
THE INFLUENCE OF PSYCHOSOCIAL LEARNING ENVIRONMENTS ON STUDENTS' SELF-EFFICACY BELIEFS IN ENGLISH LANGUAGE LEARNING

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Abstract

The overarching aim of this study was to investigate whether the psychosocial learning environments of English classes influence students' self-efficacy beliefs in English language. In order to achieve this purpose, correlational design was adopted. The study involved the gathering of data through What Is Happening In this Class and Self-Efficacy Belief questionnaires from 371 samples. Simple random sampling was used to draw the samples from the population. Simple correlations, multiple regression and standardized regression coefficients were computed to analyze the collected data. The results depict that all of the six psychosocial learning environment aspects were significantly related to students' self-efficacy beliefs. The set of learning environment scales also significantly influence students' self-efficacy beliefs. Among the six aspects, student involvement, task orientation and student cohesiveness contributed to the influence on students' self-efficacy beliefs. The influence of the task orientation aspect was the strongest; this is followed by student cohesiveness and student involvement. This implies that students tend to have high self-efficacy beliefs in English language when there were more task-oriented and cohesive classroom environment and when students were encouraged to involve themselves well in class activities. Hence, the psychosocial learning environments of English classes need improvement to enhance students' self-efficacy beliefs towards English language. In particular, the learning environment aspects of task orientation, student cohesiveness and involvement play a pivotal role in enhancing students' self-efficacy beliefs in English learning.

Keywords: English classes, English language, psychosocial learning environments, secondary education, self-efficacy

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Introduction

The English language is dominantly employed around the globe for a wider communication purposes and in a variety of areas. In Ethiopia, English is one of the foreign languages that is used in various areas. In particular, it has been employed widely in the education sector for more than a century. Heugh et al. (2006) mentioned that the teaching of English language commenced around 1908 in Ethiopia with the introduction of contemporary education. The language has been taught as a subject beginning from first grade where children start formal education in public schools in the country following the 1994 introduction of the new education and training policy. It is also used as a medium of instruction for secondary and higher education across the country.

In English as a foreign language context, the teaching and learning of the language takes place mostly in classrooms where students spend most of their time. Fraser (2001) argues that students have spent about 15,000 hours in the classroom environment when they complete their secondary education. According to Dorman (2008b, p. 299), classroom environment refers to “the atmosphere, ambience, tone, or climate that pervades the particular setting”. It is also defined as students’ and sometimes teachers’ shared experiences in that environment (Fraser, 2001). In the educational process, the quality of the classroom environment is an essential element (Wubbels, 2006). Studies showed that students can learn effectively and improve their learning in a positive classroom environment (Dorman, 2002, 2008a, 2008b; Fraser, 2001, 2002). Similarly, Fraser (2001, p. 1) contended that “It is the quality of life lived in classrooms that determines many of the things that we hope for from education.” Hence, in order to improve the classroom practices of English language classes and to help students learn in a better way in Ethiopia, learning environment studies are needed; this study is among the desired studies.

The present study focuses on the psychosocial classroom environment which refers to the psychological, social and academic characteristics of learning environments (Bi, 2015). Psychosocial learning environment of a classroom plays important roles in educational process (Fraser, 2001, 2014). Even though it is clearly important, “teachers and researchers have relied heavily and sometimes exclusively on the assessment of academic achievement and other learning outcomes” (Fraser, 2007, p. 103). The importance of achievement is undeniable; however, it cannot provide a complete picture of the teaching and learning process that occurs within classrooms alone (Fraser, 2007, 2012, 2014). That is, the psychosocial learning environment is equally important to achieve the goals of education (Fraser, 2001).

The psychosocial learning environment of a classroom determines students’ cognitive and affective learning outcomes (Fraser, 2007, 2012) even though the most frequently researched learning outcomes have been academic achievement or attitude of a particular subject (Fraser, 2007). This study investigated the influence of psychosocial learning environments on students’ self-efficacy beliefs in learning English at secondary education. From their teaching experience, the researchers have realized that students feel that learning English is a difficult task; they considered English to be difficult language. They said that it is hard to improve their English. Such feelings may arise from low self-efficacy beliefs when they learn English and when they try to employ it; many Ethiopian students fail to use the language for communication and for other purposes after learning it for more than a decade, presumably, as a result of weak personal efficacy.

Self-efficacy belief in English language learning could be one of the hindering factors that contribute to the English language difficulty of students. Self-efficacy means beliefs in one's ability

to plan and carry out the steps necessary to achieve specific goals (Bandura, 1997). Self-efficacy plays a vital role in second or foreign language (L2) learning (Bensalem, 2018). Students' foreign language performance is strongly affected by their self-efficacy (Tsai, 2013), and in order to help students develop their L2 skills, it is necessary to foster positive self-efficacy (Rahemi, 2007). Further, Tsai (2013, p. 3) stated that "Learners with high self-efficacy are more likely to succeed at language learning... Self-efficacy is an essential factor for learners to succeed in learning a language." According to Pajares (2003), most of the language learning difficulties of learners are related to their low efficacy beliefs.

Students' self-efficacy beliefs can be affected by several factors. One of the factors could be the learning environment created in a classroom. In line with this, Choi (2005) postulated that the classroom learning environment should be emphasized in order to improve the self-efficacy of students. Therefore, the present study examined whether the psychosocial English classroom environments influence students self-efficacy beliefs towards English language.

Previous studies, although limited, have provided some evidence that psychosocial aspects of learning environment are likely to affect self-efficacy (e.g., Afari et al., 2013; Dorman, 2001; Gupta & Fisher, 2012). The results reported in these studies showed inconsistency in terms of the aspects of psychosocial learning environment that influence self-efficacy. For example, in Lim's (2013) study, among the six aspects of learning environment, involvement and equity were significant independent predictors of academic efficacy, whereas in Afari et al.'s (2013) study, only one of the six learning environment aspects had statistically significant and independent relationship with self-Efficacy. Most of the studies in this area were undertaken in science and/or mathematics classrooms. Little research has also been undertaken in language classrooms (e.g., Daemi et al., 2017; Lim, 2013). However, the association between psychosocial classroom environment and self-efficacy has not been examined in Ethiopia. The present study, therefore, extended the past research to English classes in Ethiopia to fill the gap. It examined the influence of psychosocial learning environments on students' self-efficacy beliefs in English language learning. The study also identified the psychosocial aspects of English classroom environment that can affect students' self-efficacy beliefs in learning English. Thus, the following research questions have been addressed in the course of this study.

1. Is each aspect of psychosocial learning environment related to students' self-efficacy beliefs?
2. To what extent do psychosocial learning environments influence students' self-efficacy beliefs in English language learning?
3. Which psychosocial aspects of learning environment influence students' self-efficacy beliefs?

Literature Review

Classroom learning environment

It is evident that the educational system takes place in classrooms in which students spend large amounts of time and engage in instructional activities that make learning transpire. Fraser (2001) indicated that in achieving the objectives of education, quality classroom environment in which learning takes place plays a crucial role. The learning environment in the classroom refers to the overall setting in which learning takes place and is comprised of two elements: the physical

environment and the psychosocial environment (Bell & Aldridge, 2014). Bell and Aldridge explained that the former refers to the materials and their arrangements in classrooms whereas the latter refers to classroom psychosocial environment and the participants of classrooms, such as students and teachers and the interaction among them. The present study focuses on the psychosocial environment of classrooms that could contribute to the efficacy of English language education. As Dorman (2002, p. 112) indicated, “Without a consideration of the crucial role of the psychosocial environment of classrooms, educational productivity cannot be optimized.” Furthermore, a plethora of studies that have been carried out around the globe indicated that the learning environment that takes place in a classroom has a strong and consistent influence on student learning (Fraser, 2007, 2012). Similarly, it is widely recognized that the learning environment plays a significant role in improving the effectiveness of student learning (UNESCO, 2012). Therefore, paying attention to the learning environment in classrooms is essential for the effectiveness of learning and teaching.

Psychosocial learning environments and self-efficacy beliefs

It was noted that previous research has strongly investigated the relationships between students' cognitive and affective outcomes and their perceptions of the psychosocial aspects of their classroom environment (Fraser, 2012, 2014). However, the most frequently researched learning outcomes have been academic achievement or attitude of a particular subject (Fraser, 2007). Moreover, the extant research examining the associations between student outcomes and learning environment was mainly conducted in science and mathematics classrooms. The present study fills this gap by investigating psychosocial learning environment influence on students' self-reports of self-efficacy in EFL setting. This section review literature related to the associations of psychosocial learning environment with self-efficacy. Research undertaken in different countries and in various classrooms, including in ESL/EFL classrooms is involved.

Previous studies have examined the extent to which the psychosocial learning environment influences students' self-efficacy and have reported that the two variables were positively and significantly related. For example, in Australia, Dorman (2001) examined the classroom psychosocial environment associations with academic efficacy using seven scales of the WIHIC questionnaire and three scales from CLES with the sample of 1055 students in secondary schools. The data were analyzed utilizing simple and multiple correlations. The overall result disclosed that the classroom environment and academic efficacy were significantly and positively related. The results of simple correlations indicated a statistically significant ($p < 0.001$) relationships between all the classroom environment scales and academic efficacy where the ranges of their correlations were from 0.17 for Student Cohesiveness to 0.38 for Task Orientation. The strength of relationships were small; it was the Task Orientation scale that contributes for high variance in the scale of Academic Efficacy (14.4%). The results of multiple correlation analysis also revealed that the set of classroom environment scales contributed 22% variance to Efficacy Scale ($R=0.47$). The results of standardized regression coefficient also suggest that though five of the scales: Teacher Support ($\beta = -0.14$), Involvement ($\beta = 0.21$), Investigation ($\beta = 0.17$), Task Orientation ($\beta = 0.27$) and Cooperation ($\beta = -0.10$) affected students' academic efficacy significantly, one of these, Task Orientation, affected it strongly.

The associations between affective outcomes (including academic efficacy) and psychosocial learning environment in technology-rich classrooms was investigated by Dorman and Fraser (2009) utilizing TROFLEI questionnaire which includes seven scales of the WIHIC questionnaire. The

study involved 4146 high school students of Australian. The results of Pearson correlation indicated that there were statistically significant relationships between all classroom environment scales and academic efficacy though the strength of correlation was of medium effects (ranging from 0.28 for Equity scale to 0.46 for Involvement scale). The analysis of multiple regression also revealed that the set of classroom environment scales predicted academic efficacy ($R^2 = 0.31$). Further, the results showed that the psychosocial environment aspect of involvement ($\beta=0.29$) predicted academic efficacy significantly and strongly. This was followed by task Orientation ($\beta=0.21$) and investigation ($\beta=0.07$). In another study, Velayutham and Aldridge (2013) reported that three of the seven WIHIC scales (task orientation, investigation and student cohesiveness) strongly influence students' self-efficacy in science learning. The WIHIC questionnaire was administered to a sample of 1360 secondary students in public schools in Australia.

Dorman and Adams (2004) also investigated classroom environment associations with efficacy belief in mathematics classrooms with the use of a questionnaire that was developed by taking seven scales of the WIHIC and three scales from the CLES. The questionnaire was administered to 2,651 secondary schools students. The study revealed a significant relationship between the classroom environment dimensions (ranging from 0.14 for student cohesiveness to 0.37 for task orientation) and academic efficacy. However, small magnitudes of correlations were found for all scales except task orientation which accounts for high variance in efficacy belief (13.7%). The results of multiple regression analysis also indicated that the set of classroom environment scales contributed 19.4% of variance to academic efficacy ($R = 0.44$). Further, the standardized regression coefficient analyses suggest that the psychosocial environment aspect of task orientation ($\beta = 0.27$) had significantly a strong effect on academic efficacy. This was followed by involvement ($\beta = 0.19$), investigation ($\beta = 0.12$), equity ($\beta = 0.06$) and cooperation ($\beta = -0.09$).

Utilizing the same questionnaire mentioned above with modification, Gupta and Fisher (2012) explored the relationships between Indian students' perceptions of their technology-supported learning environments in science classrooms and academic efficacy. The sample involved 705 students. Simple and multiple correlation was computed for data analysis. The results indicated that the associations of all WIHIC scales and academic efficacy were significant and positive. A significant relationship was also found between the set of WIHIC scales and academic efficacy ($R^2 = 0.33$). The findings indicated that Involvement ($\beta=0.14$), Task Orientation ($\beta=0.20$), Investigation ($\beta=0.11$), Differentiation ($\beta=0.14$) and Technology Teaching ($\beta=0.21$) scales predicted academic efficacy significantly.

In Canada, Ferguson and Dorman (2001) investigated the relationship between the classroom environment and academic efficacy utilizing seven WIHIC scales and three CLES scales. The samples were 951 mathematics students of high school. The overall result indicated that classroom psychosocial environment contributed 31.4% of variance to academic efficacy. Specifically, it was found that there were statistically and positively significant correlations between each learning environment scales and academic efficacy. That is, the more the mathematics classes are involving, investigative and task oriented the higher academic efficacy level students have. The study also suggested that Task Orientation was the strong determinant of academic efficacy ($\beta = 0.35$).

Recently, Daemi et al. (2017) examined academic self-efficacy relations with classroom environment using a sample of 200 Iranian EFL learners who completed WIHIC questionnaire and 'Self-Efficacy for Learning Form (SELF-A)'. The overall result revealed that there was relationship between EFL learners' classroom environment and academic self-efficacy. Task Orientation was

found to have the highest relationship with self-efficacy. This is followed by Student Cohesiveness. In contrast, Cooperation had the lowest correlation with self-efficacy. Alzubaidi et al. (2016) also employed WIHIC questionnaire with a sample of 994 university students in Jordan and reported that six of the seven learning environment scales had statistically significant positive associations with self-efficacy except the Cooperation scale. It was also found that the set of WIHIC scales were related to self-efficacy ($R= 0.40$) significantly. In addition, the results of standardized regression weight (β) indicated that the four WIHIC scales of Student Cohesiveness ($\beta= 0.20$), Teacher Support ($\beta= 0.08$), Investigation ($\beta= 0.16$), Task Orientation ($\beta= 0.15$) and Equity ($\beta= 0.23$) were positively and statistically significant independent predictors of students' Self-efficacy.

In Singapore, Lim (2013) explored the associations between the learning environment of English language classes at primary level and students' self-efficacy beliefs related to English language. To assess students' learning environment perspectives of English classes, the WIHIC questionnaire was used and to assess student efficacy, the MJSES were employed. The participants were 441 students at primary school in Singapore. The analyses of simple correlation revealed significant and positive associations between academic efficacy and all WIHIC scales. The WIHIC scales correlation with Academic Efficacy scale ranges from 0.27 for Teacher Support to 0.39 for Involvement. The strength of associations ranged from modest to medium. The result of multiple correlation for the whole learning environment scales also revealed that the set of WIHIC scales and self-efficacy ($R= 0.44$) were associated significantly. In addition, the standardized regression coefficients (β) were examined to identify the scales of WIHIC that had contributions to these multivariate associations. Beta (β) weights revealed that scales of Involvement ($\beta= 0.22$) and Equity ($\beta= 0.19$) significantly and independently influenced academic efficacy. It was suggested that students were likely to have strong academic efficacy in English language when there were more involvement of students and more equitable treatment of students by teachers in classes.

In UAE, Afari et al. (2013) examined whether the use of games in college level classes improved students' perceptions of learning environment and their attitudes towards mathematics. The relationship between academic efficacy and classroom learning environment was also examined in their study using a modified Arabic version of WIHIC scales and a sample of 352 students. MJSES was used to assess students' efficacy belief. Generally, it was found that learning environment influenced student self-efficacy. The simple correlations results reported in the study depicted that all six WIHIC scales were positively and significantly related to Academic Efficacy. It was also found that the associations of the set of WIHIC scales with academic efficacy was statistically significant ($R= 0.30$).

In general, the associations between psychosocial learning environment and self-efficacy have been examined in previous studies and the overall results revealed that the two variables were significantly and positively related. Nevertheless, as reviewed above in this section, these studies reported different results in terms of the aspects of psychosocial learning environment that influence self-efficacy. For example, in Lim's (2013) study, among the six WIHIC scales, Involvement and Equity scales were significant independent predictors of academic efficacy, whereas in Afari et al.'s (2013) study, only one of the six WIHIC scales had statistically significant and independent relationship with Academic Efficacy. Different results were also found with regard to each learning environment scales associations with self-efficacy; most studies found a statistically significant associations of all learning environment scales with self-efficacy (e.g., Afari et al., 2013; Dorman, 2001; Gupta & Fisher, 2012) whereas a few studies found a statistically significant relationships between some or most learning environment scales and self-efficacy (e.g., Alzubaidi et al., 2016). In

addition, many of the previous studies reviewed in this section have examined the learning environment associations with student self-efficacy in science and mathematics classrooms. Very few studies have investigated the learning environment influence on students' self-efficacy in EFL context. Moreover, there is no such study in Ethiopia. Therefore, this study extended the existing research into secondary level EFL classrooms in Ethiopia to fill the gap. It examined whether the psychosocial learning environment of English classes influenced students' self-efficacy beliefs in English language learning.

Methodology

The research design

A research design involves several stages of collecting, analyzing and interpreting either quantitative or qualitative data or both (Creswell, 2012). This study investigated the influence of the psychosocial aspects of English classroom environment on students' self-efficacy beliefs in English language learning. As such, correlational design was employed. In addition, the study employed quantitative research approach to collect and analyze data from WIHIC and Self-Efficacy Belief questionnaires.

Selection of the research participants

The total population was 1124 Menelik II Preparatory School grade eleven students of which 513 and 611 were male and female students, respectively. Simple random sampling was utilized to choose 393 students (male: 179; female: 214) from the population to participate in this study. The questionnaire filled by 15 students was discarded as it was not filled appropriately. Seven students also did not return the questionnaire. As a result, the data obtained from 371 students were analyzed and utilized in the results of this study.

Data collection

Two questionnaire types, namely, what Is Happening In this Class (WIHIC) and Self-Efficacy Belief (SEB) questionnaires were employed for data collection in the present study. For the purpose of this study, the WIHIC questionnaire was opted for and adapted to investigate the psychosocial aspects of learning environment of English classes at secondary education. SEB questionnaire was also adapted to assess self-efficacy in English language learning. Each questionnaire is detailed below.

The first one was the WIHIC questionnaire which was utilized to assess the psychosocial aspects of learning environment of English classes at secondary education in the study. The WIHIC questionnaire was first developed by Fraser et al. (1996); it incorporated nine ten-item scales. Then, it was modified by Aldridge et al. (1999) who formed its final version that involves seven scales; each scale includes eight items with a five-point Likert scale (Almost never = 1 to Almost always = 5). The WIHIC questionnaire amalgamates salient scales from a variety of existing questionnaires with new scales that address current educational issues (e.g., equity) (Fraser, 2014).

The WIHIC is the most widely used learning environment questionnaire in a range of contexts and countries across the globe (Fraser, 2012, 2014). The WIHIC has also been translated

into other languages and used successfully (e.g., Arabic (Afari et al., 2013; Alzubaidi et al., 2016); Spanish (Helding & Fraser, 2013); Greek (Charalampous & Kokkinos, 2017)). It was found to be reliable and valid in the studies conducted at various grade levels and in many countries (e.g., Aldridge and Fraser, 2000; Dorman, 2003). Further, the WIHIC has been applied and found useful in learning Environment of English (ESL/EFL) classes (e.g., Alzubaidi et al., 2016; Bi, 2015; Goksu, 2015). It is for these reasons that the researchers adapted the WIHIC questionnaire from Aldridge et al. (1999) and utilized it in the present study. The modified version of the questionnaire was translated into Amharic language.

The other questionnaire utilized in this study was Self-Efficacy Belief (SEB) which assesses students' self-efficacy beliefs in English language. SEB questionnaire was adapted from Lim (2013) and used in this study by making slight changes to the wording of the items. Lim (2013) modified the Morgan-Jinks Student Efficacy Scale (MJSES) (Jinks & Morgan, 1999). The questionnaire includes eight items that measure the extent to which students are confident and believe in their own ability in successfully performing language-learning tasks. Students were asked to give response to the items in a five-point Likert scale response ranging from (Almost never = 1 to Almost always = 5) to reflect their beliefs of their ability in English Language learning. The data obtained from students were used to examine whether students' perceptions of English classroom psychosocial environment was associated with their self-efficacy beliefs in learning English. Many previous studies undertaken in a variety of countries ensured the validity and reliability of the questionnaire (e.g., Afari et al., 2013; Lim, 2013). The questionnaire was also translated into Amharic language.

Before administering to the target participants, the reliability and validity of the Amharic version of WIHIC and SEB questionnaires was tested first for use in Ethiopian EFL context with 107 students who had similar characteristics to the samples of this study. Cronbach's alpha coefficient was computed to check the internal consistency reliability of the instruments. The alpha coefficients of WIHIC scales ranged from 0.73 (Student Cohesiveness) to 0.88 (Teacher Support) and its overall reliability was 0.93. Moreover, the alpha coefficients for SEB scale were 0.78. The results were all above 0.70 which is the acceptable value for reliability coefficients (Dörnyei, 2007). Additionally, discriminant validity was calculated for the research instruments. To determine the discriminant validity, the mean value of a scale was correlated with other scales. Discriminant validity determines scale independence or it decides how much a scale in a questionnaire assess different factor that is independent of the other ones. Brown (2006) recommends that factor correlations above 0.80 imply overlap of concepts and point towards poor discriminant validity. For the current study, the highest correlation between each scale was 0.63. This met the requirements of discriminant validity recommended by Brown's (2006) cut off point which is 0.80. Overall, the questionnaires were found to be reliable and valid for use in Ethiopian EFL context.

Data analysis

The data for this study were analysed utilizing several quantitative data analysis techniques as per the research questions of the study. The Statistical Package for Social Sciences (SPSS 24 version) was used to analyze the data. Pearson correlations and multiple regressions were utilized to address the first and the second research questions, respectively. Pearson correlations were computed to examine the bivariate associations of the WIHIC scales with self-efficacy, whereas multiple regressions were performed to investigate the set of WIHIC scales influence on students' self-efficacy beliefs in learning English. In the analysis of multiple regressions, the independent variable

was the set of six scales of the WIHIC and the dependent variable was Self-Efficacy Belief scale. In addition, the standardized regression coefficient (β) was calculated to address the third research question that focuses on identifying which aspects of learning environment contribute significantly to the influence on students' self-efficacy beliefs.

Findings

Associations between each aspect of psychosocial learning environment and self-efficacy belief

One of the objectives of this study was to examine the associations between each psychosocial aspect of learning environment of English classes and students' self-efficacy beliefs in EFL learning. Table 1 below presents the results of the study.

Table 1. *Correlational analysis of each aspect of psychosocial learning environment and self-efficacy belief*

| WIHIC Scales | Self-efficacy belief | |
|----------------------|----------------------|--------|
| Student Cohesiveness | Pearson Correlation | .411** |
| | Sig. (2-tailed) | .000 |
| | N | 371 |
| Teacher Support | Pearson Correlation | .326** |
| | Sig. (2-tailed) | .000 |
| | N | 371 |
| Involvement | Pearson Correlation | .413** |
| | Sig. (2-tailed) | .000 |
| | N | 371 |
| Task Orientation | Pearson Correlation | .432** |
| | Sig. (2-tailed) | .000 |
| | N | 371 |
| Cooperation | Pearson Correlation | .263** |
| | Sig. (2-tailed) | .000 |
| | N | 371 |
| Equity | Pearson Correlation | .331** |
| | Sig. (2-tailed) | .000 |
| | N | 371 |

**p<0.01, N= number of students

The results of correlation analysis, reported in Table 1 above, showed that each of the six WIHIC scales had a statistically significant ($p<0.01$) relationships with self-efficacy belief. Furthermore, all of these correlations were positive in direction and ranged from 0.263 for the Cooperation scale to 0.432 for the Task Orientation scale. According to Muijs (2004: 145), the effect size (the correlation coefficients (r)) is the stronger, the closer to $+/-1$ and the weaker the closer to 0. Some rules of thumb on effect size are: $<+/-0.1$ weak; $<+/-0.3$ modest; $<+/-0.5$ moderate; $<+/-0.8$ strong; $>=+/-0.8$ very strong. Therefore, as indicated in the table, the strength of associations between each aspect of psychosocial learning environment and self-efficacy ranged from modest to moderate effect size. The effect sizes of all associations were moderate (r ranging from 0.331 to 0.432) except Cooperation scale ($r = 0.263$). Cooperation had modest effect size. Of

the six learning environment scales, Task Orientation contributed high variance to student self-efficacy ($r^2 = 18.5\%$). This is followed by student cohesiveness and involvement ($r^2 = 16.8\%$) and teacher support and equity ($r^2 = 10.9\%$).

The Influence of psychosocial learning environments on students' self-efficacy beliefs

The other objective of the present study was to investigate whether the psychosocial learning environments of English classes influence students' self-efficacy beliefs in English language learning. Table 2 below presents the results of the study.

Table 2. *Analyses of multiple regression for the relation between the set of WIHIC scales and self-efficacy belief*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1 | .530 ^a | .281 | .269 | .77646 |

a. Predictors: (Constant), Equity, Cooperation, Student Cohesiveness, Task Orientation, Involvement, Teacher Support

As reported in Table 2 above, the result of multiple regression analysis showed that the influence of the combined WIHIC scales on student self-Efficacy was statistically significant ($p < 0.01$) and positive. The set of WIHIC scales also accounted for 28% of variance in student self-efficacy ($R^2 = 0.281$). The Adjusted R square was 0.269 for Self-Efficacy Belief scale. This suggests that the predictors are good at predicting students' self-efficacy beliefs. According to Muijs's (2004) criteria, the Adjusted R square (the model) that ranges from 0.11–0.3 has modest fit and from 0.31–0.5 has moderate fit. Hence, the set of environment scales modestly predicts students' self-efficacy beliefs in learning English.

The contribution of each psychosocial learning environment aspect to the influence on self-efficacy belief

To identify the psychosocial environment aspects that contributed most in predicting students' self-efficacy beliefs, the standardized regression coefficients (β) were computed. The results are presented in Table 3 below.

Table 3. *Influence of each psychosocial learning environment aspect on self-efficacy belief*

| Model | Unstandardized Coefficients | | | Standardized Coefficients | | Sig. |
|----------------------|-----------------------------|------------|-------|---------------------------|-------|------|
| | B | Std. Error | | Beta | t | |
| (Constant) | .292 | .244 | | | 1.199 | .231 |
| Student Cohesiveness | .231 | .062 | .202 | | 3.701 | .000 |
| Teacher Support | .022 | .054 | .025 | | .411 | .681 |
| Involvement | .193 | .062 | .182 | | 3.094 | .002 |
| Task Orientation | .305 | .068 | .243 | | 4.507 | .000 |
| Cooperation | -.015 | .051 | -.015 | | -.294 | .769 |
| Equity | .037 | .055 | .040 | | .670 | .504 |

a. Dependent Variable: Self-Efficacy Belief, N=371 students

As reported in Table 3 above, the findings showed that three of the learning environment scales, namely, Student Cohesiveness ($\beta = 0.20$), Involvement ($\beta = 0.18$) and Task Orientation ($\beta = 0.24$) contributed to a statistically significant ($p < 0.01$) influence on students' self-efficacy beliefs. Task Orientation had the strongest effect size. This is followed by Student Cohesiveness and Involvement.

Discussion

The present study examined the relationship between the psychosocial learning environments of English classes and students' self-efficacy beliefs in English language. To address this, Pearson correlation and multiple regressions were calculated. Further, to identify which psychosocial aspects of learning environment influenced student self-efficacy, the standardized regression coefficients (β) were computed. The results of Pearson correlation analyses indicate that each of the six WIHIC scales had a statistically significant relationships with student self-efficacy. All correlations were positive and had medium effect sizes except Cooperation scale. Cooperation had modest effect size which was small. This indicates that the learning environment aspect of task orientation contributes to high variance in self-efficacy (18.5%). The results suggest that all six aspects of psychosocial learning environment are likely to influence student self-efficacy. The positive correlation found between each aspect of learning environment and self-efficacy suggests that students are likely to have high self-efficacy beliefs in English language classes where there are improved cohesive, teacher supportive, involving, task oriented, cooperative and equitable learning environments. This study's findings support that of past studies (Afari et al., 2013; Alzubaidi et al. 2016; Daemi et al., 2017; Dorman, 2001; Dorman & Adams, 2004; Dorman & Fraser, 2009; Gupta & Fisher, 2012; Lim, 2013) which reported significant and positive associations between each aspect of learning environment and self-efficacy with the exception of Cooperation scale in Alzubaidi et al.'s (2016) study.

The multiple regression analysis also indicates that the set of psychosocial learning environment aspects association with student self-efficacy was statistically significant and positive. About 28% of the variation in self-efficacy was explained by the set of psychosocial aspects of classroom environment ($R^2 = 0.281$). The Adjusted R^2 was also 0.269 (modest fit), which suggests that the predictors (the set of learning environment scales) are relatively good in predicting students' self-efficacy. This means that the set of learning environment aspects modestly influenced students' self-efficacy beliefs. This finding supports the findings of past research (Afari et al., 2013; Daemi et al., 2017; Dorman, 2001; Dorman & Adams, 2004; Dorman & Fraser, 2009; Ferguson & Dorman, 2001; Lim, 2013) which found that the set of classroom environment scales accounted for a statistically significant and positive variance in student self-efficacy.

In addition, the standardized regression coefficients (β) indicate that three of the six psychosocial environment aspects, namely, student cohesiveness, involvement and task orientation contributed to a statistically significant variation to students' self-efficacy beliefs. This means that the three aspects were significant contributors for the influence of the set of learning environment scales on self-efficacy. Task orientation tended to have the strongest influence on students' self-efficacy; this is followed by student cohesiveness and involvement.

The implications of the findings for the three learning environment aspects that contributed to the influence on self-efficacy are discussed as follows. In this study, the learning environment aspect of student cohesiveness had a positive and a statistically significant influence on students'

self-efficacy beliefs in learning English language. Students could have high self-efficacy beliefs in classes where they are provided with opportunities to support one another on class activities. In a cohesive learning environment, students are likely to be friendly with one another and are supportive of one another. This finding supports the findings reported by Al Zubaidi et al. (2016) and Velayutham and Aldridge (2013); they reported in their studies that Student Cohesiveness scale was among the scales that had positive and statistically significant predictors of self-efficacy. Alzubaidi et al. (2016) suggests that teachers could improve opportunities for students to use their English skills in communicating directly with their classmates in real-life contexts in order to create a cohesive learning environment. According to Urdan and Schoenfelder (2006), the relationships among students play a vital role in a classroom. They indicate that when teachers create learning environment in a class where students have opportunities to work and communicate together, they know one another well and build friendships. Alzubaidi et al. (2016) also suggest that if students are given opportunities to communicate and collaborate during English lessons, they would have a better chance of getting to know one another and forming positive social bonds. Therefore, a supportive classroom environment among students is important. The result suggests the relationships between students in English class could affect their self-efficacy beliefs.

The involvement aspect of psychosocial learning environment had also positive and statistically significant relationship with students' self-efficacy beliefs. Other researchers also found similar results (Dorman, 2001; Dorman & Adams, 2004; Dorman & Fraser, 2009; Gupta & Fisher, 2012; Lim, 2013). The result of this study suggests that when involvement of students in English learning is increased, their self-efficacy in English language is likely to be enhanced. Students are likely to believe in their English language capabilities if they are encouraged to involve themselves well in group and classroom discussions, such as by asking questions, by giving opinions and explaining ideas. According to Aldridge et al. (2012), teachers need to provide opportunities for students to take part in class discussions and encourage them to attend actively what is going on in a classroom.

This study also depicts that the psychosocial aspect of task orientation had positive and a statistically significant influence on students' self-efficacy beliefs. Students could have high self-efficacy beliefs when they know the purpose of class activities and complete what is expected of them. Increasing task orientation of students may contribute to enhancing students' self-efficacy beliefs. This result supports past studies that found significant and positive associations of task orientation and students' self-efficacy beliefs (Alzubaidi et al., 2016; Daemi et al., 2017; Dorman, 2001; Dorman & Adams, 2004; Dorman & Fraser, 2009; Ferguson & Dorman, 2001; Gupta & Fisher, 2012; Velayutham & Aldridge, 2013).

Conclusion and implications

Student self-efficacy belief had positive and a statistically significant ($p < 0.01$) associations with each psychosocial environment aspect. Among the aspects of learning environment, task orientation accounted for high variance in student self-efficacy ($r^2 = 18.5\%$). Hence, it can be concluded that all aspects of psychosocial environment are likely to influence students' self-efficacy beliefs in learning English. Of all aspects, the influence of task orientation aspect seems strong. It was also found that the set of psychosocial aspects of learning environment had a statistically significant ($p < 0.01$) and positive influence on student self-efficacy belief. However, only three of the six WIHIC scales, namely, Student Cohesiveness, Involvement and Task Orientation contributed to

a statistically significant ($p < 0.01$) influence on students' self-efficacy beliefs. Of the three aspects, the contribution of task orientation to the influence tended to be the strongest. Hence, it is important to consider student cohesiveness, student involvement and task orientation aspects of learning environment in English classes to enhance students' self-efficacy beliefs in English language learning. In particular, task orientation and student involvement aspects influence students' self-efficacy beliefs consistently even though the task orientation aspect contributes the highest. This implies that task oriented, involving and student cohesive classroom learning environment plays a pivotal role in enhancing students' self-efficacy beliefs in English language learning.

Considering the findings and conclusions, it is recommended that English teachers in secondary schools need to make attempts to create a cohesive, involving and task oriented classroom learning environments so that students' self-efficacy beliefs tend to be enhanced. Positive relationships among students help them feel that they get help from other class members. Teachers also should provide students with clear goals of learning English language and involve them in learning activities to increase students' self-efficacy beliefs towards English language.

This study has its own limitations and further research has been suggested accordingly. The study involved only grade eleven students of one school. The study was also limited to secondary school education. Although the samples were selected carefully from the population, the findings of the study may not be generalized to other grade levels and schools. Therefore, further studies could replicate this study by involving additional secondary schools and grade levels of secondary education. Future studies could also replicate the study at elementary and tertiary levels and in other subject matter classes in addition to English language classes. The other limitation of the current study was that it examined the psychosocial learning environment influence on only student self-efficacy in English language learning. Therefore, it is suggested that future studies examine the influence of classroom environment on other outcome variables such as attitude to English language and motivation (intrinsic and extrinsic) to learn English language.

Disclosure statement

No potential conflict of interest was reported by the authors

References

- Afari, E., Aldridge, J. M., Fraser, B. J., & Khine, M. S. (2013). Students' Perceptions of the learning environment and attitudes in game-based mathematics classrooms. *Learning Environ Res*, 16, 131–150. <https://doi.org/10.1007/s10984-012-9122-6>
- Aldridge, J. M., & Fraser, B. J. (2000). A Cross-cultural study of classroom learning environments in australia and taiwan. *Learning Environments Research*, 3, 101–134. <https://doi.org/10.1023/A:1026599727439>
- Aldridge, J. M., Fraser, B. J., Bell, L., & Dorman, J. (2012). Using a new learning environment questionnaire for reflection in teacher action research. *Journal of Science Teacher Education*, 23(3), 259–290. <https://doi.org/DOI 10.1 007/s 1 0972-01 2-9268- 1>
- Aldridge, J. M., Fraser, B. J., & Huang, T.-C. I. (1999). Investigating classroom environments in taiwan and australia with multiple research methods. *The Journal of Educational Research*, 93(1), 48–62. <https://doi.org/10.1080/00220679909597628>

- Alzubaidi, E., Aldridge, J. M., & Khine, M. S. (2016). Learning English as a second language at the university level in Jordan: motivation, self-regulation and learning environment perceptions. *Learning Environ Res*, 19, 133–152. <https://doi.org/10.1007/s10984-014-9169-7>
- Bandura, A. (1997). *Self-Efficacy: The Exercise of Control*. Freeman
- Bell, L. M., & Aldridge, J. M. (2014). *Student voice, teacher action research and classroom improvement* (Vol. 6). Sense Publishers.
- Bensalem, E. (2018). Foreign language anxiety of efl students: Examining the effect of self-efficacy, self-perceived proficiency and sociobiographical variables. *Arab World English Journal (AWEJ)*, 9(2), 38–55. <https://dx.doi.org/10.24093/awej/vol9no2.3>
- Bi, X. (2015). Associations between psychosocial aspects of English classroom environments and motivation types of Chinese tertiary-level English majors. *Learning Environment Research*, 18, 95–110. <https://doi.org/10.1007/s10984-015-9177-2>
- Brown, T. A. (2006). *Confirmatory factor analysis for applied research*. Guilford Press.
- Charalampous, K., & Kokkinos, C. M. (2017). The “What Is Happening in This Class” Questionnaire: A Qualitative Examination in Elementary Classrooms. *Journal of Research in Childhood Education*, 31(3), 379–400. <https://doi.org/10.1080/02568543.2017.1310153>
- Choi, N. (2005). Self-efficacy and self-concept as predictors of college students’ academic performance. *Psychology in the Schools*, 42(2), 197–205. <https://doi.org/10.1002/pits.20048>
- Creswell, J. W. (2012). *Educational research: planning, conducting, and evaluating quantitative and qualitative research* (4th ed.). Pearson.
- Daemi, M. N., Tahriri, A., & Zafarghandi, A. M. (2017). The relationship between classroom environment and EFL learners’ academic self-efficacy. *International Journal of Education & Literacy Studies*, 5(4), 16–23. <https://doi.org/10.7575/aiac.ijels.v.5n.4p.16>
- Dorman, J. P. (2001). Associations between classroom environment and academic efficacy. *Learning Environments Research*, 4, 243–257. <https://doi.org/10.1023/A:1014490922622>
- Dorman, J. P. (2002). Classroom environment research: Progress and possibilities. *Queensland Journal of Educational Research*, 18(2), 112–140. <http://www.iier.org.au/qjer/qjer18/dorman.html>
- Dorman, J. P. (2003). Cross-national validation of the What is Happening in This Class? (WHIC) questionnaire using confirmatory factor analysis. *Learning Environments Research*, 6(3), 231–245. <https://doi.org/10.1023/A:1027355123577>
- Dorman, J. P. (2008a). Use of Multitrait-multimethod modelling to validate actual and preferred forms of the What is Happening in This Class? (WHIC) questionnaire. *Learning Environ Res*, 11, 179–193. <https://doi.org/10.1007/s10984-008-9043-6>
- Dorman, J. P. (2008b). Using Student perceptions to compare actual and preferred classroom environment in Queensland schools. *Educational Studies*, 34(4), 299–308. <https://doi.org/10.1080/03055690802034484>
- Dorman, J. P., & Adams, J. (2004). Associations between students’ perceptions of classroom environment and academic efficacy in Australian and British secondary schools. *International Journal of Research and Method in Education*, 27, 69–85. <https://doi.org/10.1080/0140672040270106>
- Dorman, J. P., & Fraser, B. J. (2009). Psychosocial environment and affective outcomes in technology-rich classrooms: testing a causal model. *Social Psychology of Education*, 12, 77–99. <https://doi.org/10.1007/s11218-008-9069-8>

- Dörnyei, Z. (2007). *Research Methods in applied linguistics: quantitative, qualitative and mixed methodologies*. Oxford University Press.
- Ferguson, J. M., & Dorman, J. P. (2001). Psychosocial classroom environment and academic efficacy in canadian high school mathematics classes. *Alberta Journal of Educational Research*, 47(3), 276–279. <http://search.proquest.com/openview/f13f7b6d8780cfdb0d1c2c3eff40f58b/1?pq-origsite=gscholar&cbl=34114>
- Fraser, B. J. (2001). Twenty thousand hours: Editor's Introduction. *learning Environments Research*, 4, 1–5. <https://doi.org/10.1023/A:1011406709483>
- Fraser, B. J. (2002). Learning environments research: Yesterday, today and tomorrow. In S. Chiew Gob & M. S. Khine (eds) *Studies in Educational Learning Environments: An International Perspective* (pp. 1–26). World Scientific Publishing.
- Fraser, B. J. (2007). Classroom learning environments. In Sandra K. Abell & Norman G. Lederman (eds.) *Handbook of Research on Science Education* (pp. 103–124). Lawrence Erlbaum Associates, Inc.
- Fraser, B. J. (2012). Classroom learning environments: Retrospect, context and prospect. In Barry J. Fraser, Kenneth G. Tobin & Campbell J. McRobbie (eds.) *Second international handbook of science education* (pp. 1191–1239). Springer. <http://hdl.handle.net/20.500.11937/39017>
- Fraser, B. J. (2014). Classroom learning environments: Historical and contemporary perspectives. In Norman G. Lederman, Sandra K. Abel (Eds.) *Handbook of Research on Science Education* (pp. 104–119). Routledge. <https://www.routledgehandbooks.com/doi/10.4324/9780203097267.ch6>
- Fraser, B. J., McRobbie, C., & Fisher, D. (1996). Development, validation and use of personal and class forms of a new classroom environment questionnaire. *Proceedings Western Australian Institute for Educational Research Forum 1996*. <Http://Www.Waier.Org.Au/Forums/1996/Fraser.Html>.
- Goksu, A. (2015). High school students' perceptions of classroom learning environments in an efl context. *Revista de Cercetare Şi Intervenţie Socială*, 51, 72–89. <https://www.cceol.com/search/article-detail?id=521637>
- Gupta, A., & Fisher, D. (2012). Technology-supported learning environments in science classrooms in India. *Learning Environment Research*, 15(2), 195-216. <https://doi.org/10.1007/s10984-012-9103-9se>
- Helding, K. A., & Fraser, B. J. (2013). Effectiveness of National Board Certified (NBC) teachers in terms of classroom environment, attitudes and achievement among secondary science students. *Learning Environment Research*, 16, 1–21. <https://doi.org/10.1007/s10984-012-9104-8>
- Heugh, K., Benson, C., Berhanu, B., & Mekonnen, A. (2006). *Study on medium of instruction in primary schools in ethiopia*. Ministry of Education, Addis Ababa.
- Jinks, J., & Morgan, V. (1999). Children's perceived academic self-efficacy: An inventory scale. *The Clearing House*, 72(4), 224–230. <https://doi.org/10.1080/00098659909599398>
- Lim, D. (2013). *Learning environments in English classrooms in Singapore: Determinants and effects* [Thesis, Curtin University]. <https://espace.curtin.edu.au/handle/20.500.11937/829>
- Muijs, D. (2004). *Doing quantitative research in education with SPSS*. Sage Publications.
- Pajares, F. (2003). Self-efficacy beliefs, motivation, and achievement in writing: A review of the literature. *Reading & Writing Quarterly*, 19, 139–158. <https://doi.org/10.1080/10573560390143085>

-
- Rahemi, J. (2007). Self-efficacy in english and iranian senior high school students majoring in humanities. *Novitas-ROYAL*, 1(2), 98–111.
- Tsai, Cl. (2013). The impact of foreign language anxiety, test anxiety, and self-efficacy among senior high school students in Taiwan. *International Journal of English Language and Linguistics Research*, 1(3), 1–17.
- UNESCO. (2012). *A Place to Learn: Lessons from Research on Learning Environment*. UNESCO Institute for Statistics: Montreal, Canada.
- Urdu, T., & Schoenfelder, E. (2006). Classroom effects on student motivation: goal structures, social relationships, and competence beliefs. *Journal of School Psychology*, 44(5), 331–349. <https://doi.org/10.1016/j.jsp.2006.04.003>
- Velayutham, S., & Aldridge, J. M. (2013). Influence of psychosocial classroom environment on students' motivation and self-regulation in science learning: A structural equation modeling approach. *Research in Science Education*, 43, 507–527. <https://doi.org/10.1007/s11165-011-9273-y>
- Wubbels. (2006). Preface. In *Darrel L. Fisher & M.S Khine (eds.) Contemporary Approaches to Research on Learning Environments Worldviews* (pp. v–vi). World Scientific Publishing.