Male
- 2.3. Religion _____
- 2.4. Field of study: _____
- 2.5. Semester Cumulative Grade Point Average(CGPA) _____
- 2.6. Parents' occupation: Mother _____ Father _____
- 2.7. Parents' Educational Level: Mother _____ Father _____
- 2.8. Residence: Urban _____ Semi _____ Urban Rural _____

Section Two: open ended Questions

Dear Study Participants!

The following ten questions are presented for you in order to evaluate your personal opinion, behavior of job creation, strength and weakness of the course (entrepreneurship and small business management) teaching-learning method. Hence, you are kindly asked to provide your open and freely described views.

2.1. Who do you think is responsible for solving the problem of graduates' unemployment? Why?

- a. -----
- b. -----
- c. -----
- d. -----

2.2. Do you think it was helpful to learn this course? **Yes No**

2.3. If your answer to question No. 2.2 is **Yes**, then consider the main points of how you benefited

- a. -----
- b. -----
- c. -----

2.4. If your answer to question No. 2.2 is that you did not benefit from learning the course, then why not?

- a. -----
- b. -----
- c. -----

2.4. In your opinion, what are the main strengths of the teaching learning method of the course entrepreneurship and small business management?

- a. -----
- b. -----
- c. -----
- d. -----

2.5. In your opinion, what are the main weaknesses of the teaching learning method of the course Entrepreneurship and small business management?

- a. -----
- b. -----
- c. -----
- d. -----

2.6. In your opinion, how do you evaluate the content of this course in terms of enabling students to create their own work after graduation?

2.7. Do you believe the university should approve a loan for the business creation exercise of prospective graduate students? **YES NO**

2.8. Explain the reason for your response of 2.7.

2.9. Have you taken the loan that is allowed to graduates for business creation and practice? YES
 NO

2.10. If your answer to question No. 2.9 is "NO", explain why you did not take it.

Section Three: Entrepreneurial Intention Questionnaire (EIQ)

In this section, entrepreneurial intention measuring items are presented. The items are supposed to measure the impact of entrepreneurial learning/ teaching methods on entrepreneurial intention and corresponding learning outcomes of students. Therefore, evaluate your business related behavior you feel you have acquired as a result of learning the course Entrepreneurship and Small Business Management through statements provided. Regarding Agreement Level Numbers: 1 means the lowest level of agreement; each time you increase the level by 2, 3, 4, etc.. and 7, your level of agreement on the behavior described increases from a relatively low level of agreement to a high level.

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No.	Statements	Evaluation alternatives						
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3.1.2.	I will make every effort to start and run my own business	1	2	3	4	5	6	7
3.1.3.	I have serious thought about starting firm	1	2	3	4	5	6	7
3.1.4.	I am determined to create a business venture in the future	1	2	3	4	5	6	7
3.1.5.	My professional goal is to be an entrepreneur	1	2	3	4	5	6	7
3.1.6.	I have got intention to start a business someday	1	2	3	4	5	6	7
3.2	EAT							
3.2.1.	A career as entrepreneur is attractive for me	1	2	3	4	5	6	7
3.2.2.	If I had the opportunity and resources, I'd like to start a firm	1	2	3	4	5	6	7
3.2.3.	Among various options, I would rather be an entrepreneur	1	2	3	4	5	6	7
3.2.4	Being an entrepreneur would entail great satisfactions for me	1	2	3	4	5	6	7
3.2.5	Being an entrepreneur implies more advantages than disadvantages to me	1	2	3	4	5	6	7
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3.3	SNB							
3.3.1.	My closest family members think that I should pursue a career as an entrepreneur	1	2	3	4	5	6	7
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3.4	PBC							
3.4.1.	To start a firm and keep it working would be easy for	1	2	3	4	5	6	7

	me							
3.4.2.	I am prepared to start a viable firm	1	2	3	4	5	6	7
3.4.3.	I can control the creation process of a new firm	1	2	3	4	5	6	7
3.4.4.	I know the necessary practical details to start a firm	1	2	3	4	5	6	7
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3.5	(EHC)							
	For the business that I would create after my graduation:							
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3.5.4.	I have identified my business partners	1	2	3	4	5	6	7
3.5.5.	I have identified the business type that I will be engaged	1	2	3	4	5	6	7
3.5.6	<i>I have begun saving some amount of my pocket money (removed after the pilot)study)</i>	1	2	3	4	5	6	7
3.6	ESC							
3.6.1.	I feel that I have a greater ability to hunt business opportunities than most of my friends	1	2	3	4	5	6	7
3.6.2.	I feel that I am confident enough that I have the knowledge of how to write a feasible business project than most of my friends.	1	2	3	4	5	6	7
3.6.3.	I believe that most of my friends/parents have a confidence that I will be capable in creating my own venture after graduation	1	2	3	4	5	6	7
3.6.4.	I feel that I am good at business negotiation and personal relationships.	1	2	3	4	5	6	7
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3.7.3.	I set goals before I do work; I evaluate my effectiveness in terms of those goals.	1	2	3	4	5	6	7
3.7.4.	Although I am not better than others, I am satisfied as long as today's results are better than yesterday.	1	2	3	4	5	6	7
3.7.5.	As long as the type of work I do is personally satisfying, I don't care about others negative opinion	1	2	3	4	5	6	7
3.7.6.	It is my habit to think that I have done the right thing in addition to the results I have achieved	1	2	3	4	5	6	7
3.7.7.	I would rather do tasks which appear challenging than the ones in which I feel confident +	1	2	3	4	5	6	7

Appendix C: Amharic version of the pretest questionnaire

ባህር ዳር ዩኒቨርሲቲ
የመምህራንና የስነ-ባህሪ ኮሌጅ
የሳኮሎጂ ትምህርት ክፍል

የስራ ፈጠራና አመራር ስርዓተ-ትምህርት የማስተማሪያ ዘዴ ተፅእኖ ግምገማና መረጣ ፕሮጀክት መረጃ መሰብሰቢያ መጠይቆች

(ቅድመ-መማር ግምገማ)

የተከበራችሁ የዚህ ጥናት ተሳታፊዎች፦

የዚህ ጥናት ዋና አላማ የስራ ፈጠራና አነስተኛ የንግድ ድርጅቶች አመራር ትምህርት የማስተማሪያ ዘዴ በተመራቁ ተማሪዎች ባህሪ ላይ የሚያሳድረውን የአመለካከትና ክህሎት ተፅዕኖ ለመገምገምና አማራጭ የማስተማሪያ ዘዴን ለመቅረፅ የታለመ ነው።

በቅድሚያ የጥናቱ ተሳታፊ ለመሆን ፈቃደኛ ስለሆኑ እናመሰግናለን። ለጥናቱ ሁለንተናዊ ስኬታማነት እርሶዎ የሚሰጡት የመረጃ ጥራትና ተዓማኒነት ጠቀሜታው የላቀ ሲሆን የሚሰጡት መረጃ በማኛውም መንገድ ከጥናቱ አላማ ውጭ እንደማይውል እናረጋግጣለን።

በመጠይቁ የተለያዩ ክፍሎች የተመለከቱትን ጥያቄዎችን ግለ-ግምገማዎች በጥንቃቄ እየተመለከቱ ይመልሱ። ይህ መሆኑ የጥናቱን አላማ በግልፅ ለማሳካትና የሃገራችን ከፍተኛ ትምህርት ተቋማት የሚሰጡትን የስራ ፈጠራ ትምህርት ጠቅላላ ባህሪ እንደገና እንዲፈትሹ አስረጅ ይሆናል።

በተጨማሪም አሁን የሚሰጡትን ምላሽ በድጋሚ በሴሚስተሩ መጨረሻ ከሚሰጡት ጋር እንደምናዘምደው ግምት ውስጥ ያስገቡ ዘንድ ይጠየቃሉ። ስመዎንና መታወቂያ ቁጥርዎን መፃፈዎን አይዘንጉ፤ ሁሉንም ጥያቄዎች እንደባህሪያቸው ይመልሱ።

በቅድሚያ እናመሰግናለን

ያሲን መሐመድ ዓሊ (ኢ.ሜ.ይል፤ haruny53@gmail.com; ስልክ፤ 0912056165

አማካሪ፤ ፕሮፌሰር ረዳ ዳርጌ (ባህር ዳር ዩኒቨርሲቲ)

ሙሉ ስም-----

የዩኒቨርሲቲ መታወቂያ ቁጥር-----

ስልክ ቁጥር 1-----

ስልክ ቁጥር 2-----

E-mail-----

1. ግለ-መረጃ

1.1. እድሜ _____

1.2. ፆተ: _____

1.3. ሃይማኖት _____

1.4. የትምህርት መስክ: _____

1.5. የሴሚስተር አማካይ ውጤት (CGPA) _____

1.6. የወላጆች (አሳዳጊዎች) የስራ አይነት፤ የባት----- የእናት _____

1.7. የወላጆች ትምህርት ደረጃ የአባት _____ የእናት-----

1.8. የመኖሪያቦታ: ገጠር ከተማ----- የገጠር ከተማ

ክፍል ሁለት፤

2. ቅድመ-ተሞክሮና መጠበቅ

2.1. መጠበቅ፤ የሰራ ፈጠራና አነስተኛ የንግድ ድርጅቶች አመራር ከሚለው ኮርስ ምን ይጠብቃሉ? አንድ ወይም ከአንድ አማራጭ በላይ መልስ መስጠት ይችላሉ።

ሀ/ ይህ ነው የሚባል ግልፅ የሆነ የምጠብቀው ነገር የለም

ለ/ ጥቅል የሆነ ፍላጎት አለኝ፤ ስለሆነም ስለ ስራ ፈጠራ ምንነት መማር እፈልጋለሁ። ይህም ከተመረቅኩ በኋላ የግል የንግድ ስራ አማራጭ የስራ ዘርፍ ይሆን እንደሆነ ለመወሰን ያግዘኛል።

ሐ/ የራሴ የሆነ የንግድ ድርጅት እንዲኖረኝ አሰብ ነበር። ስለሆነም አስፈላጊ የሆኑ ክህሎቶችንና ብቃቶችን መማር እፈልጋለሁ።

መ/ የራሴን የግል የንግድ ድርጅት ለመጀመር ወስኛለሁ። ስለሆነም አስፈላጊ የሆኑ

እፈልጋለሁ።

ሰ/ ሌላ የተለየ ሃሳብ ካለዎት በአጭሩ ያብራሩ

2.2. ያለፈ የንግድ ስራ ተሞክሮ ተሞክሮ፤

በሚከተለው ሰንጠረዥ የርሰዎን ያለፈ የንግድ ስራ ተኮር ተሞክሮ ለመገምገም የሚያግዙ ዓ. ነገሮች ቀርቦታል። ስለሆነም ዓ.ነገሮችን “አዎ” ወይም “አይደለም” እያሉ አማራጮችን በማክበብ ተሞክሮዎን ይወስኑ።

ተ.ቁ	ዓ.ነገሮች	የመልስ አማራጮች	
2.2.1.	ከቤተሰቦቼ መካከል የራሳቸው የንግድ ድርጅት ያላቸው አሉ።	አዎ	አይደለም
2.2.2.	በግል የንግድ ድርጅት ውስጥ ተቀጥሮ የሚሰራ የቅርብ ቤተሰብ አለኝ።	አዎ	አይደለም
2.2.3.	ከዚህ ቀደም በግል የንግድ ድርጅት ውስጥ ሰርጭ አውቃለሁ።	አዎ	አይደለም
2.2.4.	ወላጆቼ የራሳቸውን የንግድ ድርጅት መስርተው ያውቃሉ።	አዎ	አይደለም
2.2.5.	የራሴ የሆነ የንግድ ድርጅት አለኝ።	አዎ	አይደለም
2.2.6.	ከዚህ ቀደም የራሴን የንግድ ድርጅት ለመክፈት አስቤ አውቃለሁ (ለምሳሌ፤ መረጃ ሰበስቤያለሁ፣ ቢዝነስ ፕላን አዘጋጅቻለሁ)	አዎ	አይደለም
2.2.7.	የራሳቸው የንግድ ድርጅት ያላቸው ባለሃብቶች ጋር ተደጋጋሚ ግንኙነት አለኝ።	አዎ	አይደለም
2.2.8.	ስራ ፈጠራን አስመልክቶ የተዘጋጁ ሰልጠናዎች፣ የውይይት መድረኮች ወይም ኮርሶች ላይ ተሳትፎ አውቃለሁ።	አዎ	አይደለም

ክፍል ሶስት፤

በዚህ ክፍል የሰራ ፈጠራና አነስተኛ የንግድ ድርጅቶች አመራር ኮርስ የማስተማሪያ ዘዴ በተመራቁ ተማሪዎች የባህሪ ለውጥ ላይ የሚያሳድረውን ቅድመ የራስን ስራ የመፍጠር ፅኑ ፍላጎት የሚመዘኑ ዓ.ነገሮች ቀርበዋል። በመሆኑም በቀረቡት የግለ-ምዘና መጠይቆች መሰረት የስምምነት ደረጃዎን ጥንካሬ መጠን ከ 1-7 ዋጋ በመስጠት የንግድ ስራ ባህሪዎን ይገምግሙ። የስምምነት ደረጃ ቁጥሮችን በተመለከተ፤ 1 ማለት ዝቅተኛ የስምምነት ደረጃን ሲወክል፤ 2፣3፣ 4... እና 7 እያሉ ደረጃውን በጨመሩ ቁጥር በተገለጸው ባህሪ ላይ የርሰዎ የስምምነት ደረጃ በአንፃራዊነት ከዝቅተኛ የስምምነት ደረጃ ወደ ከፍተኛው እየጨመረ ይሄዳል ማለት ነው። በመጨረሻም መልስ አሰጣጡ ላይ ትንሽም ግራ መጋባት ቢገጥመዎት ለጥናቱ ውጤታማነት ሲባል የጥናቱን መረጃ ሰብሳቢዎች እርዳታ እንዲጠይቁ በድጋሚ በአክብሮት ይጠየቃሉ።

ተቁ	ዓ.ነገር	መገምገሚያ አማራጮች						
3.1.		የግለ-ምዘና ስምምነትዎን (1=ሙሉ በሙሉ አልስማማም፣ 7= ሙሉ በሙሉ እስማማለሁ) በማለት ይመልሱ						
3.1.1	የትኛውንም አይነት ስራ በመስራት ጥሩ ውጤታማ የሆነ የንግድ ስራ ሰው ለመሆን ዝግጁ ነኝ።	1	2	3	4	5	6	7
3.1.2	የራሴን የንግድ ድርጅት ለመክፋትና ለመምራት አቀማን አሟጥጬ ለመጠቀም አስባለሁ።	1	2	3	4	5	6	7
3.1.3	የግል የቢዝነስ ድርጅት ማቋቋም አስፈላጊ ነው የሚል ጠንካራ እሳቤ አለኝ።	1	2	3	4	5	6	7
3.1.4	ከተምረቅኩ በኋላ የራሴን የንግድ ድርጅት ለመክፈት ቁርጠኛ ነኝ።	1	2	3	4	5	6	7
3.1.5	የረዥም ጊዜ አላማየ የተሳካለት የንግድ ስራ ባለሙያ መሆን ነው።	1	2	3	4	5	6	7
3.1.6	የራሴን የንግድ ድርጅት የመመስረት ሃሳብ ፀንሻለሁ።	1	2	3	4	5	6	7

3.2		(1= ሙሉ በሙሉ አልስማማም፣ 7= ሙሉ በሙሉ እስማማለሁ)						
	የራሱ ድርጅት ያለው ስራ ፈጣሪ መሆን የሚረከብኝ የስራ ዘርፍ ነው።	1	2	3	4	5	6	7
3.2.1	መልካም አጋጣሚዎችና ሁኔታዎች ቢመቻችሉኝ የራሴን ካምፓኒ መመስረት ምርጫዬ ነው።	1	2	3	4	5	6	7
3.2.2	ከሌሎች የስራ አማራጮች በተሸለ ውጤታማ የሆነ የንግድ ስራ ሰው መሆን እፈልጋለሁ።	1	2	3	4	5	6	7
3.2.3	ስኬታማ የንግድ ስራ ሰው መሆን ትልቅ እርካታ ይሰጠኛል።	1	2	3	4	5	6	7
3.2.4	ስኬታማ የንግድ ስራ ሰው መሆን የሚያስገኘው ጥቀም ከጉዳቱ በእጅጉ ይበልጣል።	1	2	3	4	5	6	7
3.2.5	ስኬታማ የንግድ ስራ ሰው የመሆን ህልጫን እውን ለማድረግ ቁርጠኛ ነኝ።	1	2	3	4	5	6	7
3.3		(1= ሙሉ በሙሉ አይቀበሉም፣ 7= ሙሉ በሙሉ ይቀበላሉ)						
3.3.1	ቅርብ ቤተሰቦቼ የራሴን የንግድ ድርጅት መጀመርና እንደ ሙያ ይዘገቡ መቀጠል እንዳለብኝ ያስባሉ።	1	2	3	4	5	6	7
3.3.2	ቅርብ ቤተሰቦቼ የራሴን የንግድ ድርጅት መጀመርና እንደ ሙያ ይዘገቡ መቀጠል እንዳለብኝ ያስባሉ።	1	2	3	4	5	6	7
3.3.3	የጌ የምላቸው ቅርብ ሰዎች የራሴን የንግድ ድርጅት መጀመርና እንደ ሙያ ይዘገቡ መቀጠል እንዳለብኝ ያስባሉ።	1	2	3	4	5	6	7
3.4		(1= ሙሉ በሙሉ አልስማማም፣ 7= ሙሉ በሙሉ እስማማለሁ)						
3.4.1	የራሴን የንግድ ድርጅት መመስረትና ማንቀሳቀስ የሚያስችል አቅም አለኝ።	1	2	3	4	5	6	7
3.4.2	አዋጭ የሆነ የንግድ ስራ ለመጀመር የሚያስችል ቅድመ-ዝግጅት ላይ ነኝ	1	2	3	4	5	6	7
3.4.3.	አዲስ የንግድ ስራ ለመጀመር የሚያስፈልገውን ሂደት የመቆጣጠርና የመከታተል እውቀትና ክህሎት አለኝ።	1	2	3	4	5	6	7
3.4.4.	አዲስ የንግድ ስራ ለመጀመር የሚያስፈለጉ ዝርዝር ተግባራትን ላይኛ አውቃለሁ።	1	2	3	4	5	6	7
3.4.5.	የራሴን የንግድ ድርጅት ብከፍት ትርፋማ የመሆን እድሌ ከፍተኛ ነው።	1	2	3	4	5	6	7
3.4.6.	ጥሩ የስራ ፈጠራ ፕሮጀክቶች እንዴት እንደሚዘጋጁ እውቀቱ አለኝ።	1	2	3	4	5	6	7

3.5								
	ከተመረቅኩ በኋላ ለምሳሌው የንግድ ስራ፡	1= ምንም አልፈፀኩም; 7= ሙሉ በሙሉ ፈፀሜዋለሁ						
3.5.1.	መሪ የስራ እቅድ በሰነድ አስደግፌ አስቀምጬለሁ፡፡	1	2	3	4	5	6	7
3.5.2.	በትውልድ መኖሪያዎ ያሉ መልካም የንግድ ስራ እድሎችን ለይቻለሁ፡፡	1	2	3	4	5	6	7
3.5.3.	ገንዘብ የማግኘትባቸውን አማራጮች ለይቻለሁ፡፡	1	2	3	4	5	6	7
3.5.4.	የቢዝነስ አጋሮቼን በትክክል ለይቻለሁ፡፡	1	2	3	4	5	6	7
3.5.5.	አይነተኛ የገበያ ጥናት በማድረግ የምሰማራበትን የንግድ ስራ ዘርፍ ወስኛለሁ	1	2	3	4	5	6	7
3.5.6.	ከሚላክልኝ የኪስ ገንዘብ ላይ እየቀነሰኩ መቆጠብ ጀምሪያለሁ፡፡	1	2	3	4	5	6	7
3.6		(1= ሙሉ በሙሉ አልሰማማም፣ 7= ሙሉ በሙሉ እስማማለሁ)						
3.6.1.	መልካም የንግድ ስራ እድሎችን በመለየት ረገድ ከብዙ ዳደሮቼ የተሻለ ቸሎታ እንዳለኝ ይሰማኛል፡፡	1	2	3	4	5	6	7
3.6.2.	ከብዙ ዳደሮቼ ጋር ሲነፃፀር አዋጭ የሆነ የንግድ ስራ እቅድ እንዴት እንደሚፀና ያለኝ እውቀት የተሻለ እንደሆነ ይሰማኛል፡፡	1	2	3	4	5	6	7
3.6.3.	ከተመረቅኩ በኋላ የራሴን የንግድ ድርጅት መክፈት ሚያስችል ቸሎታ እንዳለኝ ቅርብ የክፍል ዳደሮቼና ቤተሰቦቼ ይተማመኑብኛል የሚል እምነት አለኝ፡፡	1	2	3	4	5	6	7
3.6.4.	ከሰዎች ጋር ያለኝ ግንኙነት እንዲሁም ሌሎችን ተደራድሮ የማሳመን አቅሜ ጥሩ እንደሆነ ይሰማኛል፡፡	1	2	3	4	5	6	7
3.6.5.	ቤተሰቦቼና ዳደሮቼ ጠንካራ ሰራተኛ ነው/ናት የሚል እይታ እንዳለቸው አምናለሁ፡፡	1	2	3	4	5	6	7
3.6.6.	እራሴን ስገመግም ነገሮችን በተሻለና በአዲስ መልክ የመስራት ልማድ አለኝ የሚል ስሜት ይሰማኛል፡፡	1	2	3	4	5	6	7
3.7		(1= ሙሉ በሙሉ አልሰማማም፣ 7= ሙሉ በሙሉ ስማማለሁ)						
3.7.1.	ሁሌም ራሴን በስራ መወጠርና መትጋት ይስታ ይሰጠኛል፡፡	1	2	3	4	5	6	7
3.7.2.	የራሴን ሃብት ለመፍጠር የሚያስችሉኝን መንገዶች ይጋግሜ አስባለሁ	1	2	3	4	5	6	7

3.7.3.	ስራዎችን ከመስራቱ በፊት ግብ አስቀምጦለሁ፤ ውጤታማነቴንም ካስቀመጡኩት ግብ አንጻር እገመግማለሁ።	1	2	3	4	5	6	7
3.7.4.	ምንም እንኳን ከሌሎች የተሻለ ባይሆንም የዛሬ ውጤቱ ከትናንት የላቀ እስከሆነ ድረስ እርካታ አገኛለሁ።	1	2	3	4	5	6	7
3.7.5.	የምሰራው የስራ አይነት በግሌ ትርጉም እስከሰጠኝ ድረስ ሌሎችን ባያስደስትም አልጨነቅም	1	2	3	4	5	6	7
3.7.6.	በስራዎ ላይ ካገኘሁት ውጤት ባሻገር ስራውን በትክክል መስራት አለመስራቱ ያስጨንቀኛል።	1	2	3	4	5	6	7
3.7.7.	ቀላልና በእርገጠኝነት ከሚሳኩ ስራዎች ይልቅ ፈታኝና አስቸጋሪ ስራዎችን መስራት ደስ ይለኛል።	1	2	3	4	5	6	7

Appendix D: Amharic version of the posttest questionnaire

በባህር ዳር የኒሽርሲቲ

የመምህራንና የስነ-ባህሪ ኮሌጅ

የሳኮሎጂ ትምህርት ክፍል

የስራ ፈጠራና አመራር ትምህርት የማስተማሪያ ዘዴ ተፅእኖ ግምገማና መረጣ ፕሮጀክት መረጃ መሰብሰቢያ መጠይቆች

(ድህረ-ኮርስ ግምገማ)

የተከበራችሁ የዚህ ጥናት ተሳታፊዎች፦
 የዚህ ጥናት ዋና አላማ የስራ ፈጠራና አነስተኛ የንግድ ድርጅቶች አመራር ትምህርት የማስተማሪያ ዘዴ በተመራቁ ተማሪዎች ባህሪ ላይ የሚያሳድረውን የአመለካከትና ክህሎት ተፅዕኖ ለመገምገምና አማራጭ የማስተማሪያ ዘዴን ለመቅረፅ የታለመ ነው።
 በቅድሚያ የጥናቱ ተሳታፊ ለመሆን ፈቃደኛ ስለሆኑ እናመሰግናለን። ለጥናቱ ሁለንተናዊ ስኬታማነት እርሶዎ የሚሰጡት የመረጃ ጥራትና ተዓማኒነት ጠቀሜታው የላቀ ሲሆን የሚሰጡት መረጃ በማኛውም መንገድ ከጥናቱ አላማ ውጭ እንደማይውል እናረጋግጣለን።
 በመጠይቁ የተለያዩ ክፍሎች የተመለከቱትን ጥያቄዎችና ግለ-ግምገማዎች በጥንቃቄ እየተመለከቱ ይመልሱ። ይህ መሆኑ የጥናቱን አላማ በግልፅ ለማሳካትና የሃገራችን ከፍተኛ ትምህርት ተቋማት የሚሰጡትን የስራ ፈጠራ ትምህርት ጠቅላላ ባህሪ እንደገና እንዲፈትሹ አስረጅ ይሆናል።
 በተጨማሪም አሁን የሚሰጡትን ምላሽ በድጋሚ በሴሚስተር መጨረሻ ከሚሰጡት ጋር እንደምናዛምደው ግምት ውስጥ ያስገቡ ዘንድ ይጠየቃሉ። ስመዎንና መታወቂያ ቁጥርዎን መፃፈዎን አይዘንጉ፤ ሁሉንም ጥያቄዎች እንደባህሪያቸው ይመልሱ።

በቅድሚያ እናመሰግናለን

ያሲን መሐመድ ዓሊ (ኢሜይል፣ haruny53@gmail.com; ስልክ፣ 0912056165

አማካሪ፣ ፕሮፌሰር ረዳ ዳርጌ (ባህር ዳር ዩኒቨርሲቲ)

ሙሉ ስም-----

ዩኒቨርሲቲ መታወቂያ ቁጥር-----

ስልክ ቁጥር 1-----

ስልክ ቁጥር 2-----

E-mail-----

1. ግለ-መረጃ

1.1. እድሜ _____

1.2. ፆተ: _____

1.3. ሃይማኖት _____

1.4. የትምህርት መስክ: _____

1.5. የሴሚስተር አማካይ ውጤት (CGPA) _____

1.6. የወላጆች (አሳዳጊዎች) የስራ አይነት፣ የአባት----- የእናት _____

1.7. የወላጆች ትምህርት ደረጃ የአባት _____ የእናት-----

1.8. የመኖሪያቦታ: ገጠር ከተማ----- የገጠር ከተማ

ክፍል ሁለት፣ ግለዊ ሃሳብ ማንሸራሸሪያ ጥያቄዎች

2. ተማሪዎች ከተመረቁ በኋላ የሚገጥሟቸውን ስራ የማጣት ችግር የመፍታት ግዴታ ያለበት ማነውብለው ያስባሉ? ለምን?

ሀ.----- ለ.-----
----- ሐ.-----
----- መ.-----

2. የአንተ ፕሮፌሰር ኮርስን የሚመለከቱ ጥያቄዎች:

ከተ.ቁ 2.1- 2.10 የተመለከቱትን ጥያቄዎች በጥሞና በማንበብ በእርሶዎ እይታ ትክክል ነው ብለው የሚያስቡትን የሃሳብ ምላሽ ወይም ግለ-አስተያየት አማራጩን በማክበብ ወይም በማብራራት መልስ ይስጡ፤

2.1. ይህን ኮርስ መማርዎ ጠቅሞኛል ብለው ያሰባሉ?

አዎ አልጠቀመኝም

2.2. ለተራ ቁጥር 2.1. የሰጡት መልስ አዎ ጠቅሞኛል ከሆነ እንዴት እንደጠቀመዎት ዋና ዋና የሚሏቸውን ፍሬ ነገሮች ይጥቀሱ

ሀ. -----

ለ. -----

ሐ. -----

መ. -----

2.3. ለተራ ቁጥር 2.1 የሰጡት ምላሽ ኮርሱን መማሬ አልጠቀመኝም የሚል ከሆነ ለምን አልጠቀመኝም ብለው እንዳሰቡ ዋና ዋና ምክንያት ናቸው የሚሏቸውን ይጥቀሱ

ሀ. -----

ለ. -----

ሐ. -----

መ. -----

2.4. በእርሶዎ እይታ የዚህ ኮርስ የማስተማሪያ ስነ-ዘዴ ጠንካራ ጎኖች የሚሏቸውን ዋና ዋና ነገሮች ምንድን ናቸው?

ሀ. -----

ለ. -----

ሐ. -----

መ. -----

2.5. በእርሶዎ እይታ የዚህ ኮርስ የማስተማሪያ ስነ-ዘዴ ደካማ ጎኖች የሚሏቸው ዋናዎና ነገሮች ምንድን ናቸው?

ሀ. -----

ለ.....

ሐ.....

መ.....

2.6. በእርስዎ እይታ ተማሪዎች ከተመረቁ በኋላ የራሳቸውን ስራ እንዲፈጥሩ ከማስቻል አኳያ የዚህን ኮርስ ይዘት እንዴት ይገመግሙታል?

ሀ.....

ለ.....

ሐ.....

መ.....

2.7. ለተመራቁ ተማሪዎች የስራ ፈጠራና ልምምድ ስራ የሚሆን የገንዘብ ብድር ዩኒቨርሲቲው ማፍቀድ አለበት ብለው ያምናሉን? አዎ አላምንም

2.8. ለተራ ቁጥር 2.7. ለሰጡት ምላሽ ምክንያቶቻን ያብራሩ

የብራሩ

ሀ.....

ለ.....

ሐ.....

መ.....

2.9. ለተመራቁ ተማሪዎች የስራ ፈጠራና ልምምድ ተማሪዎች እንዲያስዱ የተፈቀደውን ገንዘብ ወስደዋልን? አዎ አልወሰድኩም

2.10. ለተራ ቁጥር 2.9. የሰጡት ምላሽ አልወሰድኩም ከሆነ ለምን እንዳልወሰዱ ምክንያቶቻን ይዘርዝሩ።

ሀ.....

ለ.....

ሐ.....

መ.....

ክፍል ሶስት፤

በዚህ ክፍል የሰራ ፈጠራና አነስተኛ የንግድ ድርጅቶች አመራር ኮርስ የማስተማሪያ ዘዴ በተመራቁ ተማሪዎች የባህሪ ለውጥ ላይ የሚያሳድረውን ቅድመ የራስን ስራ የመፍጠር ፅኑ ፍላጎት የሚመዘኑ ዓ.ነገሮች ቀርበዋል። በመሆኑም በቀረቡት የግለ-ምዘና መጠይቆች መሰረት የስምምነት ደረጃዎን ጥንካሬ መጠን ከ 1-7 ዋጋ በመስጠት የንግድ ስራ ባህሪዎን ይገምግሙ። የስምምነት ደረጃ ቁጥሮችን በተመለከተ፤ 1 ማለት ዝቅተኛ የስምምነት ደረጃን ሲወክል፤ 2፣3፣ 4... እና 7 እያሉ ደረጃውን በጨመሩ ቁጥር በተገለጸው ባህሪ ላይ የርሰዎ የስምምነት ደረጃ በአንፃራዊነት ከዝቅተኛ የስምምነት ደረጃ ወደ ከፍተኛው እየጨመረ ይሄዳል ማለት ነው። በመጨረሻም መልስ አሰጣጡ ላይ ትንሽም ግራ መጋባት ቢገጥመዎት ለጥናቱ ውጤታማነት ሲባል የጥናቱን መረጃ ሰብሳቢዎች እርዳታ እንዲጠይቁ በድጋሚ በአክብሮት ይጠየቃሉ።

ተቁ	ዓ.ነገር	መገምገሚያ አማራጮች						
3.1.		የግለ-ምዘና ምምነትዎን (1=ሙሉ በሙሉ አልስማማም፣ 7= ሙሉ በሙሉ እስማማለሁ) በማለት ይመልሱ						
3.1.1	የትኛውንም አይነት ስራ በመስራት ጥሩ ውጤታማ የሆነ የንግድ ስራ ሰው ለመሆን ዝግጁ ነኝ።	1	2	3	4	5	6	7
3.1.2	የራሴን የንግድ ድርጅት ለመክፋትና ለመምራት አቀሜን አሟጥጬ ለመጠቀም አስባለሁ።	1	2	3	4	5	6	7
3.1.3	የግል የቢዝነስ ድርጅት ማቋቋም አስፈላጊ ነው የሚል ጠንካራ እሳቤ አለኝ።	1	2	3	4	5	6	7
3.1.4	ከተምረቅኩ በኋላ የራሴን የንግድ ድርጅት ለመክፈት ቁርጠኛ ነኝ።	1	2	3	4	5	6	7
3.1.5	የረዥም ጊዜ አላማየ የተሳካለት የንግድ ስራ ባለሙያ መሆን ነው።	1	2	3	4	5	6	7
3.1.6	የራሴን የንግድ ድርጅት የመመስረት ሃሳብ ፀንሻለሁ።	1	2	3	4	5	6	7
3.2		(1= ሙሉ በሙሉ አልስማማም፣ 7= ሙሉ በሙሉ እስማማለሁ)						
	የራሱ ድርጅት ያለው ስራ ፈጣሪ መሆን የሚማርከኝ የስራ ዘርፍ ነው።	1	2	3	4	5	6	7
3.2.1	መልካም አጋጣሚዎችና ሁኔታዎች ቢመቻችሉኝ የራሴን ካምፓኒ መመስረት ምርጫዬ ነው።	1	2	3	4	5	6	7

3.2.2	ከሌሎች የስራ አማራጮች በተሸለ ውጤታማ የሆነ የንግድ ስራ ሰው መሆን እፈልጋለሁ።	1	2	3	4	5	6	7
3.2.3	ስኬታማ የንግድ ስራ ሰው መሆን ትልቅ እርካታ ይሰጠኛል።	1	2	3	4	5	6	7
3.2.4	ስኬታማ የንግድ ስራ ሰው መሆን የሚያስገኘው ጥቀም ከጉዳቱ በእጅጉ ይበልጣል።	1	2	3	4	5	6	7
3.2.5	ስኬታማ የንግድ ስራ ሰው የመሆን ህልጫን እውን ለማድረግ ቁርጠኛ ነኝ።	1	2	3	4	5	6	7
3.3		(1= ሙሉ በሙሉ አይቀበሉም፣ 7=ሙሉ በሙሉ ይቀበላሉ)						
3.3.1	ቅርብ ቤተሰቦቼ የራሴን የንግድ ድርጅት መጀመርና እንደ ሙያ ይዘገ መቀጠል እንዳለብኝ ያስባሉ።	1	2	3	4	5	6	7
3.3.2	ቅርብ ቤተሰቦቼ የራሴን የንግድ ድርጅት መጀመርና እንደ ሙያ ይዘገ መቀጠል እንዳለብኝ ያስባሉ።	1	2	3	4	5	6	7
3.3.3	የኔ የምላቸው ቅርብ ሰዎች የራሴን የንግድ ድርጅት መጀመርና እንደ ሙያ ይዘገ መቀጠል እንዳለብኝ ያስባሉ።	1	2	3	4	5	6	7
3.4		(1= ሙሉ በሙሉ አልስማማም፣ 7= ሙሉ በሙሉ እስማማለሁ)						
3.4.1	የራሴን የንግድ ድርጅት መመስረትና ማንቀሳቀስ የሚያስችል አቅም አለኝ።	1	2	3	4	5	6	7
3.4.2	አዋጭ የሆነ የንግድ ስራ ለመጀመር የሚያስችል ቅድመ-ዝግጅት ላይ ነኝ	1	2	3	4	5	6	7

3.4.3.	አዲስ የንግድ ስራ ለመጀመር የሚያስፈልገውን ሂደት የመቆጣጠርና የመከታተል እውቀትና ክህሎት አለኝ።	1	2	3	4	5	6	7
3.4.4.	አዲስ የንግድ ስራ ለመጀመር የሚያስፈለጉ ዝርዝር ተግባራትን ለይቼ አውቃለሁ።	1	2	3	4	5	6	7
3.4.5.	የራሴን የንግድ ድርጅት ብክፍት ትርፋማ የመሆን እድሌ ከፍተኛ ነው።	1	2	3	4	5	6	7
3.4.6.	ጥሩ የስራ ፈጠራ ፕሮጀክቶች እንዴት እንደሚዘጋጁ እውቀቱ አለኝ።	1	2	3	4	5	6	7
3.5		1= ምንም አልፈጸኩም፣ 7= ሙሉ በሙሉ ፈጸሜቀለሁ						
3.5.1.	መሪ የስራ እቅድ በሰነድ አስደግፌ አስቀምጬለሁ።	1	2	3	4	5	6	7

3.5.2.	በትውልድ መኖሪያዎ ያሉ መልካም የንግድ ስራ እድሎችን ለይቻለሁ።	1	2	3	4	5	6	7
3.5.3.	ገንዘብ የማግኘትባቸውን አማራጮች ለይቻለሁ።	1	2	3	4	5	6	7
3.5.4.	የቢዝነስ አጋሮቼን በትክክል ለይቻለሁ።	1	2	3	4	5	6	7
3.5.5.	አይነተኛ የገበያ ጥናት በማድረግ የምሰማራበትን የንግድ ስራ ዘርፍ ወስኛለሁ	1	2	3	4	5	6	7
3.5.6	ከሚላክልኝ የኪስ ገንዘብ ላይ እየቀነሰኩ መቆጠብ ጀምረያለሁ።	1	2	3	4	5	6	7
3.6		(1= ሙሉ በሙሉ አልስማማም፣ 7= ሙሉ በሙሉ እስማማለሁ)						
3.6.1.	መልካም የንግድ ስራ እድሎችን በመለየት ረገድ ከብዙ ዳደሾቼ የተሻለ ችሎታ እንዳለኝ ይሰማኛል።	1	2	3	4	5	6	7
3.6.2.	ከብዙ ዳደሾቼ ጋር ሲነፃፀር አዋጭ የሆነ የንግድ ስራ እቅድ እንዴት እንደሚፃፍ ያለኝ እውቀት የተሻለ እንደሆነ ይሰማኛል።	1	2	3	4	5	6	7
3.6.3.	ከተመረቅኩ በኋላ የራሴን የንግድ ድርጅት መክፈት ሚያስችል ችሎታ እንዳለኝ ቅርብ የክፍል ዳደሾቼና ቤተሰቦቼ ይተማመኑብኛል የሚል እምነት አለኝ።	1	2	3	4	5	6	7
3.6.4.	ከሰዎች ጋር ያለኝ ግንኙነት እንዲሁም ሌሎችን ተደራድሮ የማሳመን አቅሜ ጥሩ እንደሆነ ይሰማኛል።	1	2	3	4	5	6	7
3.6.5.	ቤተሰቦቼና ዳደሾቼ ጠንካራ ሰራተኛ ነው/ናት የሚል እይታ እንዳላቸው አምናለሁ።	1	2	3	4	5	6	7
3.6.6.	እራሴን ስገመግም ነገሮችን በተሻለና በአዲስ መልክ የመስራት ልማድ አለኝ የሚል ስሜት ይሰማኛል።	1	2	3	4	5	6	7
3.7		(1= ሙሉ በሙሉ አልስማማም፣ 7=ሙሉ በሙሉ እስማማለሁ)						
3.7.1.	ሁሌም ራሴን በስራ መወጣጠና መትጋት ደስታ ይሰጠኛል።	1	2	3	4	5	6	7
3.7.2.	የራሴን ሃብት ለመፍጠር የሚያስችሉኝን መንገዶች ደጋግሜ አስባለሁ	1	2	3	4	5	6	7
3.7.3.	ስራዎችን ከመስራቴ በፊት ግብ አስቀምጣለሁ፤ ውጤታማነቴንም ካስቀመጠኩት ግብ አንጻር እገመግማለሁ።	1	2	3	4	5	6	7
3.7.4.	ምንም እንኳን ከሌሎች የተሻለ ባይሆንም የዛሬ ውጤቴ ከትናንት የላቀ እስከሆነ ድረስ እርካታ አገኛለሁ።	1	2	3	4	5	6	7
3.7.5.	የምሰራው የስራ አይነት በግሌ ትርጉም እስከሰጠኝ ድረስ ሌሎችን ባያስደስትም አልጩኝም	1	2	3	4	5	6	7

3.7.6.	በስራዎ ካገኘሁት ውጤት ባሻገር ስራውን በትክክል መስራት አለመስራቴ ያስጨንቀኛል።	1	2	3	4	5	6	7
3.7.7.	ቀላልና በእርገጠኝነት ከሚሳኩ ስራዎች ይልቅ ፈታኝና አስቸጋሪ ስራዎችን መስራት ደስ ይለኛል።	1	2	3	4	5	6	7