Exploring the Effect of an Entrepreneurship Awareness-raising Intervention on ELT Learners’ Entrepreneurial Intention, Mindset, Self-efficacy and Outcome Expectations

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Abstract
This experimental study aimed to explore the effect of entrepreneurship education among English language teaching (ELT) learners in Iran. To this end, an entrepreneurship awareness-raising intervention was designed and evaluated through a mixed-method explanatory sequential design with hypotheses rooted in social cognitive career theory. The effectiveness of the intervention was first investigated quantitatively through pre-test and post-test among 41 ELT learners. Then, semi-structured interviews were conducted among 15 participants to triangulate and further explain the quantitative findings. The results of repeated measures of MANOVA revealed that ELT learners’ entrepreneurial intention, entrepreneurial self-efficacy, entrepreneurial mindset, and entrepreneurial outcome expectations improved significantly from pre-test to post-test under the effect of the intervention. Further, the findings of qualitative data analysis confirmed the quantitative results and revealed that all of the participants took great satisfaction in the course, and they believed that the effectiveness of the course was even beyond their expectations. Implications are discussed.

Keywords: Entrepreneurship Awareness-Raising Program, Entrepreneurial Intention, Mindset, Self-Efficacy, Outcome Expectations, Mixed-Method, ELT Context
Introduction

Today, we face many challenges in social, economic, technological and environmental areas, which necessitate serious reforms in various fields both at the local and global scales (Nichols, 2019). We need to think of new ways of thinking, learning, and teaching in schools, professions, and businesses. In this connection, educators and administrators seek to provide the competencies and skills that students will need in the future; therefore, the educational system is developing more rapidly than in the past (Nichols, 2019).

In this era, graduates should not only have knowledge of an academic subject, but they should also acquire the necessary skills and competencies concerning their future jobs (Altan, 2019). Thus, universities must equip graduates with basic knowledge and skills and prepare them to enter the labor market, where the key to success is the capacity to think and behave entrepreneurially and proactively (Audretsch, 2014; Urbano & Guerrero, 2013). In the 21st century, entrepreneurial thinking and acting are among the most fundamental skills that the young generation needs to succeed in their professional and personal lives (Obschonka, 2013; World Economic Forum, 2009). It is said that entrepreneurship facilitates economic growth and reduces unemployment (Audretsch, 2014; Santarelli et al., 2009).

Further, researchers agree that entrepreneurs are not born but made, which means that one can learn how to be a successful entrepreneur via particular educational programs and policies (Boulton & Turner, 2005; Mellor et al., 2009). Empirical research has shown that education is a crucial tool for enhancing entrepreneurial intentions and competencies (Cui et al., 2021; Fayolle & Gailly, 2015; Martin et al., 2013; Mitra & Matlay, 2004; Mukhtar et al., 2021; Wardana et al., 2020). Likewise, it is argued that EE should be the main focus of each country’s educational policy and planning (European Commission, 2006, 2015). This perspective has resulted in a remarkable rise in the number of entrepreneurship education (EE) courses in universities and colleges around the world. (Burnette et al., 2019; Katz, 2003; KuratKo, 2005; Nowiński et al., 2019; Saadat et al., 2021; Wijayati et al., 2021).

However, despite the significant expansion of EE programs, existing review studies are still equivocal about the impact of these programs on entrepreneurial intention and its antecedents (Aamir et al., 2019; Martínez-Gregorio et al., 2021). At the same time, literature reports that research methods in entrepreneurship education still tend to be mainly post-test and cross-sectional; only a few research studies have used pretest-posttest designs. In addition, few authors even took the opportunity to triangulate the research findings (Krueger, 2017).

Another criticism, many developing countries, including Iran, are still in the early stages of investing in these programs (Fallah-Haghighi et al., 2018; Rahimi, 2021; Rezaei et al., 2017). Moreover, when it comes to Iran, most of the entrepreneurship education programs have been done mainly among business and agricultural students (Heydari et al., 2022; Karimi, 2019). EE courses have been rarely provided in the realm of education, especially for ELT students. As Park (2019) noted, teaching entrepreneurship is not yet adequately incorporated into the language teaching curriculum. Last but not least, research on entrepreneurship mindset is still slim (Krueger, 2017). A great majority of entrepreneurship research has focused on intention and its common antecedents, such as attitudinal, contextual, and personality factors. Krueger (2017)
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argued that for a better appreciation of the nature of entrepreneurship, research should go deeper cognitively by studying the entrepreneurial mindset along with other factors.

To bridge these gaps and contribute to EE research, this experimental study aimed to design and evaluate an entrepreneurial educational program through a mixed-method explanatory sequential design among ELT learners. The following research question is addressed:

**RQ:** How effective is an entrepreneurship-based intervention in fostering ELT learners’ EI, ESE, EOE, and EM?

**The Status of Entrepreneurship Education in Iran**

As the government is the dominant employment provider, particularly for university graduates in Iran, the prominent strategy and policy of higher education have been to prepare the students for state job opportunities (Karimi, 2019). However, following a sharp increase in university registration and the consequently high growth of the graduate population, the number of educated job applicants in many fields surpassed the attainability of state employment in Iran (Haddad & Habibi, 2017). In this connection, it is said that over 40 percent of jobless individuals are among university graduates (Tasnim, 2020). When it comes to the ELT context, the unemployment rates are 40, 38.45, and 66.04 percent for doctorates, master, and bachelor levels, respectively (Mehr News Agency, 2021).

Meanwhile, the decline of employment opportunities in the governmental institutions which commonly employ most graduates turns entrepreneurship into a desirable employment choice in Iran as a third-world country. According to Pfeifer et al. (2016), the presence of unemployment has a triggering impact on the learners’ aspiration to entrepreneur identity and raises willingness to do entrepreneurial careers among university graduates.

Nevertheless, in spite of the strength of entrepreneurship in making new career chances and helping governments in promoting economic development (Cui et al., 2021; Obschonka, 2013; World Economic Forum, 2009), EE is still in its infancy in the realm of education and non-business fields, especially in the ELT context. Today, the practice of ELT should equip students not only with the main language skills (i.e., speaking, reading, writing, and listening) in the undergraduate program and language teaching methodology in the graduate course but also with the 21st-century skills (Park, 2019). Considering the importance of English language learning and increasing pursuits for English education, there seem to be several entrepreneurship and self-employment opportunities for would-be graduates (Altan, 2017, 2019). Besides the growing application of English as a global language, the increasingly developing technology has rendered and will continue to make considerable changes in ELT in non-Western countries. These changes accordingly create more opportunities for practicing entrepreneurship (Nanni, 2021). Moreover, the ability to communicate in English as a lingua franca and a sense of initiative and entrepreneurship are among the most crucial competencies that future graduates require to attune efficiently to a remarkably changing and interwoven world (Altan, 2019; European Council, 2006). As Altan (2019) noted, no other field or discipline yields such a prospect for potential graduates to work on and develop these important capacities at the same time.
Thus, stakeholders and curriculum planners should skillfully organize ELT courses and programs in such a way that students can not only pursue their English-based education but also develop entrepreneurial beliefs and capacities. Exploring the effect of EE would be helpful in designing practices and policies aiming at nurturing entrepreneurship in the ELT context.

The Literature Review

Different Kinds of Entrepreneurship Education

Entrepreneurship education was initially started as a formal program at the University of Harvard in 1947 (Katz, 2003). Given the significant role of entrepreneurship in economic prosperity, demands for developing entrepreneurial thinking and skills have increased so that entrepreneurship courses are now offered in several forms for both graduate and undergraduate students throughout the world (Morris & Liguori, 2016; Soomro & Shah, 2022; Velentzas, 2017).

Since its commencement, EE has been described and conceptualized in several ways. The European Commission (2014, p.11) particularly conceptualized EE as “contents, methods, and activities supporting the creation and development of knowledge, competencies, and experiences that make it desirable and feasible for students to initiate and participate in entrepreneurial value-creating processes.” In line with this conceptualization, EE includes the transmission of experiences, knowledge, and competencies to learners to lead their mindset to self-employment by founding their personal businesses. Based on this view, EE can change learners’ attitudes toward entrepreneurship and, accordingly, their intentions and willingness to embark on entrepreneurship.

Liñán (2004) also referred to EE as an educational course aiming at enhancing the desirability and feasibility of entrepreneurial activity and developing individuals’ entrepreneurial knowledge and intention. For Liñán, entrepreneurship education could be divided into awareness education and start-up education. The first one, which is the focus of the present study, aims at creating changes in soft outcomes such as attitude and mindset. This type of EE directly influences learners’ attitudes toward entrepreneurship and sensitizes them to self-employment as a feasible job opportunity (Liñán, 2007). To fulfill this objective, individuals need to get familiar with the nature of entrepreneurship and obtain fundamental knowledge on the role of entrepreneurship in the economy and society, common critical incidents, phases of the entrepreneurship process, entrepreneurs’ tasks and challenges, and essential entrepreneurial competencies (Liñán, 2004).

Fretschner and Weber (2013) argued that by designing awareness-raising courses, we could establish a learning environment where learners can appreciate the value of entrepreneurial acting and find out what an entrepreneur’s job is about. The following are a few guidelines that should be taken into account in designing such courses;

1) Concentrate on developing learners’ entrepreneurial attitudes, not skills that can be worked on later in the start-up courses.
2) Help learners believe that designing and launching one’s business is a viable opportunity and not totally controlled by exogenous factors. Accordingly, an introduction of entrepreneurial
alertness or factors such as opportunity recognition and an elaboration on major challenges and everyday entrepreneurial tasks can be helpful.

3) Introduce advantages and downsides of entrepreneurship and explain various extrinsic and intrinsic motives of establishing a new venture.

4) Provide exhaustive information and details concerning an entrepreneur’s daily life. To this end, real entrepreneurs in the field can be invited as guest lecturers to present a realistic and clear perspective of becoming an entrepreneur.

5) Instead of imbuing the learners, try to support them as future business initiators in the classroom. In addition, the importance of entrepreneurial acting in daily life affairs, social settings, and existing organizations should be emphasized along with new venture creation.

According to Liñán (2004), the second type of EE, which can be used for enhancing EI, is to create modifications in learners’ practical knowledge and skills in innovative job creation. Since learners are going to be the holders of small businesses, they should be able to perform different management tasks in the start-up stage (e.g., market analysis, strategy formulation, planning, financing, taxation, and legal regulations). Courses embracing these practical contents are called start-up education (Liñán, 2004). Unlike awareness-raising education, these courses are more action-oriented and seek for the improvement of practical qualifications in entrepreneurs (Liñán, 2007).

**SCCT as an Evaluation Tool**

Research has shown that investment in entrepreneurship education cannot immediately promote entrepreneurial acting (see Fretschner & Weber, 2013). Specifically, entrepreneurship education has a delayed influence on learners’ entrepreneurial acting and actual business (Liguori et al., 2020; Shen et al., 2010). Due to this time lag, EI and its correlates (e.g., attitudes and mindset) can be used instead of actual entrepreneurial behaviors for evaluating the effectiveness of entrepreneurship education (Cui et al., 2021; Fretschner & Weber, 2013).

Social Cognitive Career Theory (SCCT) is a theoretical scheme that can be used as a tool for assessing the effectiveness of EE (Lent et al., 2002). It provides a clear understanding of potential cognitive, motivational, and contextual variables and processes that influence the decision of the entrepreneurial career choice (Liguori et al., 2020). SCCT is grounded in social cognitive theory (Bandura, 1986). It adopts a cognitive constructivist approach to career development. Intention, self-efficacy beliefs, and outcome expectations are the main elements of SCCT (Lent et al., 2002). This theoretical framework can also include contextual variables and other cognitive and personal factors such as mindset (Cui et al., 2021; Winkler, 2014).

First, intention is a cognizant state of mind that guides experience, attention, and action towards developing a business (Bird, 1992). As Thompson (2009, p. 676) argued, entrepreneurial intention is referred to as a person’s decision and willingness to establish a new and creative job and mindfully aim to do so at the appropriate time. Intentions are pivotal to our appreciation of the correlates, antecedents, and results of planned behavior in a broad spectrum of domains. Research has shown that EE can positively affect intention (e.g., Cui et al., 2021; Fretschner & Weber, 2013; Mukhtar et al., 2021; Othman et al., 2022; Sakhti & Moshi, 2019; Souitaris et al., 2007).
Entrepreneurship self-efficacy (ESE) is referred to as people’s self-confidence in their capabilities to adeptly do different entrepreneurial affairs and roles, including generating new professional ideas, noticing entrepreneurship opportunities, and developing new products and services (e.g., Zhao et al., 2005). ESE is significantly effective in predicting entrepreneurial intention and promoting entrepreneurial performance (Gutiérrez et al., 2019; Hmieleski & Corbett, 2008). Research has also proved that ESE could be fostered through education (Godwin et al., 2016; Pihie & Bagheri, 2013; Wijayati et al., 2021; Zhao et al., 2005).

Another personal variable that can influence EI is entrepreneurial outcome expectations (EOE) (Lent et al., 2002). According to Vanevenhoven and Liguori (2013), EOE is defined as perceived expected outcomes of doing entrepreneurial tasks or activities. These outcome expectations manifest in several forms, such as individual and material consequences along with possible social outcomes (Bandura, 1986). If individuals believe that working for themselves is more rewarding, autonomous, and meaningful, they may have more positive EOE. But, if they perceive it to be more insecure, stressful, and uncertain, they will have more negative EOE (Lent et al., 2002). The existing theoretical and experimental research corroborate this positive association between EOE and EI (Gutiérrez et al., 2019; Liguori et al., 2018). Those who develop highly positive expectations about their future entrepreneurship career are presumably more intended to launch their own business. At the same time, it has been demonstrated that perceived favorability and value of entrepreneurship can be bolstered among students (Hattab, 2014; Kasseen et al., 2015; Mamman et al., 2019).

Entrepreneurial mindset is another important cognitive factor that can be included in SCCT (see Cui et al., 2021; Winkler, 2014). EM is linked with the individual’s decision-making and adaptable thinking in complex, dynamic, and uncertain contexts (Naumann, 2017). It is also referred to as the ability to find new entrepreneurial opportunities in uncertain situations (McGrath & MacMillan, 2000). Cui et al. (2021) postulated that EM is composed of four essential elements, namely alertness to opportunity, risk propensity, ambiguity tolerance, and optimism. According to the authors, alertness to opportunity is the capacity to be perceptive about identifying entrepreneurially potential opportunities. Risk propensity is seen as a person’s willingness or inclination to avoid or take risks. Ambiguity tolerance refers to the way a person interprets, processes, and reacts to unclear situations characterized by various kinds of complex, unfamiliar, fragmented, or inconsistent clues. Optimism is a belief or hope that the outcomes of one’s endeavors will be positive and desirable. Here, optimism is connected not only to the entrepreneurially favourable outputs but also to the joy influencing the evaluation of entrepreneurial opportunity and later behaviors and activities (Cui et al., 2021). All of these cognitive components of EM are interconnected and can be enhanced via training, and the whole mindset can be deemed a mind habit that needs learning to be developed (Cui et al., 2021; Daniel, 2016; McGrath & MacMillan, 2000; Saadat et al., 2021).

As an assessment tool, SCCT, here, concentrates on the effect of EE with respect to the development of students’ mindset and attitudes, not the quality and number of businesses established. Hopefully, this research contributes to the SCCT configuration by appreciating EM as a new kind of cognitive variable. Viewed this way, SCCT yields the theoretical base for this
study to test the association between EE and potential improvements in learners’ EM, ESE, EOE, and EI. Given the literature reported above, these two hypotheses are developed:

**RH1:** The higher the students’ ESE, EOE, and EM are, the more potent their EI will be.

**RH2:** The entrepreneurship intervention will foster ESE, EOE, EM and EI among the ELT learners.

**Method**

*Course Description*

An intervention course was designed to fulfill the objective of the present study. The course consisted of seven seventy-minute online sessions. The curricular objectives of the intervention were mainly in accordance with those explained previously for a common awareness course, focusing primarily on knowledge and awareness enhancement. The content was prepared based on the researchers’ own experiences in entrepreneurship, two of the main entrepreneurship textbooks used in Iranian universities, and consultation with four entrepreneurs and two university professors. The first researcher was the principal educator teaching basic concepts of entrepreneurship, business, and marketing. In addition, three guest speakers with different entrepreneurship and freelancing experiences in ELT were invited to present lectures in separate sessions. Each one focused on their entrepreneurial life stories and also important professional and entrepreneurial themes and concepts. In each session, after the presentation of the main issues, there was a 15-20-minute discussion time when the participants could ask their questions and talk about their experiences. Two WhatsApp groups were also used for coordinating the sessions and out-of-class discussions on the related themes covered in each session. Table 1 shows the content specification of the treatment program throughout the seven sessions.

**Table 1**

*Content of the Treatment Program Broken down by Sessions*

<table>
<thead>
<tr>
<th></th>
<th>Topics</th>
</tr>
</thead>
</table>
| Sessions 1 & 2 | 1. Conceptualization of entrepreneurship  
|            | 2. The role of entrepreneurship in society  
|            | 3. Major Characteristics of entrepreneurs  
|            | 4. The importance of entrepreneurship education for students and graduates  
|            | 5. Entrepreneurship in ELT |
| Sessions 3 & 4 | 6. Idea creation and opportunity identification in ELT business  
|            | 7. Examples of business ideas and opportunities in ELT  
|            | 8. Business plan  
|            | 9. Digital marketing  
|            | 10. Professional development |
Research Design
The present study used mixed method research to explore the influence of an entrepreneurship awareness course on Iranian ELT learners’ EI, ESE, EOE, and EM. The design was explanatory sequential. In this design, the qualitative method was used to explain particular quantitative results (Creswell & Clark, 2011). Thus, the research initiated with the quantitative data and continued with the qualitative phase. Such research design is mainly quantitatively oriented. Based on Morse’s (1991) notation system, this mixed-method research design is labeled QUAN → qual design.

Phase 1: The Quantitative Phase

Participants and Procedure
Forty-one ELT students were conveniently sampled in the quantitative stage. They were 23 graduates and 18 senior undergraduate learners. In line with the gender proportion of university students in Iran, especially for ELT courses, the majority of students were female; they were 11 males and 30 females. Their ages ranged from 22 to 29 years old (M = 24.51). They had not previously participated in any course in entrepreneurship. The reason for choosing participants among seniors and graduates was that they had developed a solid understanding of their field of study. They were supposed to enjoy a good level of language proficiency and sufficient knowledge and expertise of language teaching methodology to enter the job market. Since the intervention was online, the participants were from different universities and different parts of the country. They were surveyed twice; before the first session (t1) and at the end of the course (t2). Forty-five students took part in the pre-test and 43 in the post-test. For 41 participants, the two survey responses were matched.

Measures
Data collection was done via self-reported questionnaires. Persian versions of the questionnaires were developed via translation and back translation in the current research. Further, to make the scales appropriate for the ELT field, changes were made to the content of a number of items.

Entrepreneurship Intention
ELT learners’ EI was gauged using a modified form of Liñán and Chen (2009). The questionnaire tests how intended the learners are to embark on an entrepreneurial profession. It consisted of four questions responded on a seven-point Likert scale varying from “not at all true
of me” (1) to “completely true of me” (7). An example was, “I have seriously thought of starting my own ELT business sometimes after graduate.” Cronbach’s alpha was .83 in this study.

**Entrepreneurial Self-efficacy**

ESE was tested through five adapted items from Zhao et al. (2005). The scale measures participants’ beliefs in their capabilities to efficiently conduct entrepreneurial roles and activities, including recognizing new business opportunities, commercializing an idea or a new educational development, and creating creative educational products and services. Participants were supposed to demonstrate the extent to which the items were pertinent to them based upon a 7-point Likert scale varying from “not at all true of me” (1) to “completely true of me” (7). The sample item was “I am confident in my ability to successfully perform the various roles and tasks of entrepreneurship”. The reliability estimate for the scale was α = .85.

**Entrepreneurial Mindset**

EM was tested via 18 adapted items from Cui et al. (2021) scale. The scale consists of four subscales, including alertness to opportunity (4 items), risk propensity (5 items), optimism (5 items) and ambiguity tolerance (4 items). The overall measures of the individual subscales were calculated by averaging the 7-point ratings ranging from “not at all true of me” (1) to “completely true of me” (7). Total EM scores were then obtained by combining the scores of the individual subscales. Sample items were “I always keep an eye out for new business ideas when looking for information.”; “To earn greater rewards, I am willing to take higher risks.”; “I am always optimistic about the future of my ELT career”; and “If I am uncertain about the responsibilities involved in a task, I get very anxious.” for alertness to opportunity, risk propensity, optimism, and ambiguity tolerance, respectively. The reliability value was α = .80 for the total EM.

**Entrepreneurial Outcome Expectation**

EOE was evaluated using five modified items from Krueger (2000). The items followed the following statement; “To what extent do you expect to achieve the following outcomes by starting your own venture?” an example item was “Personal rewards (public recognition, personal growth, to prove I can do it, etc.)” The students ranked their answers on a 7-point Likert-type scale varying from “not at all” (1) to “very much” (7). The reliability estimate was α = .81.

**Results**

To address the stated research question, descriptive statistics, correlation analysis, regression analysis, and one-way repeated measures of MANOVA, also known as doubly multivariate MANOVA, were run.

**Correlation and Regression Analyses**

The findings show that all of the variables are interconnected both at t1 and t2. At both t1 and t2, EI was positively and significantly correlated with ESE (t1 → r = 0.55, p < 0.01; t2 → r = 0.51, p < 0.01), EOE (t1 → r = 0.45, p < 0.01; t2 → r= 0.57, p < 0.01) and EM (t1 → r= 0.53, p < 0.01; t2 → r= 0.59, p < 0.01). The two regression models also revealed statistically significant adjusted coefficients (t1 → R² = 0.42, p <0.01; t2 → R² = 0.47, p<0.01) and significant standardized coefficients (t1 → .57, .39, and .37 with at least p < 0.05; t2 → .51, .43, and .45, p<0.01) for ESE,
EOE and EM, respectively (see Table 3). Therefore, hypothesis 1 was accepted i.e., ESE, EOE and EM could significantly predict EI at both t1 and t2. Table 2 presents the descriptive and correlation analyses among the variables.

Table 2
Descriptive Statistics and Interconnections among the Variables (n=41)

<table>
<thead>
<tr>
<th>Variables</th>
<th>M / SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. EI (t1)</td>
<td>24.87/4.35</td>
<td>1.00</td>
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<td></td>
<td></td>
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<tr>
<td>2. ESE (t1)</td>
<td>26.56/5.80</td>
<td>.55**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>3. EOE (t1)</td>
<td>29.73/4.43</td>
<td>.45**</td>
<td>.61**</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. EM (t1)</td>
<td>78.92/9.81</td>
<td>.53**</td>
<td>.53**</td>
<td>.55**</td>
<td>1.00</td>
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<tr>
<td>5. EI (t2)</td>
<td>26.36/2.08</td>
<td>.47**</td>
<td>.51**</td>
<td>.52**</td>
<td>.36**</td>
<td>1.00</td>
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<tr>
<td>6. ESE (t2)</td>
<td>30.05/4.27</td>
<td>.42**</td>
<td>.53**</td>
<td>.34*</td>
<td>.33*</td>
<td>.57**</td>
<td>1.00</td>
<td></td>
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<tr>
<td>7. EOE (t2)</td>
<td>32.05/3.63</td>
<td>.39**</td>
<td>.41**</td>
<td>.46**</td>
<td>.47**</td>
<td>.57**</td>
<td>.52**</td>
<td>1.00</td>
<td></td>
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<tr>
<td>8. EM (t2)</td>
<td>93.73/8.32</td>
<td>.33*</td>
<td>.45**</td>
<td>.32</td>
<td>.51**</td>
<td>.59**</td>
<td>.56**</td>
<td>.41**</td>
<td>1.00</td>
</tr>
</tbody>
</table>

*p < .01, *p < .05

Table 3
Regression Analysis upon EI at t1 and t2 (n = 41).

<table>
<thead>
<tr>
<th>Predictors</th>
<th>intention (model at t1)</th>
<th>Adjusted R²</th>
<th>β</th>
<th>intention (model at t2)</th>
<th>Adjusted R²</th>
<th>β</th>
</tr>
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<tbody>
<tr>
<td></td>
<td></td>
<td>.42**</td>
<td>.57**</td>
<td></td>
<td>.47**</td>
<td>.51**</td>
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<tr>
<td>1. ESE</td>
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<td>2. EOE</td>
<td></td>
<td></td>
<td>.39*</td>
<td></td>
<td></td>
<td>.43**</td>
</tr>
<tr>
<td>3. EM</td>
<td></td>
<td></td>
<td>.37*</td>
<td></td>
<td></td>
<td>.45**</td>
</tr>
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</table>

*p < .01, *p < .05

MANOVA Analysis

Before running the main MANOVA analysis, the assumptions of data type, sample size, missing data, outliers, linearity, normality, and multicollinearity were checked, with all assumptions passed. The results of the one-way repeated measures of MANOVA revealed that the learners' scores on EI (F (1, 40) = 6.15, p < .05, partial eta squared (η_p²) = .13), ESE (F (1, 40) = 23.86, p < .05, η_p² = .37), EOE (F (1, 40) = 12.18, p < .05, η_p² = .23), and EM (F (1, 40) = 138.34, p < .05, η_p² = .77) improved from pre-test to post-test. In other words, the mean levels of all of the dependent variables improved significantly under the effect of the entrepreneurship treatment course. The magnitude of partial eta squared (η_p²), as a measure of effect size, suggested that the independent variable had a significantly large impact on each of the dependent variables (see Table 4). Therefore, hypothesis 2 was confirmed.
Table 4

Comparison of Means, Standard Deviations and F-values of Learners on their EI, ESE, EOE, and EM at Time1 & Time2 (N=41)

<table>
<thead>
<tr>
<th>Scales</th>
<th>time2(post-test)</th>
<th>(N=41)</th>
<th>time2(post-test)</th>
<th>(N=41)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>EI</td>
<td>24.87</td>
<td>4.35</td>
<td>26.36</td>
<td>2.08</td>
</tr>
<tr>
<td>ESE</td>
<td>26.56</td>
<td>5.80</td>
<td>30.05</td>
<td>4.27</td>
</tr>
<tr>
<td>EOE</td>
<td>29.73</td>
<td>4.43</td>
<td>32.05</td>
<td>3.36</td>
</tr>
<tr>
<td>EM</td>
<td>78.92</td>
<td>9.81</td>
<td>93.73</td>
<td>8.32</td>
</tr>
</tbody>
</table>

Phase 2: The Qualitative Phase

Participants and Procedure

In the present study, semi-structured interviews were done with 15 ELT learners who had participated in phase 1 of the research. Their ages ranged from 22-29 years old (M = 24.73). Those with teaching experiences were either hourly-paid teachers in private language institutes or language teachers in state high schools. They had not experienced any formal entrepreneurial education course before taking part in the study. Table 5 shows the demographic information of the interviewees.

The participants were interviewed individually in 15-25 minute sessions. Having reached data saturation, the researchers stopped gathering further data, as the data tended to be redundant and repetitive. The interviews were recorded and transcribed via partial transcription approach (Dornyei, 2007). Since the qualitative section in QUAN → qual design is of secondary importance, the verbatim transcription is not necessary. Rather, partial transcription of more important sections suffices (Dornyei, 2007). They were all kept as confidential conversations between the researchers and the participants. The interviews were then inductively analyzed through qualitative content analysis. Transcripts of the interviews were read a few times, and the statements were coded to develop categories and themes (Lynch, 2003). Accompanying the qualitative content analysis, memoing was also used to record the notes of the researchers’ ideas and thoughts (see Dornyei, 2007).

Table 5

Interviewees’ Demographic Information

<table>
<thead>
<tr>
<th>Number</th>
<th>Gender</th>
<th>Age</th>
<th>Level</th>
<th>Teaching experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Male</td>
<td>24</td>
<td>MA</td>
<td>2 years</td>
</tr>
<tr>
<td>2</td>
<td>Male</td>
<td>22</td>
<td>BA</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Male</td>
<td>23</td>
<td>MA</td>
<td>1 year</td>
</tr>
<tr>
<td>4</td>
<td>Male</td>
<td>28</td>
<td>PhD</td>
<td>1 year</td>
</tr>
<tr>
<td>5</td>
<td>Male</td>
<td>27</td>
<td>MA</td>
<td>5 years</td>
</tr>
<tr>
<td>6</td>
<td>Male</td>
<td>29</td>
<td>PhD</td>
<td>5 years</td>
</tr>
</tbody>
</table>
Learners were asked about the effect of the treatment on their EI, ESE, EM, and EOE. They explained to what extent they felt differences in themselves with respect to these concepts. First, the learners were asked about the general effect of the treatment. The findings revealed that all of the participants took great satisfaction in the course. They said that the course was extremely beneficial to them. The effectiveness of the course was even beyond their expectations. Considering their preoccupation with the low payments in both state schools and private language institutes, the entrepreneurship course gave them hope about their future personal business in the field.

I was desperately seeking a new start for a non-educational business before this course; hoping to make more money and reach a better social position. But, the course offered me a deep understanding of entrepreneurship in ELT and convinced me to pursue my dreams of success in my field. It has kind of saved my life! (#12)

I am totally satisfied with the course. I wish I had experienced this short course when I started my teaching career three years ago. I really needed to learn the material. Although I could criticize some parts, the whole course was very useful. (#10)

Then, the interviewees were asked about their understanding of entrepreneurship and their attitude about practicing entrepreneurship in the ELT context. They reported that the course exerted remarkable changes in their entrepreneurial thinking and mindset. The reports showed that most of the participants observed enhancement in all of the components of mindset, namely opportunity recognition, risk management, ambiguity tolerance, and optimism.

This course has led me to a better understanding of entrepreneurship and its importance. I used to relate the concept to some very special people in certain positions, but after the course, I realized that entrepreneurship comes from people’s minds, and it is not impossible to reach. (#2)

The course, especially the part regarding characteristics of entrepreneurs, was helpful and impressive. It made me aware of my own entrepreneurship characteristics like the way I used to handle complexities, take logical risks, and have an ambitious desire to progress in my affairs. Surely, I can improve these aspects by following the given instructions. (#1)
The course boosted my receptivity and awareness towards creative business ideas and opportunities. A few ideas introduced during the program interested me a lot. Now, I can think of similar ones. I can surely create some entrepreneurship opportunities by analyzing these ideas and think about discovering new ones in the future. (#14)

During this course, I have learned to consider my abilities and grab the proper work opportunities and analyze the way I could reach them. The good news is that I have accidentally found my interest during one of the lecturers’ speeches, and I am looking forward to pursuing it. (#11)

We have learned that for establishing and managing entrepreneurship, we should have a plan as a roadmap. At the same time, we were told that not every single detail of entrepreneurship could be predicted and preplanned since it is full of challenges and uncertainties, so we should enhance our tolerance and stay hopeful throughout the entrepreneurship process. (#10)

Before the course, I didn’t believe in risk-taking, but then I realized its importance in successful entrepreneurship. So, I will let myself take risks and experience new opportunities, and I will always improve this feeling. But, of course, I will take logical and proper risks entirely appropriate to my situation. (#3)

Besides other things, we were advised to think positively and be optimistic in the entrepreneurship process. Somehow, I have managed to build these characteristics in myself through the lecturers’ guidelines and instructions. (#5)

The students also showed enhanced determination to embark on entrepreneurial activities. A few participants even started their business from the middle of the course.

The course has strengthened my will to be an entrepreneur, and I am enthusiastically counting down the days for starting my own business! (#1)

Dealing with entrepreneurs in my field has motivated me to seriously think about starting my own business. (#11)

Considering the unfavorable economic conditions in the country, working in a routine job as an employee couldn’t satisfy me. I have always looked for another source of income. By introducing entrepreneurship in ELT and talking about its advantages, the course enhanced my interest in self-employment to the point that I kicked off my own business right after the 4th session of the course. (#5)

Further, the participants were asked about any changes in their expectations of the potential entrepreneurial outcomes. All of the interviewees acknowledged that they expected higher gains from entrepreneurship. For most of these individuals, financial gains were most evident. However, they still hoped to enjoy higher social recognition and help the improvement of English education in their region.

When I compare entrepreneurship with a routine administration work or a temporary teaching job, I realize how profitable it could be. According to one of the instructors, “there isn’t
a limit for an entrepreneur’s income”; what moved my expectations about the potential gains of entrepreneurship! (#10)

The course has increased my expectations about the entrepreneurship yield. If I act as a professional entrepreneur, I will gain more financial profit and higher social recognition. Additionally, I can affect the quality of English education in my local hood by my innovative educational ideas. (#14)

In addition, all of the interviewees said that the course had positive effects on their entrepreneurial capacities. They attributed these changes mainly to the enhanced entrepreneurial awareness and visiting ELT entrepreneurs in the course.

Meeting entrepreneurs in my field has raised my self-confidence to start my own business. If they could utilize innovative methods in English teaching, then I can do it, too! (#8)

Although the course did not completely cover all entrepreneurship issues (maybe, due to time limits), the informative and knowledge-oriented approach of the course convinced me that I already owned some of the vital entrepreneurial traits, like innovative thinking, ambiguity tolerance, and risk-taking spirit, and made me believe in myself much more than before. (#2)

Table 6. provides the number and percent of interviewees confirming the positive effects of the intervention on each concept. Altogether, in line with the quantitative data analysis, the examination of the interviews indicated that the ELT learners’ EI, ESE, EOE, and EM significantly improved under the effect of the intervention.

<table>
<thead>
<tr>
<th>Table 6</th>
<th>Interviewees Confirming the Positive Effect of the Course (n = 15)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>number</td>
</tr>
<tr>
<td>Overall Satisfaction</td>
<td>15</td>
</tr>
<tr>
<td>Intention</td>
<td>11</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>15</td>
</tr>
<tr>
<td>Outcome Expectations</td>
<td>14</td>
</tr>
<tr>
<td>Mindset</td>
<td>12</td>
</tr>
</tbody>
</table>

Discussion
This experimental study aimed at examining EE in the ELT context, using a mixed-method design with hypotheses rooted in SCCT. The findings approved the applicability of SCCT as a suitable framework to evaluate the effect of EE. The results showed that ESE, EOE, and EM (the newly introduced component of the SCCT model) could significantly predict EI both at t1 and t2. Furthermore, the quantitative and qualitative data analyses confirmed the effectiveness of the intervention program in enhancing ELT learners’ EI, ESE, EOE, and EM. The positive effect of EE on ESE complies with previous theoretical and experimental research (Burnette et al., 2019; Godwin et al., 2016; Othman et al., 2022; Pihie & Bagheri, 2013; Zhao et al., 2005). During this
course, learners were exposed to knowledge about business in general and entrepreneurship in particular. They also became familiar with business opportunity recognition and commercialization of their creative ideas in the realm of ELT. In addition, the presence of well-known ELT entrepreneurs as role models and case studies of real entrepreneurs in this course not only helped learners absorb seasoned knowledge and experience but also developed entrepreneurial identity and intimacy with entrepreneurship; thereby gaining confidence in their own entrepreneurial capacities (Laviolette et al., 2012). Along the same line, Pihie and Bagheri (2013) argued that specialized courses in business training and entrepreneurship could give individuals the required confidence for starting their own business.

The positive effect of EE on learners’ EOE confirmed Hattab’s (2014) findings, indicating that entrepreneurship education could enhance the degree of favorability of entrepreneurship among Egyptian university students. It seems that by becoming familiar with entrepreneurship and its potential economic and social advantages in such an educational course, students think highly about entrepreneurship and see it as personally rewarding and socially appropriate. So, they entertain more positive expectations on the end results of their future entrepreneurship pursuits (Lent & Brown, 2008).

The link between EE and EM supported the findings of Cui et al. (2021), Daniel (2016), and Handayatia et al. (2020), indicating the favorable impacts of education on EM. This suggests that the entrepreneurship course could positively affect the learners’ way of thinking and improve the capacity to discern entrepreneurial opportunities even in the face of unpredictable and ambiguous conditions. Therefore, the more efficacious the establishment of entrepreneurial knowledge and competencies within the entrepreneurial intervention, the more probable it is to enhance EM. The primary justification for this finding is that entrepreneurial education provides students with a theoretical cornerstone on the concept of entrepreneurship and develops mindset and attitude of becoming an entrepreneur (Fayolle & Gailly, 2015). In other words, it opens the students’ minds towards entrepreneurship as a career opportunity. Furthermore, according to Handayati et al. (2020), EE helps the development of entrepreneurial culture and improves the individuals’ understanding and awareness of entrepreneurship.

The significantly positive impact of EE on EI confirmed the previous research (Fretschner & Weber, 2013; Hattab, 2014; Sánchez, 2013; Saptono et al., 2020; Souitaris et al., 2007). In such courses, students can acquire fundamental knowledge on entrepreneurship and its significance in society; therefore, their perceptions of self-employment change, and they consider it as a worthwhile employment opportunity. This finding also supported Dickson et al.’s (2008) thesis that entrepreneurship education attends to becoming an entrepreneur. These findings can be supported in the light of Bandura’s (1986) social cognitive theory, which posits that contextual factors such as education can positively affect individuals’ intentions to embark on a specific course of action.

As for the qualitative data analyses, the findings revealed that all of the participants took great satisfaction in the course. They said that the course was highly beneficial to them. The effectiveness of the course was even beyond their expectations. Considering their preoccupation with the low payments in state schools and private language institutes, the entrepreneurship
course gave them hope about their future business in the field of TEFL. More specifically, the intervention boosted their confidence in their entrepreneurial capacities, raised their awareness of the real nature of entrepreneurship, its significance, and potential challenges, highlighted the appeal of launching an entrepreneurial business, and finally fostered the learners’ intention to embark upon business development. These findings are in accordance with Liñán’s (2004) postulation that entrepreneurial awareness-raising programs tend to enhance the feasibility and attractiveness of the entrepreneurial activity and develop learners’ entrepreneurial intention. Along the same line, the European Commission (2015) opined that such programs enhance learners’ entrepreneurial knowledge and understanding, make entrepreneurship more desirable for learners, encourage them to see entrepreneurship as an attainable venture, and finally foster their willingness to embark upon entrepreneurship.

**Conclusion**

This mixed-method research examined the effectiveness of an entrepreneurship awareness-raising course in enhancing the ELT learners’ EI, EM, ESE, and EOE. The study was the first step, though a small one, to explore the effectiveness of EE in the ELT context. Interesting results were obtained that can promote the understanding of these factors and direct future entrepreneurship education courses in the ELT field.

The findings showed that the intervention course worked in the hypothesized way as the learners’ scores on these constructs significantly increased from pre-test to post-test. In other words, our results showed that entrepreneurial beliefs and mindset could be improved through educational intervention, at least to a certain degree. According to Fretschner and Weber (2013), this belief updating process is critical for learners to ensure whether an entrepreneurial job is suitable for them. Such a course encourages potential entrepreneurs in the classroom and enlightens others on the inappropriate self-employment career choice. This is not only important to learners but also has societal and economic effects (von Graevenitz et al., 2010). By designing awareness-raising courses, we can establish a learning environment where learners can appreciate the value of entrepreneurial acting and investigate what the job of an entrepreneur is about (Fretschner & Weber, 2013).

Regarding the implications, the study presents an additional confirmatory ground for the applicability of the SCCT in understanding and predicting EI in a non-Western country like Iran. In addition, the study contributes to SCCT by investigating the impact of EE as an influential exogenous factor on EI and its correlates. Furthermore, this research extends the SCCT framework by adding EM as a potential antecedent of EI. The study also provides valuable information and insight for stakeholders engaged in designing, administering, and evaluating courses used for boosting the individuals’ EI. The findings indicated that EM, ESE, and EOE could significantly predict EI, and as this study proved, all of them could be improved through EE. Thus, educators and practitioners should attend more to the use of particular teaching strategies and methods to promote these factors.

Additionally, to boost EI among ELT students and help the development of future entrepreneurial activities and behaviors, measures should be adopted to allow for more creativity
and innovation in the language curricula and encourage the application of facilitating educational technologies. Apropos of this, integration of entrepreneurial activities with learners’ participation, internship and collaborative activities with professional and business institutions can promote the current language teaching methodologies (see Othman et al., 2022; Rengiah, 2013).

Furthermore, in EFL classes, there are some activities like role plays, team-based or small-group tasks, different motivating writing and reading tasks, interviews, problem solving and information-gap tasks, spontaneous speeches and presentations, and interviews which can facilitate the development of essential entrepreneurial characteristics including self-confidence in negotiations, risk-taking, tolerance of uncertainty, and creative and critical thinking (Altan, 2019; Park, 2019).

Regarding the limitations of the present study, the generalization of the findings to other settings, particularly to other fields of study, must be made cautiously. The use of a nonrandom and small sample of ELT students necessitates additional evaluation research to help external validity. Accordingly, future research should utilize samples including learners from miscellaneous institutions and fields of study. Since this study lacked a control group to compare with the treatment group, the effect of EE on learners’ EI cannot be determined precisely. The pre-test/post-test changes can be assumed to be the consequence of participation in the EE as the program’s content was mainly specific for awareness-raising and somehow geared toward ELT context; however, the use of a control group could have reinforced the outcomes. Finally, future research needs to take into account the association between EI and entrepreneurial behavior as this important interface has been investigated decidedly less than the one between EI and its antecedent attitudes (Martínez-Gregorio et al., 2021). Therefore, longitudinal research is needed to capture the potential changes in EI and entrepreneurial attitudes over time and the successive development of entrepreneurial behaviors beyond EI.

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**Ethics Declarations**

**Competing interests**

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