

Testing a Model of Entrepreneurship Intention among Iranian ELT Learners¹

*Nasser Fallah², Gholam Reza Kiany³, & Zia Tajeddin⁴,
Tarbiat Modares University, Tehran, Iran*

Abstract

Within the last two decades, research on entrepreneurship has received increasing attention throughout the world. However, most of the research in this area has been done in business and vocational fields and more research is needed in educational and non-business contexts. This study took the initiative to explore the connections among entrepreneurship intention (EI), entrepreneurial self-efficacy (ESE), entrepreneurial identity aspirations (EIA), entrepreneurial outcome expectations (EOE), and subjective norms (SN) in an English language teaching (ELT) context. To this end, 382 Iranian ELT students were conveniently chosen and requested to complete a questionnaire survey. Structural equation modeling (SEM) was run. The findings of SEM analysis revealed that ESE and EIA directly predicted EI. Further, SN proved to be a significant predictor of ESE, EIA, and EOE. The results also showed that ESE could significantly predict EOE and EIA. EOE also significantly predicted EIA. In addition, ESE, SN, and EOE could indirectly affect EI through the mediation of EIA. Altogether, this study can help enhance the realization of the stated entrepreneurial concepts, and guide potential entrepreneurship education programs in the ELT context.

Resumen

En las últimas dos décadas, la investigación sobre el emprendimiento ha recibido una atención cada vez mayor en todo el mundo. Sin embargo, la mayor parte de las investigaciones en esta área se han llevado a cabo en áreas comerciales y vocacionales; por lo tanto, se necesita más investigación en contextos educativos y no comerciales. El propósito del estudio fue explorar las relaciones entre la intención empresarial, la auto eficacia empresarial, las aspiraciones de identidad empresarial, las expectativas de resultados empresariales y las normas subjetivas en el contexto de la enseñanza del idioma inglés. Con este fin, 382 estudiantes ELT iraníes fueron seleccionados para contestar una encuesta. Para el análisis se ejecutó un modelo de ecuaciones estructurales (SEM). Los resultados del análisis SEM revelaron que la auto eficacia empresarial y las aspiraciones de identidad empresarial pueden predecir la intención empresarial. Además, las normas subjetivas probaron ser un predictor relevante de la auto eficacia empresarial, aspiraciones de identidad empresarial y expectativas de resultados empresariales. De igual manera, los resultados empresariales pueden predecir aspiraciones de identidad empresarial. Adicionalmente, la auto eficacia empresarial, las normas subjetivas y las expectativas de resultados empresariales indirectamente afectan la intención empresarial a través de la mediación de aspiraciones de identidad empresarial. En conjunto, el estudio podría ayudar a mejorar la aplicación de los conceptos empresariales establecidos y guiar futuros programas de educación empresarial en el contexto de ELT.

Introduction

The term 21st century has become an indispensable constituent of educational planning and thinking for the future. Administrators and educators are actively pursuing novel ways to equip students with skills required for the future, and the educational system has been developing at a faster rate than ever before (Nichols, 2019).

We live in an age of unprecedented social, economic, environmental, and technological problems, and we are gravely in need of improvement and change in many different areas first locally and then on a global level (Nichols, 2019). Our time necessitates new ways of thinking, learning, and teaching in school, business, and professions. Earth needs individuals who are more innovative, creative, and capable of coming up with solutions to both present and future concerns (Altan, 2019).

As a twenty-first-century skill, entrepreneurial thinking and acting are considered appropriate to the prosperity of today's societies due to their impacts on technological and economic development, and the creation of new employment opportunities (Baumol et al., 2009; Obschonka, 2013; Wilson et al., 2009). Particularly, entrepreneurship has been viewed as one of the efficient solutions to the social and economic challenges and crises (e.g., graduate unemployment) that different countries are struggling with or may undergo in the future (Schwarz et al., 2009).

¹ This is a refereed article. Received: 2 November, 2021. Accepted: January 19, 2022. Published: 29 November, 2022.

² nfallah84@yahoo.com; n_fallah@modares.ac.ir, 0000-0003-3333-2143. Correspondent

³ kiany_gh@modares.ac.ir

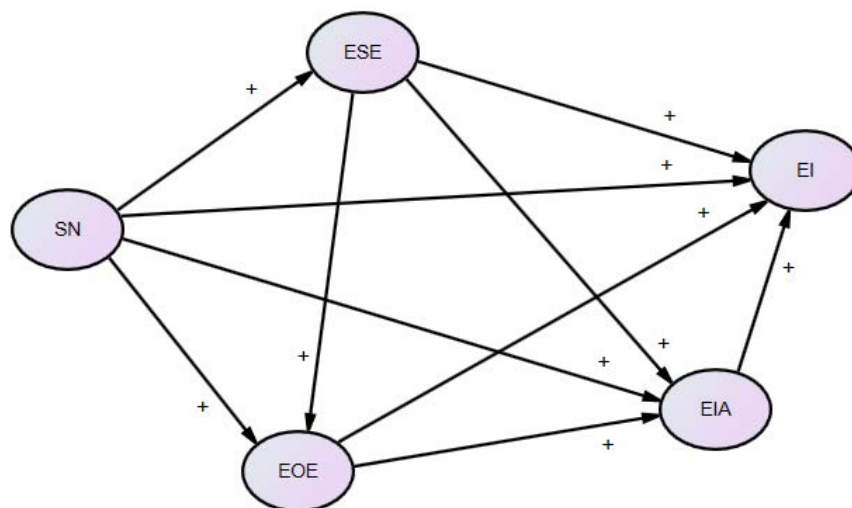
⁴ tajeddinz@modares.ac.ir

However, despite the growing body of research worldwide, entrepreneurship still remains an understudied research area in the realm of education, especially among English language teaching (ELT) students. Due to the necessity of English learning and high demands for English education in society, the ELT profession seems to be full of self-employment and entrepreneurial opportunities for future graduates (Altan, 2017). In addition to the increasing use of English as a lingua franca, the rapidly developing technology has created and will continue to make remarkable changes in ELT in Asia, including Iran. These changes, in turn, provide more opportunities for entrepreneurship (Nanni, 2021). Further, according to the European Council (2006), being able to communicate in foreign languages, especially in English as a lingua franca, and having a sense of entrepreneurship and initiative are among the most critical competencies graduates need to adapt flexibly to a highly interconnected and increasingly changing world. Therefore, stakeholders and curriculum planners should design language courses so that students can both follow their English-specific education and develop entrepreneurial skills and abilities. According to Altan (2019), no other discipline or field of study provides such an opportunity for learners to develop and work on these critical contemporary competencies simultaneously.

Therefore, to guide specific entrepreneurial educational programs in the future in the ELT context, it is vital to get further insights into the antecedents of entrepreneurial intent (EI) as the strongest predictor of entrepreneurial behavior (Ajzen, 1991; Krueger, 2000; Liñán et al., 2011). Identifying a model which can explain the development of students' EI is reasonable in an Iranian ELT context. The aim of this paper is thus to explore what explains EI among Iranian ELT students, and how well the hypothesized framework on EI fits in this context. In this research, EI is studied through the lens of social cognitive career theory (SCCT) (Lent et al., 2002), which stipulates a theoretical approach to career development based on a foundation of personal, contextual, and behavioral factors.

This study contributes to entrepreneurship research, first by examining EI for the first time in an ELT context, then by integrating identity along with subjective norms (SN) to SCCT. Scholars (Lent et al., 2002; Pfeifer et al., 2016) argue that though the basic model including entrepreneurial self-efficacy (ESE) and entrepreneurial outcome expectations (EOE) can account for a significant amount of variance in EI, the explanatory power of this framework would significantly improve if entrepreneurial identity aspirations (EIA) and SN were added. However, few studies have investigated the explanatory power of these factors, especially identity in an EI model. Thus, the present study examines an extended SCCT model including the basic SCCT model as well as EIA and SN in an ELT context.

In the present study, it is hypothesized that EIA, ESE, EOE, and SN can directly affect EI. In addition, EIA can mediate the relationship between SN, ESE, and EI. ESE and EOE are also posited to mediate the connections between SN and EIA. To the best of our knowledge, this is the first study to examine these combined effects in entrepreneurship research, particularly in an ELT context. The hypothetical causal paths among these variables are depicted in Figure 1.



Note: EI=entrepreneurial intention, ESE=entrepreneurial self-efficacy, EIA=entrepreneurial identity aspirations, EOE=entrepreneurial outcome expectations, and SN=subjective norms.

Fig 1: The hypothesized model

Literature Review

Entrepreneurship is mainly referred to as the process of creating something new with value by allocating the necessary time and effort and obtaining the resulting rewards of monetary, independence, and personal satisfaction while assuming the concurrent psychological, financial, and social risks (Hisrich et al., 2010). A construct that can be used to better explain why individuals embark on this process is entrepreneurial intention (Ajzen, 2001). This intention is a conscious state of mind that guides attention and action towards the development of a venture (Bird, 1992). EI is also known as "a self-acknowledged conviction by a person that they intend to set up a new business venture and consciously plan to do so at some point in the future" (Thompson, 2009, p. 676). Intentions can help us understand factors related to purposive behavior and the potential outcomes in different contexts (Liguori et al., 2020). Therefore, it is important to obtain a substantial understanding of different motivational, cognitive, and situational parameters and mechanisms that can affect an entrepreneur's career choice (Liguori et al., 2020).

One theoretical framework through which such processes can be examined is SCCT (Lent et al., 2002). SCCT is originated with Bandura and National Institute of Mental Health's (1986) social cognitive theory, and it assumes a cognitive constructivist view toward business advancement. The central premise of this theory is based on the interrelationship between different cognitive, personal, and environmental factors. Intentions, self-efficacy beliefs, and outcome expectations are the primary elements of SCCT (Lent et al., 2002). The framework can also embrace other individual and contextual factors such as identity aspirations and subjective norms (Pfeifer et al., 2016).

As a part of this concept, ESE is conceptualized as an individual's confidence in their capacity to efficiently do various entrepreneurial activities and roles, such as developing new business ideas, recognizing entrepreneurship opportunities and creating new products and services (Zhao, Seibert, & Hills, 2005). Previous research has shown that ESE contributes to the prediction of EI and the enhancement of entrepreneurial performance (Rodríguez Gutiérrez et al., 2019).

H1: ESE can significantly predict EI among ELT learners.

Based on SCCT, another motivational factor that can affect EI is EOE (Lent et al., 1994). These outcome expectations are originated from expectancy-value theory, which posits that human behavior, among other factors, is affected by an individual's expectations of attaining specific outcomes and the perceived value of those outcomes (Bandura, 1986; Wigfield & Eccles, 2000). These expectations are conceptualized as perceived expected consequences of conducting entrepreneurship-related tasks or activities (Vanevenhoven & Liguori, 2013). They exist in several forms, including material and personal values as well as potential social outcomes (Bandura & National Institute of Mental Health, 1986). When individuals build a higher level of positive outcome expectations for their future entrepreneurial endeavors, they are probably more intended to establish their own business (Liguori et al., 2018). Rodríguez Gutiérrez et al. (2019) found that ESE could significantly predict EI among Mexican university students.

Further, it is argued that individuals who are entrepreneurially self-efficacious entertain more positive expectations of the end results of their entrepreneurship pursuits since they are confident in their capacities to successfully fulfill the task (Lent & Brown, 2008; Liguori et al., 2020). Furthermore, Pfeifer et al. (2016) found that ESE could account for a significant amount of variance in EOE among Croatian students. Their findings also revealed that EOE significantly predicted EI.

H2: EOE can significantly predict EI among ELT learners.

H3: ESE can significantly predict EOE among ELT learners.

The next factor which can be included in SCCT theoretical model is identity aspiration (Pfeifer et al., 2016). EIA refers to individuals' ambitions, longings, and desires to see themselves as future entrepreneurs (Farmer et al., 2011). The identity aspirations influence the behavior and actions so that the individuals persist and exert themselves to reach that possible self (Farmer et al., 2011). EIA plays a critical role in developing individuals' behaviors and attitudes. Identity equips individuals with a blueprint based on which they can study their own actions (Cross & Markus, 1994). It can play an essential role in learning transfer since it is closely related to intentions and future behavior (Krueger, 2007). Further, considering the importance of self-identity for explaining learning transfer and behavioral continuity and its connection with cognitive infrastructure development (Rise et al., 2010), it is suggested that entrepreneurial self-identity can act as both a key antecedent of EI and an important mediator between ESE, EOE, and EI (Celuch et al., 2017).

Similarly, empirical research has shown that EIA can be a strong predictor of EI (Rodríguez Gutiérrez et al., 2019). It has also been shown that EIA can be positively affected by individuals' ESE and EOE (Lent et al., 2002; Pfeifer et al., 2016).

H4: EIA can significantly predict EI among ELT learners.

H5: ESE can significantly predict EIA among ELT learners.

H6: EOE can significantly predict EIA among ELT learners.

H7: EIA can mediate the ESE-EI and EOE-EI links.

SCCT also pays attention to relevant contextual variables, such as perceived subjective norms (SN) i.e., social support provided by reference others (friends, family, teachers, mentors, etc.). The applicability of SN is also supported by the theory of planned behavior, which postulates that SN accounts for entrepreneurial intentions (Ajzen, 1991; Carr & Sequeira, 2007). Significant others' opinions about entrepreneurship pursuits explain, at least to some extent, the strength of EI (Kautonen et al., 2015). Overall, theoretical and empirical studies suggest that SN affects ESE and EIA (Rodríguez Gutiérrez et al., 2019), shapes EOE, and predicts the development of domain-specific intentions (Lent et al., 1994; Pfeifer et al., 2016).

H8: SN can significantly predict EI among ELT learners.

H9: SN can significantly predict ESE among ELT learners.

H10: SN can significantly predict EOE among ELT learners.

H11: SN can significantly predict EIA among ELT learners.

The Importance of Entrepreneurship in Iranian ELT Context

When it comes to Iran, the government is the primary source of employment creation, especially for university graduates. Accordingly, the primary strategy of the country's higher education has been to prepare the graduates for the state employment (Karimi, 2019). But, due to rapid growth in the university education enrollment in the last two decades, the number of graduates has sharply increased. Eventually, the increase in the population of educated job seekers in many fields of specialization outdistanced the availability of government employment in Iran (Haddad & Habibi, 2017).

Tasnim (2020) reported that more than forty percent of the Iran's unemployed population are university graduates. Additionally, in cooperation with the ministry of science, research and technology, the Iranian employment monitoring plan has recently investigated the employment status of graduates. Based on the data obtained from 88 state and private universities, research centers and higher education institutes, the unemployment rate among graduates of different fields of study was remarkably high. The report showed that in the ELT field, the unemployment rates were 66.04, 38.45 and 40 percent for bachelor, master and doctoral levels, respectively (Mehr News Agency, 2021).

Meanwhile, the decrease of job openings in the state organizations that traditionally hire a majority of graduates makes entrepreneurship an attractive carrier choice in a developing country like Iran. Due to its triggering effect, the presence of unemployment can strengthen the aspiration to develop entrepreneurial identity and enhance willingness to embark on entrepreneurial careers among university students (Pfeifer et al., 2016).

However, despite the effectiveness of entrepreneurship in creating new job opportunities and assisting governments in fostering economic development (Obschonka, 2013; Wilson et al., 2009), there is a paucity of research on potential factors which can increase graduates' tendency toward entrepreneurship in Iranian ELT context.

To bridge this gap, the present study aimed to get insight into EI and its origins among Iranian ELT students and how well the hypothesized framework based on EI fits in the Iranian ELT context.

Methodology

Participants and procedure

The participants in this study were 382 university English majors. Two hundred forty-nine (65.2 %) were female, and 133 (34.8 %) were male. They were undergraduate and graduate students majoring in ELT.

Eighty (20.9 %) were senior undergraduates, 240 (62.8 %) MA and 62 (16.2 %) were PhD students. Their ages ranged from 21 to 43 years ($M = 26.50$). The rationale for inviting the seniors and alumni was that they had obtained a fundamental understanding of their academic field. These individuals were expected to be equipped with a mastery of the English language and adequate capability and knowledge related to language teaching to enter the labor market (Fallah et al., 2022).

To collect the data, a letter of invitation including the questionnaire link was forwarded to the participants in four related student Telegram groups. Since the group members were from different universities throughout the country, they could be assumed to be an appropriate representation of the university-level ELT students in Iran. The study's objective was explained to the participants in the online form, and they were assured that participation in the study would be voluntary, their answers would be kept confidential, and the data would be utilized only for the purpose of the current study. A total of 382 participants sent back the completed questionnaire within ten days.

Instrumentation

The data were gathered through self-reported scales. Persian versions of the scales were prepared through translation and back translation in the present study. Besides, to make the scales adaptable to the ELT context, based on consultation with two university professors, five graduates, and three experienced entrepreneurs in the field, modifications were made to the content of several items. Internal consistency and confirmatory factor analysis of the scales were also examined.

Entrepreneurship: Intention

EI was tested through an adapted version of Liñán and Chen (2009). The scale measures to what extent the learners are intending to become entrepreneurs. It included four items to be answered on a seven-point Likert scale ranging from "not at all true of me" (1) to "completely true of me" (7). A sample item was "*I will make every effort to start and run my own business.*" In this study, the reliability estimate (Cronbach's alpha) was $\alpha = .87$.

Entrepreneurial Self-efficacy

ESE was measured using five items adapted from Zhao et al. (2005). The scale measures the students' confidence in their abilities to successfully perform entrepreneurial activities and roles, such as identifying new business opportunities, creating new educational products and services, and commercializing an idea or a new educational development. Participants were asked to indicate to what extent the statements were characteristic of themselves on a 7-point Likert scale ranging 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 commercialize an idea or new educational development.*" In this study, the reliability estimate for the scale was $\alpha = .89$.

Subjective Norms

SN was measured using three items adapted from Liñán and Chen (2009). These items measure the perceived social support to carry out entrepreneurial behaviors. Particularly, they refer to the perception that reference people (here, family, friends and professors) would approve of their decision to become an entrepreneur or not. A total score of SN was obtained by averaging the 7-point ratings varying from "not at all" (1) to "very much" (7). The sample item was "*My family would support me in my career as an entrepreneur.*" The reliability estimate was $\alpha = .71$ in this study.

Entrepreneurial Identity Aspiration

Five items from Farmer et al. (2011) were used to test EIA. The scale measures learners' thinking about and seeing themselves as future entrepreneurs. They were answered on a seven-point Likert scale ranging from "not at all true of me" (1) to "completely true of me" (7). A sample item was "*Becoming an entrepreneur in ELT would be an important part of who I am.*" The reliability estimate was $\alpha = .94$ in this study.

Entrepreneurial Outcome Expectation

EOE was measured with five items inspired by Krueger (2000). All of the items began with the following instruction "*To what extent do you expect to achieve the following outcomes by starting your own venture?*" The sample item was "*Financial rewards (increase personal income, personal wealth, etc.)*." Participants rated their responses on a 7-point Likert-type scale ranging from "not at all" (1) to "very much" (7). The reliability estimate was $\alpha = .86$ in this study.

Data Analysis and Results

Preliminary assumptions were first examined to check for normality, linearity, homogeneity of variance-covariance matrices, outliers, and multicollinearity. The results revealed no violation of the assumptions. Skewness and kurtosis of all items were also examined. It was found that their values (ranging from $-.12$ to $-.74$ for skewness and from $.04$ to $.57$ for kurtosis) were statistically non-significant. Descriptive statistics (means and standard deviations), reliability estimates of the scales, and correlations between the variables are shown in Table1. As shown, EI, ESE, EOE, EIA, and SN were all significantly interconnected.

Variables	M/SD	Range	α	1	2	3	4	5
1. EI	21.14/5.58	4-28	.80	1.00				
2. ESE	25.12/6.43	5-35	.89	.58**	1.00			
3. EOE	28.88/5.08	5-35	.86	.47**	.55**	1.00		
4. EIA	27.48/6.96	5-35	.94	.61**	.59**	.57**	1.00	
5. SN	14.88/3.92	3-21	.64	.40**	.49**	.38**	.50**	1.00

** $p < .01$

Table 1: Descriptive statistics and correlation matrix (n=382).

Construct validity

Confirmatory factor analysis (CFA) was run to examine the construct validity of the scales. To this end, following Morin et al. (2013) and Tseng and Schmitt (2008), the goodness of fit indices of Chi-square divided by degree of freedom (χ^2/df), Comparative Fit Index (CFI), Tucker-Lewis Index (TLI), Normed Fit Index (NFI), and Root Mean Square Error of Approximation (RMSEA) were taken into account. It is recommended that a cut-off value of less than 3 for χ^2/df , values less than .08 for RMSEA, a value of 90 or above for CFI, NFI, and TLI would represent a reasonable fit for data (Morin et al., 2013; Tseng & Schmitt, 2008). Furthermore, all model estimation was done using Maximum Likelihood (ML) estimation.

The analyses showed that all of the intended indices had an acceptable fit to the data (see Table 2). The evaluation of the factor loadings indicated that the observed indicators had reasonably high factor loadings on their common factors (Fig.2).

	χ^2/df	CFI	TLI	NFI	RMSEA
EI	1.66	.98	.97	.95	.05
ESE	1.48	.99	.97	.96	.04
EOE	1.05	.98	.98	.97	.03
EIA	1.54	.98	.97	.96	.04
SN	1.35	.98	.96	.97	.03

Table 2: Measurement model of the latent variables.

SEM analyses

To test the research hypotheses, Structural Equation Modeling with maximum likelihood estimation was run via AMOS 22. This analysis allows for simultaneous exploration of the links among different dependent and independent variables and examination of complex hypotheses.

Measurement models for EI, ESE, EOE, EIA, and SN were examined. The hypothetical model was examined, and the following measures of goodness-of-fit were achieved for the base model; goodness-of-fit index (CFI) = .93, adjusted goodness-of-fit index (NFI) = .89, comparative fit index (TLI) = .91, root mean square error of approximation (RMSEA) = .07, and $\chi^2/df = 3.10$ showing an unacceptable good fit for the base model. As such, a model modification was made to promote the model. In doing so, the non-significant paths (SN→EI and EOE→EI) were deleted. The measures of goodness-of-fit were analyzed again for the modified model. As given in Table 3, the final measurement model represented a satisfactory fit: CFI = .96, NFI = .93, TLI = .94, RMSEA = .06, and $\chi^2/df = 2.45$.

	χ^2/df	CFI	TLI	NFI	RMSEA
Base Model	3.10	.93	.91	.89	.07
Revision: deleting the non-significant paths	2.45	.96	.94	.93	.06

Table 3: Modification steps in the structural Model.

In the final model, significant paths were obtained leading from ESE ($\beta = .22, p < .01$) and EIA ($\beta = .60, p < .001$) to their hypothesized destination of EI. EOE ($\beta = .15, p < .05$), SN ($\beta = .14, p < .01$) and ESE (β

= .66, $p < .001$) also significantly predicted EIA. The path from ESE to EOE was significant ($\beta = .51, p < .001$). Furthermore, EOE ($\beta = .16, p < .05$) and ESE ($\beta = .64, p < .001$) were significantly predicted by SN. The graphic representation of the revised structural model with standardized path coefficients is shown in Fig. 2.

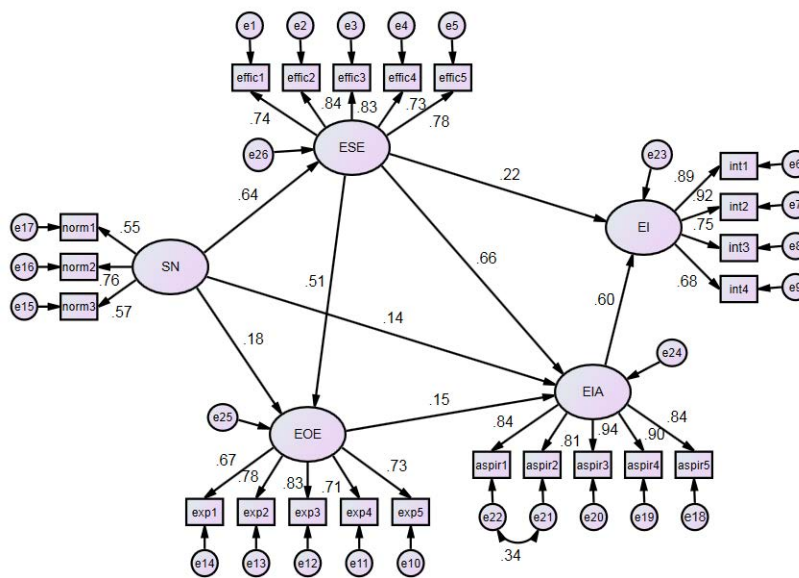


Fig 2: The final model

Mediation analyses

To examine the indirect (mediating) effects of EIA and ESE on EI, PROCESS macro was utilized (Hayes & Matthes, 2009; Hayes, 2013). PROCESS, as a computational tool for estimating indirect effects in mediation models, provides bootstrap confidence intervals for the indirect effects of the predictors on the outcome variable via the mediator variable(s). Bootstrapping, compared to other mediational analyses, yields more precise inferences and provides further calculations that are not executed automatically by conventional regression analysis (Hayes & Matthes, 2009).

The results revealed that the mediating effects of EIA on the effect of ESE on EI ($b = .39, SE = 0.04, 95\%, CI = .32, .48$), the effect of EOE on EI ($b = .47, SE = 0.05, 95\%, CI = .37, .57$) and the effect of SN on EI ($b = .54, SE = 0.06, 95\%, CI = .41, .67$) were statistically significant. Additionally, the results showed that the mediating effect of ESE on the effect of SN on EI ($b = .45, SE = 0.06, 95\%, CI = .34, .57$) was statistically significant (Table 4). It means that EI could be indirectly affected by ESE, EOE, and SN through the mediation of EIA. In addition, ESE could mediate the relationship between SN and EI.

Indirect paths	b	BootSE	BootLLCI	BootULCI
ESE→EIA→EI	.39	.04	.32	.48
EOE→EIA→EI	.47	.05	.37	.57
SN→EIA→EI	.54	.06	.41	.67
SN→ESE→EI	.45	.06	.34	.57

Note. b=coefficient of indirect effect = shows the indirect effect of the first variable on the third one through the partial mediation of the second variable. BootSE =Standard error of estimate; BootLLCI & BootULCI = lower and upper confidence limits.

Table 4: Measures of mediation analysis.

Discussion

The significant path leading from self-efficacy to intention is in line with existing theoretical and empirical research, though quite limited in the ELT context. Bandura (1997) argued that individuals' confidence in their capabilities to effectively achieve a specific task could strongly affect their intentions and subsequent behaviors. Empirical research also indicates that when graduate and undergraduate students enjoy a high level of ESE, they strongly intend to engage in entrepreneurship (Celuch et al., 2017; Santos & Ligouri, 2019; Tran & Korflesch, 2016).

The significant paths from ESE to EOE and EIA confirmed the findings of Rodríguez Gutiérrez et al. (2019), Liguori et al. (2020), and Pfeifer et al. (2016). One potential explanation for these findings is that as the learners feel more confident in their capacities to identify entrepreneurship opportunities and to do entrepreneurial actions, they envisage more gains and rewards to receive out of their future endeavors. Moreover, Lent et al. (2002) argued that those who feel confident in their abilities to perform specific entrepreneurial roles and activities form higher aspirations and create more vital images of entrepreneurial identity. According to Bandura (1997), individuals with high levels of self-efficacy deem situations as realizable opportunities. Compared to their counterparts with lower levels of self-efficacy, they express high levels of aspirations as they are more optimistic about the potential entrepreneurial outcomes, and enjoy more control over their future plans and endeavors (Luszczynska et al., 2011); thereby, expecting better entrepreneurial outcomes and having more potent images of themselves as future entrepreneurs.

The path from EIA to EI confirmed the findings of previous research. Rodríguez Gutiérrez et al. (2019) and Celuch et al. (2017), for example, found that EIA could significantly account for university students' EI in Mexico and the United States, respectively. Bandura (1986) argues that one's specific pattern of likes or dislikes respecting various occupations has a strong effect on the formation of career choice and intention. Self-identity is also seen as a powerful predictor of behavior and behavioral intentions in psychology and sociology literature (Compeau & Higgins, 1995).

Besides being the most proximal antecedent of EI, EIA proved to be a powerful conduit for the effects of ESE, EOE, and SN on EI. It means that the way that ELT learners imagine themselves as potential future entrepreneurs enhances the impacts of ESE, EOE, and SN on EI. In other words, the effect of ESE, SN, and EOE on EI could be increased to the extent that the students had more substantial images of themselves as potential entrepreneurs.

Surprisingly, the findings revealed that the direct effect of EOE on EI did not reach statistical significance. This finding, perhaps, can be justified by Nabi and Liñán's (2011) argument that the unpleasant institutional framework and economic conditions in developing countries tend to weaken the appropriation of the valued outcomes or the impact of EOE. Even if learners have high expectations of financial rewards, family security, autonomy, and other personal rewards, they may have doubts about the prospect of obtaining those outcomes. Perception of the possible self as an entrepreneur and students' ESE can better account for EI than EOE do in the context of a developing country (Pfeifer et al., 2016).

The findings also revealed that SN could not directly predict EI. These findings suggest that the graduates and final-year undergraduates are mature and capable enough to make career choices by themselves. These findings are in contrast with those of Kolvereid and Isaksen (2006) but in line with those of Doanh and Trang (2019), who found no direct connection between the support of reference others and EI among Vietnamese students.

In this study, although significant others' attitudes toward entrepreneurship could not directly influence EI, they could indirectly account for EI through the mediation of ESE and EIA. In other words, SN played an essential role in building ESE and EIA among Iranian ELT students, and ESE and EIA, in turn, predicted EI. In addition, SN could directly predict EOE among ELT learners. The results seem to support Bandura's (1997) thesis that social support, especially from significant others, improves self-efficacy for individuals facing adversity like unemployment. Previous research also indicates that the entrepreneur's identity changes with time and can be promoted through social support (Edwards & Muir, 2012). One probable explanation for these findings is that referencing others' (university professors, parents, and friends) positive attitudes toward entrepreneurship can facilitate access to various resources for ELT students. For instance, significant others may act as mentors and offer their time and provide meaningful network connections with experts, partners, and professionals in the subject matter. They can also support the production and preparation of innovative educational services and products, and even provide financial support and affirmation of the entrepreneurship initiatives. The combination of these supports can lead to the enhancement of self-efficacy, aspirations, and positive anticipated consequences among ELT students.

Conclusion

This study examined the relationships among EI, ESE, EIA, EOE, and SN in a sample of Iranian ELT learners. The study was the first step, although a small one, to investigate these constructs in an ELT context. Intriguing findings were obtained that can help enhance the realization of these phenomena and guide potential entrepreneurship education programs in the ELT context.

The hypothesized model showed a good fit to the dataset concerning the evaluated concepts and supported the application of the SCCT framework in an Iranian ELT context. The results suggest that EI is a complex concept that can be influenced by different factors in different ways. ESE and EIA directly affected EI, while EOE and SN could indirectly affect EI. Further, SN proved to be a significant predictor of ESE, EIA, and EOE. The results also showed that ESE can significantly predict EOE and EIA. EOE also significantly predicted EIA. Following these findings, it can be said that to enhance EI, factors impacting this phenomenon, particularly those reported here, should be taken into consideration by university administrators and ELT professors, and learners.

Implications

Concerning implications and pedagogical practices, this study can guide potential entrepreneurship education programs at universities in Iran. First, measures should be adopted to improve students' entrepreneurial self-efficacy. Wood and Bandura (1989) pointed out mastery experiences (performance successes), physiological states, role models, and social persuasion as potential ways to boost students' ESE. Therefore, carrying out small projects, doing extracurricular activities, inviting entrepreneurs to share their start-up experiences, and telling the stories of successful entrepreneurs as part of entrepreneurship education programs can foster students' confidence in their entrepreneurial skills and abilities. These activities can also facilitate the creation of institutional entrepreneurial culture (Rodríguez Gutiérrez et al., 2019). Such an atmosphere could encourage the enhancement of the proper sense of the learners as potential entrepreneurs so that the graduating students deem themselves future employers and not just simple employees in the public sector or private language institutes; thereby, enhancing their EIA.

Although SN did not directly predict EI, it could indirectly affect intention through the mediation of ESE, EOE, and EIA. As such, it can still play a pivotal role in forming EI. Furthermore, those in university contexts, including professors and friends, can encourage students to start and run their own ventures. Thus, inspiring the entrepreneurship movement in university (through successful entrepreneurs, start-up contests, start-up clubs, etc.) can be considered a potentially effective solution to enhance learners' EI.

Moreover, to enhance the ELT learners' EI and facilitate the occurrence of subsequent entrepreneurial behaviors, curriculum planners and universities are advised to make the language curricula more creative, engaging, innovative, and equipped with supportive technologies. They can also ameliorate the existing language teaching methodologies by including entrepreneurial activities with student internships, participation, and partnership activities with medium and small institutions (Rengiah, 2013).

Many other activities in most ELT classes such as interviews, role plays, small-group or team-based oral projects, picture prompts, extemporaneous presentations and speeches, various inspiring readings and writing tasks, and problem-solving, task-based, information-gap, and conversation grid activities are inherently effective in developing qualities of successful entrepreneurs (Altan, 2019; Park, 2019). They can help the learners survive in new situations, think both cooperatively and individually, take risks, enhance ambiguity tolerance and be more skillful and self-confident negotiators. Further, if effectively designed, well-performed, and dynamically supported by alternative assessment techniques, these activities can change ELT classes into safe, active, and enjoyable contexts in which students can both develop entrepreneurial skills, and learn the language which will be required to employ these skills in real-world settings (Altan, 2019).

Designing entrepreneurship awareness courses is also an effective way for enhancing ELT learners' entrepreneurial knowledge, attitude, and intention (Fretschner & Weber, 2013). In such intervention programs, learners learn about the nature and the importance of entrepreneurship in the educational context, stages of the entrepreneurial process, challenges of entrepreneurship, and essential entrepreneurial capabilities and competencies (Liñán et al., 2011).

Limitations

As for the limitations, first, only self-reported data for the constructs was used. To measure the variables more precisely, future research could use a range of both quantitative and qualitative measures. In addition, the participants were all university ELT students; therefore, any generalization of the results to other contexts and fields of study should be made with caution. This study should be replicated in different settings with a more heterogeneous group of participants to see whether the same findings could be attained. Further, the inclusion of other cognitive and personal variables such as entrepreneurial mindset (EM) and entrepreneurship passion (EP), which can theoretically fit well in SCCT, is recommended in the ELT context.

This lends support from Cardon et al. (2009) who argued that passion can play an inspirational role in opportunity recognition and new business creation. Moreover, Krueger (2017) contended that for gaining a profound understanding of the nature of entrepreneurship, scholars need to proceed deeper cognitively by examining entrepreneurial mindset in addition to intention.

References

- Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52, 27–58. <https://doi.org/10.1146/annurev.psych.52.1.27>
- Altan, M.Z. (2017). Pre-Service ELT teachers as future enterprising teachers. *Journal of Asia Entrepreneurship and Sustainability*, 8(2), 108-137.
- Altan, M. Z. (2019). EFL classes for cultivating entrepreneurial mindset. *Language Teaching Research Quarterly*, 11, 20-30. <https://doi.org/10.32038/ltrq.2019.11.03>
- Bandura, A. (1997). *Self-efficacy and agency of change*. Raven Press.
- Bandura, A., & National Institute of Mental Health. (1986). *Social foundations of thought and action: A social cognitive theory*. Prentice-Hall.
- Baumol, W. J., Litan, R. E., & Schramm, C. J. (2009). *Good capitalism, bad capitalism, and the economics of growth and prosperity*. Yale University Press.
- Bird, B. J. (1992). The operation of intentions in time: The emergence of the new venture. *Entrepreneurship Theory and Practice*, 17(1), 11–20. <https://doi.org/10.1177/104225879201700102>
- Cardon, M. S., Wincent, J., Singh, J., & Drnovsek, M. (2009). The nature and experience of entrepreneurial passion. *Academy of Management Review*, 34(3), 511–532. <https://doi.org/10.5465/amr.2009.40633190>
- Carr, J. C., & Sequeira, J. M. (2007). Prior family business exposure as intergenerational influence and entrepreneurial intent: A theory io planned behavior approach. *Journal of Business Research*, 60(10), 1090–1098. <https://doi.org/10.1016/j.jbusres.2006.12.016>
- Celuch, K., Bourdeau, B., & Winkel, D. (2017). Entrepreneurial identity: The missing link for entrepreneurship education. *Journal of Entrepreneurship Education*, 20(2), 1-20. <https://www.abacademies.org/articles/entrepreneurial-identity-the-missing-link-for-entrepreneurship-education-6657.html>
- Compeau, D. R., & Higgins, C. A. (1995). Computer self-efficacy: development of a measure and initial test. *MIS Quarterly*, 19(2), 189-211. <https://doi.org/10.2307/249688>
- Cross, S. E., & Markus, H. R. (1994). Self-schemas, possible selves, and competent performance. *Journal of Educational Psychology*, 86, 423-438. <https://doi.org/10.1037/0022-0663.86.3.423>
- Doanh, D. C., & Trang, T. V. (2019). Entrepreneurial self-efficacy and intention among Vietnamese students: A meta-analytic path analysis based on the theory of planned behavior. *Management Science Letters* 9, 1847-1862. <https://doi.org/10.5267/j.msl.2019.6.007>
- Edwards, J.-L., & Muir, E. (2012). Evaluating enterprise education: why do we do it? *Education + Training*, 54(4), 278-290. <https://doi.org/10.1108/00400911211236136>
- European Council (2006). Recommendation of the European parliament and of the council on key competences for lifelong learning. Retrieved June 15, 2021, from <http://eurlex.europa.eu/legalcontent/EN/TXT/PDF/?uri=CELEX:32006H0962&from=EN>
- Fallah, N., Kiani, G. R., & Tajeddin, Z. (2022). Exploring the effect of an entrepreneurship awareness-raising intervention on ELT learners' entrepreneurial intention, mindset, self-efficacy and outcome expectations. *Language Teaching Research Quarterly*, 27, 45-65. <https://doi.org/10.32038/ltrq.2022.27.04>
- Farmer, S. M., Yao, X., & Kung-Mcintyre, K. (2011). The behavioral impact of entrepreneur identity aspiration and prior entrepreneurial experience. *Entrepreneurship Theory and Practice*, 35(2). <https://doi.org/10.1111/j.1540-6520.2009.00358.x>
- Fretschner, M., & Weber, S. (2013). Measuring and understanding the effects of entrepreneurial awareness education. *Journal of Small Business Management*, 51(3), 410-428. <https://doi.org/10.1111/jsbm.12019>
- Haddad, G. K., & Habibi, N. H. (2017). Why the youth are so eager for university education? Evidence from Iran's labor market. *Journal of Economic Studies*, 44(3), 362-379. <https://doi.org/10.1108/JES-02-2016-0036>
- Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression based approach*. The Guilford Press.
- Hayes, A. F., & Matthes, J. (2009). Computational procedures for probing interactions in OLS and logistic regression: SPSS and SAS implementations. *Behavioral Research Methods*, 41, 924–936. <https://doi.org/10.3758/BRM.41.3.924>
- Hisrich, R. D., Peters, M. P. & Shepherd, D. A. (2010). *Entrepreneurship*. McGraw-Hill.
- Karimi, S. (2019). The role of entrepreneurial passion in the formation of students' entrepreneurial intentions. *Applied Economics*, 52(3), 331-344. <https://doi.org/10.1080/00036846.2019.1645287>
- Kautonen, T., vanGeldereren, M., & Fink, M. (2015). Robustness of the theory of planned behaviour in predicting entrepreneurial intentions and action. *Entrepreneurship Theory and Practice*, 39(3), 655–674. <https://doi.org/10.1111/etap.12056>
- Kolvereid, L., & Isaksen, E. (2006). New business start-up and subsequent entry into self-employment. *Journal of Business Venturing*, 21(6), 866-885. <https://doi.org/10.1016/j.jbusvent.2005.06.008>
- Krueger, N. F. Jr. (2000). The cognitive infrastructure of opportunity emergence. In Á, Cuervo, D. Ribeiro, S. Roig (Eds.), *Entrepreneurship: Concepts, theory and practice*, (pp. 5–23). Springer. https://doi.org/10.1007/978-3-540-48543-8_9
- Krueger, N. F. (2007). What lies beneath? The experiential essence of entrepreneurial thinking. *Entrepreneurship Theory and Practice*, 31(1), 123-138. <https://doi.org/10.1111/j.1540-6520.2007.00166.x>
- Krueger, N. F. (2017). Is research on entrepreneurial intentions growing? Or...just getting bigger? in M. Brännback & A. L. Carsud (Eds.), *Revisiting the entrepreneurial mind, inside the black box: An expanded edition* (pp. 35-40). Springer.
- Lent, R.W., & Brown, S.D. (2008). Social cognitive career theory and subjective well-being in the context of work. *Journal of Career Assessment*, 16(1), 6-21. <https://doi.org/10.1177/1069072707305769>
- Lent, R. W., Brown, S. D. & Hackett, G. (1994). Toward a unifying social cognitive theory of career and academic interest, choice, and performance. *Journal of Vocational Behavior*, 45(1), 79-122. <https://doi.org/10.1006/jvbe.1994.1027>

- Lent, R. W., Brown, S. D., & Hackett, G. (2002). Social cognitive career theory. In D. Brown, (Ed.). *Career choice and development* (4th ed.) (pp. 255–311). Jossey-Bass.
- Liguori, E. W., Bendickson, J. S. & McDowell, W. C. (2018). Revisiting entrepreneurial intentions: A social cognitive career theory approach. *International Entrepreneurship and Management Journal*, 14(1), 67-78. <https://doi.org/10.1007/s11365-017-0462-7>
- Liguori, E. W., Winkler, C., Vanevenhoven, J., Winkel, D. & James, M. (2020). Entrepreneurship as a career choice: Intentions, attitudes, and outcome expectations. *Journal of Small Business & Entrepreneurship*, 32(4), 311-331. <https://doi.org/10.1080/08276331.2019.1600857>
- Liñán, F., & Chen, Y.-W. (2009). Development and cross-cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, 33(3), 593-617. <https://doi.org/10.1111/j.1540-6520.2009.00318.x>
- Liñán, F., Rodriguez-Cohard, J. C., & Rueda-Cantucho, J. M. (2011). Factors affecting entrepreneurial intention levels: A role for education. *International Entrepreneurship and Management Journal*, 7(2), 195-218. <https://doi.org/10.1007/s11365-010-0154-z>
- Luszczynska, A., Schwarzer, R., Lippke, S., & Mazurkiewicz, M. (2011). Self-efficacy as a moderator of the planning-behaviour relationship in interventions designed to promote physical activity. *Psychology and Health*, 26(2), 151–166. <https://doi.org/10.1080/08870446.2011.531571>
- Mehr News Agency (2021). *Amare eshteghale 14 reshthe dar maghatea karshenasi, arshad, va doktori*. [Employment statistics in 14 fields of study at bachelor's, master's, and doctoral levels]. Retrieved from <https://is.gd/XPWH9n>
- Morin, A. J. S., Marsh, H. W., & Nagengast, B. (2013). Exploratory structural equation modeling. In G. R. Hancock, & Mueller, R. O. (Eds.), *Structural equation modeling: A second course* (2nd ed.), (pp. 395-436). Information Age.
- Nabi, G., & Liñán, F. (2011). Graduate entrepreneurship in the developing world: Intentions, education and development. *Education + Training*, 53(5), 325–334. <https://doi.org/10.1108/00400911111147668>
- Nanni, A. (2021). Educational entrepreneurship in an intensive English program in Thailand: A case study. *SAGE Open*, 11(1), 1-13. <https://doi.org/10.1177/2158244021998694>
- Nichols, J. R. (2019). Four essential rules of 21st century learning. *Teachthought: We grow teachers*. <https://www.teachthought.com/learning/4-essential-rules-of-21st-century-learning>
- Obschonka, M. (2013). Entrepreneurship as 21st century skill: Taking a developmental perspective. In M. Coerzee, (Ed.). *Psycho-social career meta-capacities: Dynamics of contemporary career development*, (pp. 293-306). Springer.
- Park, E. (2019). Call for fostering an entrepreneurial mindset in TESOL in higher education. *NYS TESOL Journal*, 6(1), 74-77. <http://journal.nystesol.org/jan2019/8Park.pdf>
- Pfeifer, S., Šarlija, N., & Sušac, M.Z. (2016). Shaping the entrepreneurial mindset: Entrepreneurial intentions of business students in Croatia. *Journal of Small Business Management*, 54(1), 102-117. <https://doi.org/10.1111/jsbm.12133>
- Rengiah, P. (2013). *Effectiveness of entrepreneurship education in developing entrepreneurial intentions among Malaysian university students* [Doctoral dissertation, Southern Cross University]. https://researchportal.scu.edu.au/view/pdfCoverPage?instCode=61SCU_INST&filePid=1367368630002368&download=true
- Rise, J., Sheeran, P., & Hukkelberg, S. (2010). The role of self-identity in the theory of planned behavior: A meta-analysis. *Journal of Applied Social Psychology*, 40(5), 1085–1105. <https://doi.org/10.1111/j.1559-1816.2010.00611.x>
- Rodríguez Gutiérrez, P. I., Pastor Pérez, M. Del P., & Alonso Galicia, P. E.. (2019). University entrepreneurship: How to trigger entrepreneurial intent of undergraduate students. *Journal of Science and Technology Policy Management*, 10(4), 927-950. <https://doi.org/10.1108/JSTPM-04-2018-0037>
- Santos, S. C., & Liguori, E. W. (2019). Entrepreneurial self-efficacy and intentions: Outcome expectations as mediator and subjective norms as moderator. *International Journal of Entrepreneurial Behavior & Research*, 26(3), 400-415. <https://doi.org/10.1108/IJEBR-07-2019-0436>
- Schwarz, E. J., Wdowiak, M. A., Almer-Jarz, D.A. & Breitenecker, R. J. (2009). The effects of attitudes and perceived environment conditions on students' entrepreneurial intent: an Austrian perspective. *Education + Training*, 51(4), 272-291. <https://doi.org/10.1108/00400910910964566>
- Tasnim, N.A. (2020). *Gozaresha markaze amar az nerkhe bikari fargholtahsilan dar sale 1400*. [The rate of unemployment among Iranian university graduates in 2020: A report from the Statistics Center]. Retrieved from <https://is.gd/aJnPpj>
- Thompson, E. R. (2009). Individual entrepreneurial intent: Construct clarification and development of an internationally reliable metric. *Entrepreneurship Theory and Practice*, 33(3), 669-694. <https://doi.org/10.1111/j.1540-6520.2009.00321.x>
- Tran, A. T. P., & Von Korfflesch, H. (2016). A conceptual model of social entrepreneurial intention based on the social cognitive career theory. *Asia Pacific Journal of Innovation and Entrepreneurship*, 10(1), 17-38. <https://doi.org/10.1108/APJIE-12-2016-007>
- Tsang, W.-T., & Schmitt, N. (2008). Toward a model of motivated vocabulary learning: A structural equation modeling approach. *Language Learning*, 58(2), 357–400. <https://doi.org/10.1111/j.1467-9922.2008.00444.x>
- Vanevenhoven, J., & Liguori, E. (2013). The impact of entrepreneurship education: introducing the entrepreneurship education project. *Journal of Small Business Management*, 51(3), 315-328. <https://doi.org/10.1111/jsbm.12026>
- Wigfield, A., & Eccles, J. S. (2000). Expectancy-Value theory of achievement motivation. *Contemporary Educational Psychology*, 25(1), 68–81. <https://doi.org/10.1006/ceps.1999.1015>
- Wood, R., & Bandura, A. (1989). Impact of conceptions of ability on self-regulatory mechanisms and complex decision making. *Journal of Personality and Social Psychology*, 56(3), 407–415. <https://doi.org/10.1037/0022-3514.56.3.407>
- Wilson, K. E., Vyakarnam, S., Volkmann, C., Mariotti, S., & Rabuzzi, D. (2009). *Educating the next wave of entrepreneurs: Unlocking entrepreneurial capabilities to meet the global challenges of the 21st century*. World Economic Forum. <https://dx.doi.org/10.2139/ssrn.1396704>
- Zhao, H., Seibert, S., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *Journal of Applied Psychology*, 90(6), 1265–1272. <https://doi.org/10.1037/0021-9010.90.6.1265>