On the Relationship between Iranian English Language Teaching Students’ Self-efficacy, Self-esteem, and their Academic Achievement

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Abstract
The present study explores the relationship between self-esteem, self-efficacy, and academic achievement among Iranian graduate students majoring in English Language Teaching (ELT) by presenting a model of the interrelationship among these three constructs. To this end, 229 students, male (N=80) and female (N=149), were selected from among different universities of Khorasan Razavi Province, Iran. AMOS software, Schwarzer, and Jerusalem’s self-efficacy questionnaire were utilised to conduct the study and Rosenberg’s self-esteem questionnaire. Also, to assess the participants’ academic achievement, their Grade Point Average (GPA) was used as a criterion measure based on their self-report evaluation. The results of the Pearson correlation indicated that there were significant positive relationships between self-efficacy and self-esteem (r=.641, p<.05), self-efficacy and academic achievement (r=.609, p<.05), and self-esteem and academic achievement (r=.519, p<.05). The goodness of fit indices revealed that all the fit indices lie within the acceptable fit thresholds. Results of the model showed that both self-efficacy (β=.44, p<.05) and self-esteem (β=.22, p<.05) were significant positive predictors of students’ achievement. Therefore, self-efficacy was a better predictor of GPA. The model also demonstrated that self-efficacy positively and significantly (β=.57, p<.05). The findings of the study might have some pedagogical implications for language teaching and learning.

Keywords: Academic Achievement, ELT, Self-efficacy, Self-esteem
Introduction
According to Bandura’s social cognitive theory, factors such as self-efficacy and self-esteem play important roles in achieving the goals in learners’ lives. Learners increase or decrease their self-efficacy and self-esteem based on previous performance, comparison with peers, and feedback from the learning environment (Namaziandost & Çakmak, 2020). Bandura (1997) states that self-efficacy is a driving force to complete a task or excel academically. Different psychologists who have studied self-efficacy concur that higher levels of self-efficacy increase one’s perception of achievement (e.g., Marsh & Craven, 2006; Moyano, Quilez-Robres, & Cortés Pascual, 2020; Schwarzer, 2007; Zheng, Atherton, Trzesniewski, & Robins, 2020).

Self-esteem, the other construct to be explored in this study, is an enduring personality characteristic (Bandura, 1997, as cited in Hajloo, 2014). Holly (1987, as cited in Hajloo, 2014) stated that self-esteem and achievement go hand-in-hand and feel each other. According to Bandura (1997, as cited in Yazon, 2015), the notions of self-esteem and perceived self-efficacy are mainly utilised interchangeably as though they show the same idea. In other words, Rosenberg, Schoenbech, Schooler, and Rosenberg (1995, as cited in Yazon, 2015) point out this confusion has risen to the level where some researchers insist that the self, self-esteem, and self-efficacy are all interchangeable constructs. Based on previous studies, the main problem is that students with low self-esteem tend to be sad, less sociable, more willing to use drugs, and have a higher level of depression (Yazon, 2015), which are all related to lower academic achievement. Higher perceived self-efficacy leads to effort and persistence at a task, whereas low self-efficacy produces discouragement and giving up (Yazon, 2015). Also, previous studies revealed that students with lower self-esteem and self-efficacy are more likely to neglect trying new experiences, which accordingly demotivated them to learn a new language (e.g., Bai, Nie, & Lee, 2020; Hermann, 2005; Mone, Baker, & Jeffries, 1995; Moyano et al., 2020; Saito, 2020; Yazon, 2015).

Furthermore, the correlation between self-efficacy, self-esteem, and academic achievement in the EFL context of tertiary education has not been studied. Most research has concentrated on the ESL context. Although some studies have been conducted on self-efficacy levels, most studies have focused on in-school achievements for a younger age group (Steffen, McKibbin, Zeiss, Gallagher-Thompson, & Bandura, 2002). Accordingly, this study investigates the relationship between self-esteem, self-efficacy, and the academic achievement of Iranian master of arts (MA) students majoring in ELT. In other words, it is aimed to present a model of the interrelationship between these three constructs using AMOS software. In the present study, to address the objectives, the following questions were analysed:

**RQ1.** Is there any significant relationship between the Iranian Master of Arts English Language Teaching students’ self-efficacy, self-esteem, and academic achievement?

**RQ2.** Can Iranian Master of Arts English Language Teaching students’ self-efficacy and Self-esteem predict their academic achievement?
Review of the Literature

Regarding the relationship between self-efficacy and self-esteem, Hermann (2005) suggested that high self-efficacy is predictive of high self-esteem; whereas, low self-efficacy predicts low self-esteem. As Bandura (1997) points out, “self-liking does not necessarily beget performance attainments” (p.21). Research findings showed that self-esteem predicts neither the choice of personal goals nor performance accomplishments (Mone, Baker, & Jeffries, 1995). Therefore, it can be inferred that self-efficacy predicts self-esteem (rather than self-esteem predicts self-efficacy), particularly in predicting trait procrastination. Individuals with low self-efficacy may be more likely to delay decision making. One critical issue centres on the presumed orthogonal nature of self-efficacy and self-esteem. Specifically, some people may question whether it is conceptually sound to assume that the two orthogonal variables can predict each other; they might assert that the relationship of self-efficacy and self-esteem would be best described by a simple, reciprocal correlation/covariance. Then this relation between variables might result from their shared variability (or error variance). However, we argue that this issue remains unresolved (Hajloo, 2014).

Various studies explored the relationship between Self-esteem and Self-efficacy. For example, McKenzie (1999) examined the relationship between self-efficacy and self-esteem in learners. The main historical framework of his study was based on Alfred Bandura and Mark Sherer’s study. Data was gathered on the research fields of self-efficacy and self-esteem theories and the impact of education on self-efficacy and self-esteem, and the influence of education on learners. To analyse the data, Pearson r coefficient and t-tests were employed. The research data collected found that there was no statistically significant correlation between self-efficacy scores and self-esteem scores for middle school students. Hermann (2005) investigated the relationship of social self-efficacy with various personality and psychological adjustment variables in a sample of 696 college students. Path models were proposed to examine the relationships. It was found that self-efficacy predicts self-esteem positively and significantly.

In the Iranian context, Hajloo (2014) aimed to review the association between procrastination and two self-factors, self-efficacy and self-esteem. One hundred forty undergraduates Psychology university students participated in this study. Three questionnaires were used, namely student-version of the General Procrastination Scale, General Self-Efficacy Scale and Rosenberg’s Self-Esteem Scale. Results indicated that self-efficacy is a positive predictor of self-esteem. Moreover, Yazon (2015) aimed to determine the level of self-esteem, self-efficacy and academic performance of the College of Teacher Education students and determine the relationship between these variables. To achieve these objectives, the researcher used descriptive-correlational design. The study used two questionnaires: The General Self-Efficacy Scale by Schwarzer and Rosenberg’s Self-Esteem Scale. According to the results, only General Weighted Average and Self-esteem and Self-esteem and Self-efficacy showed low correlations with R-values of 0.26 and 0.33, respectively. Recently, Namaziandost and Çakmak (2020) carried out a study to explore the difference that the flipped classroom made on learners’ self-efficacy. Participants were 58 intermediate proficiency level students randomly divided into two
groups: experimental (flipped classroom) and control (traditional) group. Students filled out the Self-Efficacy scale before and after the treatment of the flipped classroom. The Findings showed a significant increase in self-efficacy scores of the experimental group. In addition, Wang and Sun (2020) conducted a meta-analysis study to find the association between self-efficacy and language proficiency. Basing their analysis on a meta-analysis of the 493 effect sizes from 74 published journal articles, book chapters, and theses, the writers concluded a correlation between students’ self-efficacy beliefs and their linguistic proficiency ranging from small to medium effect size. Results of hierarchical linear models showed that 76.7% of the published studies variance, indicating that the effect size varies across different works. Effect sizes reported in these published works with East Asian learners were larger than those reported in studies with students in Western culture.

Furthermore, Farag (2020) found a correlation between learners’ self-efficacy in English and the three subscales of perfectionism (adaptive, maladaptive and non-perfectionist). Basing his analysis on the data extracted from the English Self-Efficacy Questionnaire Scale (QESE) and the Revised Almost Perfect Scale (APS-R) administered to 114 high-intermediate and advanced-level English students, Farag demonstrated that the English Total Self-Efficacy Scale and its four subscales positively correlated with the Order and High Standards subscales, using Pearson Product Moment Correlation, hierarchical cluster analysis, MANOVA and the independent sample t-test.

Zheng et al. (2020) studied the association between self-esteem and academic achievement using data from a longitudinal study of Mexican-origin youth (N = 674) to explore the bidirectional relationships between these two variables among 5th to 11th-grade students. Global and domain-specific self-esteem (academic, honesty, peer relationships, appearance) were analysed at ages 10, 12, 14, and 16 using the Self-Description scale. Academic achievement was measured at the same ages through self-reported grades and standardised test scores from school records. Findings revealed that students with high global and academic self-esteem indicated relative improvements in their scores (but not test grades), and students who received higher scores and test grades revealed relative increases in global and academic self-esteem. Students with high honesty self-esteem indicated relative increases in scores and test grades, and students with higher scores revealed relative increases in peer association with self-esteem. Finally, in their study, Moyano et al. (2020) examined the role of non-cognitive (motivation and self-esteem) and cognitive (verbal fluency and reasoning) variables on students’ academic performance, concerning both their overall scores as well as specific topics, including but not limited to, language, literature and mathematics.

Finally, in their study, Moyano et al. (2020) examined the role of non-cognitive (motivation and self-esteem) and cognitive (verbal fluency and reasoning) variables on students’ academic performance, concerning both their overall scores as well as specific topics, including language, literature and mathematics. The findings, based on the data extracted from 133 mixed-sex learners (aged 6–9 years old), showed the relevance of intrinsic motivation and self-esteem, interpreted as the predictors of academic achievement. Moyano et al. (2020) concluded that
academic achievement is based on both cognitive and non-cognitive variables and the malleability of cognitive variables, as they seem to improve through enhanced motivation and self-esteem.

According to different previous studies, all the thoughts that affect human functioning and standing after the core of social cognitive theory, self-efficacy and self-esteem. The majority of the studies in this area have focused on the ESL context. Although some studies have been conducted on self-efficacy levels, most studies have focused on in-school achievements for a younger age group (Steffen et al., 2002). In educational situations, self-efficacy and self-esteem were frequently employed to demonstrate their effects on learners’ academic achievement (e.g. Correlating, 2018; Hairuzila & Subarna, 2007; Juyandegan, 2016; Moyano et al., 2020; Namaziandost & Çakmak, 2020; Okoko & Odingo, 2012; Tenaw, 2013; Tilfarlioğlu & Ciftci, 2011; Zheng et al., 2020). A review of the previous studies indicated that self-efficacy and self-esteem positively impact learners’ achievement (e.g. Bandura, 1995; Bhagat, 2016; Edman & Brazil, 2007; Okoko & Odingo, 2012; Tilfarlioğlu & Ciftci, 2011; Zimmerman, 1995). Also, to the researcher’s best knowledge, no study has been done to present an interrelationship model between efficacy, self-esteem and academic achievement among MA students.

Methodology
Participants and Setting
Based on Krejcie and Morgan (1970), 248 students participated in this study. Of 248 participants, unfortunately, 19 participants were excluded from the study because of missing data. Therefore, 229 participants stayed and collaborated with the researcher in this study. These participants were both female (N=149) and male (N=80) Iranian master of art students studying English Language Teaching (ELT) in Universities of Khorasan Razavi Province, Iran. They were MA students in the second and third semester who had passed more than ten credits from the MA program. This means that all participants were selected in this study had passed more than 25% of MA courses.

Instrumentation
Two instruments were used to conduct this study: Schwarzer and Jerusalem’s self-efficacy questionnaire and Rosenberg’s self-esteem questionnaire. A section for identifying the participants’ general characteristics was added to the beginning of the questionnaires. The demographic information included the participants’ age, gender and their self-report GPA. All participants were asked to fill out these two scales.

Self-efficacy Questionnaire
In this study, Schwarzer and Jerusalem’s (1995) questionnaire of self-efficacy was used. General Self -efficacy questionnaire (GSE) is a self-report scale of self-efficacy. The scale is developed for the general adult population, comprising adolescents. The instrument has been proven reliable and valid in various fields of studies (Schwarzer, 1993). The Cronbach’s alpha
reliability coefficient reported by Schwarzer (1993) was 0.76 for this questionnaire. According to Schwarzer (1993), this questionnaire is not only parsimonious and reliable; it also has both convergent and discriminate validity. It is available in 30 languages other than English. Filling out this questionnaire took around 15 minutes. This questionnaire consisted of 10 items to measure self-efficacy. Responses to these items were on a 4-point Likert scale ranging, not at all true, hardly true, moderately true, and exactly true.

**Self-esteem Questionnaire**
In this study, Rosenberg’s (1965) questionnaire of self-esteem was used. Rosenberg Self-Esteem questionnaire demonstrated high ratings in reliability areas; internal consistency was 0.77, minimum Coefficient of Reproducibility was at least 0.90 (Rosenberg, 1965). The Cronbach’s alpha reliability coefficient reported by Rosenberg (1965) was 0.77 for this scale. Rosenberg’s Self-Esteem Scale is a 10-item scale that measures global self-worth by measuring positive and negative feelings about the self. All ten items of this scale are answered based on a 4-point Likert scale format. Higher scores indicate higher self-esteem.

**Procedure**
Since the present investigation was trying to explore the relationship between some variables via questionnaires and academic achievement, a correlational design was used. Participants were screened from 248 university students who were the participants in this study, but 19 students who did not agree to participate in this study or did not complete the scales were omitted. In total, 229 MA students agreed to participate in this project. The next step, collecting data, was started in February 2018 and lasted for about two months. For collecting the data, the researcher used two questionnaires. In the present study, Self-efficacy Questionnaire of Schwarzer and Jerusalem (1995) and the Self-esteem Questionnaire of Rosenberg (1965) were used. The questionnaires were carefully prepared to measure whether misspelling existed, and the format of questions was printed in the hard copies.

One of the researchers distributed the questionnaire, explained the procedures, and answered the participants’ possible questions. The probable needed time for filling out both questionnaires was about 20 to 30 minutes. In other words, the investigator went to each of the classrooms, explained the purpose of this study. The researcher’s presence in the classroom helped ensure that participants answered the questionnaire items responsibly and seriously. All of the university students in this study were assured that their responses were confidential and not be compared or identified personally. On average, these 229 university students spent about 15 to 30 minutes responding to mentioned questionnaires. The participants were advised to complete the questionnaires patiently and precisely and were reminded that their cooperation was deeply appreciated. The participants needed to complete the demographic information part to achieve a reliable result, added to the questionnaires’ beginning. This part included the participants’ age, gender and their self-report Grade Point Average (GPA). To answer the first research question (correlation between variables), Pearson Correlation was conducted. Finally, to answer the
second research question, Structural equation modelling (SEM) was used to describe the directed dependencies among the variables and find how much independent variables can predict dependent variables.

**Results**

In the first step, to check the collected data’s normality, the Kolmogorov-Smirnov test was used. Results of the Kolmogorov-Smirnov test illustrated that the obtained sig value for all variables is higher than .05. So, the data is normal, and the researchers can use parametric tests. Table 1 presents descriptive statistics of the variables of the study. Descriptive statistics show the number of students, mean, standard deviation, maximum and minimum scores. The possible range of score for Self-Efficacy and Self-esteem scales with ten questions is between 10 and 40. Moreover, the possible range of score for the Academic Achievement test is between 0 and 20.

Table 1.
*Descriptive Statistics of Variables of the Study*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Efficacy</td>
<td>229</td>
<td>11.00</td>
<td>40.00</td>
<td>26.85</td>
<td>8.95</td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>229</td>
<td>14.00</td>
<td>40.00</td>
<td>28.12</td>
<td>7.98</td>
</tr>
<tr>
<td>Academic Achievement</td>
<td>229</td>
<td>11.00</td>
<td>20.00</td>
<td>15.58</td>
<td>2.46</td>
</tr>
</tbody>
</table>

As Table 1 indicates, the minimum and maximum scores for Self-Efficacy Scale are 11 and 40, and the mean score is 26.85. Moreover, the minimum and maximum scores for Self-Esteem Scale are 14 and 40, and the mean score is 28.12. Finally, the Academic Achievement Scale’s minimum and maximum scores are 11 and 20, and the mean score is 15.58. To answer research question 1, a Pearson correlation was conducted. Table 2 indicates the correlation between Iranian EFL learners’ self-efficacy, self-esteem and academic achievement.

Table 2.
*Results of Correlation between Learners’ Self-Efficacy, Self-Esteem and Their Academic Achievement*

<table>
<thead>
<tr>
<th></th>
<th>Self-Efficacy</th>
<th>Self-Esteem</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Efficacy</td>
<td>Pearson Correlation 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>229</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Esteem</td>
<td>Pearson Correlation .641** 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>229</td>
<td>229</td>
<td></td>
</tr>
<tr>
<td>GPA</td>
<td>Pearson Correlation .609** .519** 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>229</td>
<td>229</td>
<td>229</td>
</tr>
</tbody>
</table>

Based on Table 2, there are significant positive relationships between the variables: self-efficacy and self-esteem ($r=.641$, $p<.05$), self-efficacy and academic achievement ($r=.609$, $p<.05$), self-esteem and academic achievement ($r=.519$, $p<.05$).
The path analysis was used to answer the second research question as to whether Iranian graduate-level ELT students’ self-efficacy and Self-esteem can predict their academic achievement. To discover the structural associations, the proposed model was tested using Amos 24 software. Basing Chi-square as an index to assess the model fit, the writer found fit indices to be an acceptable level with Chi-square/df ratio lower than 2 or 3; the good fit index (GFI) and the comparative fit index (CFI) with the cut value greater than .90; and the Root Mean Square Error of Approximation (RMSEA) of about .06 or .07 (Schreiber et al., 2006). Figure 1 shows the model of the relationship between students’ self-efficacy, Self-esteem and academic achievement.

![Figure 1. The model of the relationship between students’ self-efficacy, self-esteem, and their academic achievement.](image)

As demonstrated by Table 3, the chi-square/df ratio (2.89), RMSEA (.07), GFI (.91), and CFI (.95), all the fit indices are acceptable. Therefore, the proposed model is valid. As indicated in Figure 1, both self-efficacy (β= .44, p<.05) and self-esteem (β= .22, p<.05) were significant positive predictors of students’ achievement. Therefore, self-efficacy was a better predictor of GPA. The model also showed that self-efficacy predicted self-esteem positively and significantly (β= .57, p<.05).

<table>
<thead>
<tr>
<th>Table 3</th>
<th>The Goodness of Fit Indices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>X2/df</td>
</tr>
<tr>
<td>Acceptable fit</td>
<td>&lt;3</td>
</tr>
<tr>
<td>Model</td>
<td>2.89</td>
</tr>
</tbody>
</table>

As demonstrated by Table 3, the chi-square/df ratio (2.89), RMSEA (.07), GFI (.91), and CFI (.95), all the fit indices are acceptable. Therefore, the proposed model is valid. As indicated in Figure 1, both self-efficacy (β= .44, p<.05) and self-esteem (β= .22, p<.05) were significant positive predictors of students’ achievement. Therefore, self-efficacy was a better predictor of GPA. The model also showed that self-efficacy predicted self-esteem positively and significantly (β= .57, p<.05).
Discussion
The present study explores the relationship between self-esteem, self-efficacy, and academic achievement among Iranian graduate students majoring in English Language Teaching (ELT) by presenting a model of the interrelationship between these three constructs. The results revealed that self-efficacy impact students’ achievement. To test the first research hypothesis, Pearson Correlation was used. Results of Pearson correlation indicated that there are significant positive relationships between self-efficacy and self-esteem, self-efficacy and academic achievement, self-esteem and academic achievement.

As regards the positive relationship between self-efficacy and academic achievement, the result is consistent with various studies in different countries (Bai et al., 2020; Bandura, 1995; Edman & Brazil, 2007; Namaziandost, & Çakmak, 2020; Saito, 2020; Tilfarlioğlu & Ciftci, 2011; Wang, & Sun, 2020; Zimmerman, 1995). The result support Bandura’s (1995) study claiming that there are three features that self-efficacy donates to academic success: 1) students’ self-efficacy about self-regulation learning and controlling academic subjects; 2) teachers’ self-efficacy about their skill to inspire and support learners’ learning; 3) faculty’s cooperative efficacy about that their school can encourage substantial academic improvement. Similarly, according to an analysis of different research, Zimmerman (1995) mentioned that self-efficacy was found to manipulate three kinds of academic attainment: basic cognitive abilities, performance in academic course work, and standardised achievement tests. Another study in Turkey by Tilfarlioğlu and Ciftci (2011) also report the same results. Their participants were 250 preparatory level university students, and the utilised instruments were self-efficacy and autonomous learner questionnaires. Their results revealed a positive association between academic success as described by grades and learners’ self-efficacy beliefs. Tenaw (2013) examined the level of students’ self-efficacy, the gender difference in self-efficacy and attainment, and the association between self-efficacy and attainment for second-year students. By employing the Pearson correlation, the association between self-efficacy and attainment were discovered. The data analysis showed a meaningful association between self-efficacy and attainment.

In addition, the findings revealed that self-efficacy predicts self-esteem positively and significantly. To test the second research hypothesis, SEM was conducted. The results of the goodness of fit indices revealed that (the chi-square/df ratio (2.89), RMSEA (.07), GFI (.91), and CFI (.95), all the fit indices lie within the acceptable fit thresholds. Hence, it can be concluded that the proposed model had a perfect fit with the empirical data. As indicated in the model, both self-efficacy (β=.44, p<.05) and self-esteem (β=.22, p<.05) are significant positive predictors of students’ achievement. Therefore, self-efficacy is a better predictor of GPA. In addition, the model showed that self-efficacy predicts self-esteem positively and significantly (β=.57, p<.05). This finding is in tandem with different studies. For instance, Hermann (2005) suggested that high SEF is predictive of high SES; whereas, low SEF predicts low self-esteem. This researcher investigated the relationship of social self-efficacy with various personality and psychological
adjustment variables in a sample of 696 college students. Path models were proposed to examine the relationships. It was found that self-efficacy predicts self-esteem positively and significantly. The finding also supports Bandura’s claim (1997) that self-liking does not necessarily beget performance attainments. Research findings demonstrate that self-esteem predicts neither the choice of personal goals nor performance accomplishments. Therefore, it can be inferred that SEF predicts self-esteem (rather than self-esteem predicts SEF), particularly in predicting trait procrastination. Further, this result resonates with Hermann’s (2005) finding investigating the relationship of social self-efficacy with various personality and psychological adjustment variables by Path models. It was found that self-efficacy predicts self-esteem positively and significantly. Similarly, in the Iranian context, Hajloo (2014) found that self-efficacy is a positive predictor of self-esteem.

**Conclusion**

Concluding, it has to be noted that the present study can infer that both self-efficacy and self-esteem are significant positive predictors of language achievement. Despite the mentioned shortcomings of the present study, it is possible to consider the results within the Iranian English-major MA students’ framework. The findings of the study might have some theoretical and pedagogical implications for language teaching and learning. Both self-esteem and self-efficacy proved to be reliable predictors of learners’ achievement. English teachers, material developers, policymakers in the ELT domain, and teacher trainers can benefit from the present study’s findings. Teachers should offer self-esteem enhancement programs to sustain students’ self-esteem. Teachers should also provide success situations for all students; this will improve students’ sense of self-esteem. Students should involve themselves in different tasks that would increase their self-efficacy level and enhance their self-esteem level.

The findings also supported theories dealing with self-esteem and self-efficacy—the limitations of the study yield some recommendations for further studies. One recommendation for further research in light of these results is to determine this model’s causal relationships’ accuracy. Structural equation modelling allows for the implication of causality, but only a true experimental design could verify the model’s causal pathways. This method is dependent on students’ self-reports which may be complemented with qualitative methods. Therefore, future research can explore these constructs in the Iranian context using qualitative methods like experimental group designs, observation and interview. Therefore, in addition to their usefulness in counselling, interventions could be implemented to increase self-efficacy and self-esteem. Finally, in this investigation, students’ demographic information, such as their age, gender, cultural and socioeconomic background, were not controlled, and their role on each concept was not considered. Thus, it is recommended that these factors and their role in investigating in further research.
References


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Ethics Declarations

Competing Interests
No, there are no conflicting interests.

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