Teaching English online in higher education: Understanding the social climate of online academic English courses

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This study examined the social climate of fully synchronous online English classrooms and its effects on students' learning outcomes in a mixed-methods design, engaging 196 first-year non-English major students experiencing their first fully synchronous online English classes on Zoom in one academic term (12 weeks), taught by foreign lecturers. The results reveal a very positive learning experience with seven factors contributing to the social climate of the online English classrooms. Gender did not affect students' perceptions and learning experiences, but English proficiency levels did, with a medium effect size. The social climate was a predictor of online English learning outcomes with a substantial effect size. Individual insights were extracted from the qualitative data.

Implications for practice or policy:

- Online English courses should provide the same learning quality as in a face-to-face environment by enhancing the seven factors constructing a positive online English classroom climate.
- Educational policymakers should emphasise building positive social climates in online classrooms as it will lead to both better learning outcomes and experiences.
- Teachers may be encouraged to develop the skills students need to recognise and manage emotions, establish and maintain relationships and achieve positive goals in online English learning.

Keywords: social climate, online English classroom, academic English courses, task, proficiency, gender

Introduction

The social climate of a classroom comprises a variety of interpersonal connections, communication and behaviors that individuals perform in the classroom, whether as a teacher or a student (van Compernolle & Williams, 2013). The first empirical studies in this field were conducted in the 1950s, concentrating on children's personal and social development in the classroom, particularly the relationship between teacher and student (Wrightstone, 1951). Since then, early and recent research has established its effects on student learning processes and outcomes, such as being one of the determinants of classroom success informing instructional adjustment (Deyoung, 1977), having a positive relationship with learning achievement (Aluri & Fraser, 2019) and being beneficial to students' motivation and level of engagement in their studies (Aluri & Fraser, 2019; Lerdpornkulrat et al., 2018). Much research has concentrated on the interactions between elements of a classroom's social climate and other variables affecting the teaching and learning process, such as teachers' coercive and supportive behavior (Mainhard et al., 2011), learning achievement goals (Patrick et al., 2011) and learning motivation (Valero-Valenzuela et al., 2020). There is a dearth of study targeted at elucidating the diverse aspects that contribute to the social climate in a particular subject's classroom. Thus far, only two recent investigations have been conducted – in secondary mathematics classes (Smalley & Hopkins, 2020) and university-level general English classes (Waluyo & Tuan, 2021), indicating the need for additional research and the extension of research to the online learning environment.

Literature review

Online classrooms, like traditional ones, have their own specific social climate. Kaufmann et al. (2016) characterise an online classroom social climate as a sense of connectivity, rapport, or affinity established by interactions between a teacher and students in a technology-mediated classroom. The incorporation of the technology enables online learning exchanges to occur asynchronously, synchronously, or both. However, such diverse digitally mediated encounters frequently lead to a lack of rapport between teacher and students, as well as between students and students, developing into a feeling of isolation or loneliness despite sharing a classroom (Kaufmann et al., 2020). In a typical classroom, small talk between teacher and students, or between students, can result in laughter, smiles and conversational engagement; these behaviors help shape student connectedness and foster a positive classroom climate, thereby alleviating feelings of isolation or loneliness during the study (Driver, 2018). According to recent review research by Trespalacios et al. (2021), fostering a sense of community and connectedness is critical in online learning, and previous empirical research suggests that course design and technology tool selection should be directed at fostering a pleasant classroom climate. The classroom climate should encourage active learning by allowing for peer communication and collaboration, as this can raise students' course engagement, generating improved learning outcomes (Cole et al., 2021). Singhal et al. (2021) discovered that students who studied in such a classroom setting improved their grades by 30% and their long-term average marks by 66.9 %. In addition, the social climate of online learning has been shown to have a significant effect in students' satisfaction with online courses, which impacts student learning motivation and engagement throughout the learning process (Alenezi, 2022; Turk et al., 2022).

Research has also identified factors constructing the social climate in a non-specific subject's online classroom. The first set of factors is generated from the teacher and students as the primary actors in the classroom interaction. Nonetheless, it is the teacher's responsibility to initiate the process of creating a positive classroom climate. Kaufmann et al. (2016) noted in their studies involving focus group discussions with students that teachers must demonstrate understanding, availability, support and sympathy to students and make them visible and felt, as well as provide opportunities for students to engage, communicate and collaborate with peers. Teachers can influence the development of emotional and social support for all students in a variety of ways, including through establishing positive interactions with students and fostering healthy relationships among students themselves (Pianta et al., 2012). When students have pleasant and warm relationships with their teachers, they are more likely to follow classroom rules and be more motivated and involved in a learning-oriented setting (Rubie-Davies et al., 2016). Meanwhile, Kaufmann et al. (2016) observed what Dwyer et al. (2004) referred to as student connectedness expressed by students participating in online learning during their instrument development and validation process for online classroom. The level to which students feel linked with their peers, the teacher and the learning materials contributes to the social atmosphere of the classroom. In online classes, students want more connection with both classmates and instructors since the experience of being linked can help students maintain motivation and focus throughout the learning period (Sellnow-Richmond et al., 2020).

The second set of factors emerges from students' interactions with the learning materials, tasks and projects. These factors are task involvement, investigation and orientation in online learning. Students' task involvement can be reflected in their responses to structured and collaborative tasks, as well as their active engagement with learning materials (Coomey & Stephenson, 2001), which can contribute to improved learning outcomes (Panigrahi et al., 2018). Nonetheless, Dumford and Miller (2018) discovered that students were less likely to engage in collaborative learning, student-faculty interactions and discussions in an online setting. Meanwhile, when students acquire and apply their skills and knowledge in problem-solving tasks, they demonstrate the investigation aspect of learning (Smalley & Hopkins, 2020). In this factor, students conduct research to test ideas, provide rationales for personal assertions, clarify meanings, present ideas, look for answers and solve issues through direct and indirect inquiries both within and outside the classroom. The degree of student performance in undertaking investigative tasks may be dependent on the support students receive and an early study found that guidelines in the form of prompts, such as instructions and questions, are useful in improving this factor (Kauffman et al., 2008). Furthermore, because formative tasks and assignments are frequently assigned in a classroom, regardless of the setting,

the extent to which students can maintain their learning focus and complete all tasks as assigned contributes to the overall classroom climate and influences learning outcomes (Waluyo & Tuan, 2021).

Studies on online learning have raised the issue of equity because it can involve critical aspects such as digital access and digital efficacy; the most recent research, by Rofiah et al. (2022), delved into factors influencing the expediency of online learning at a university in Thailand confirmed these challenges. In an online classroom, equity can also be seen as the manifestation of everyone receiving equal treatment, such that no students are left behind (Qadir, 2020). At this point, the online teacher should distribute the course contents to the entire class as a single entity (Hiltz & Turoff, 2005). McLoughlin (2001) offered three possible teacher perspectives on this concept of equity: (a) Teachers disregard differences between students, focusing instead on humanity's shared characteristics; (b) Teachers value students' identities as members of specific groups; respect and value students from diverse groups; greeted students in their native language; correctly pronounced their names; and used a variety of strategies to address the learning and assessment needs of specific groups; and (c) Teachers treat all students as individuals, respecting them as individuals. When doing online classroom instruction, a teacher may take one or more of these perspectives. This is one of the factors that can impact the social climate of a classroom, much more so in online learning, because the teacher is the primary actor directing the learning process – students cannot interact among themselves as much as they do in a regular classroom. Thus far, studies have identified a number of strategies for addressing issues of equity in online learning, such as utilising the widely used technological tools among students from diverse backgrounds (Reich et al., 2012), enhancing the digital agency, that is, the individual's ability to control and adapt to the digital world, among learners (Passey et al., 2018), and collecting the demographic profile of students as well as the external populations from which they are drawn (Lowell et al., 2019).

Apart from the three factors mentioned previously, there are further data from prior studies that revealed different factors. For example, Kaufmann et al. (2016) identified three aspects that contribute to the online learning environment: teacher behaviors, course structure, course clarity and student connectivity. Moore (1989) established three criteria in an early study: student-instructor interaction, student-content interaction and student-student interaction. All these components, in essence, revolve around three facets: the teacher, the learner and the instructional materials. Our understanding of the components that contribute to the social climate of an online classroom for a particular subject, such as online English classes, is currently restricted. As a response, the current study's research topics address this research gap.

Surveying students' perceptions of the social climate in their online classroom and conducting quantitative statistical analysis have been the most often used methodologies in past research on this subject. Among the studies are Cole et al. (2021), who investigated student perceptions of online active learning practices and online learning climate to predict online course engagement; Kaufmann and Vallade (2020), who explored connections in the online learning environment: student perceptions of rapport, climate and loneliness; and Kaufmann et al. (2016), who developed and validated an online learning climate scale. There is also a study that collected data from teachers' perspectives in the Turkish context by Ahmet and Özdemir (2021). The current study employed a quantitative research design that incorporated a survey of students' perceptions. Nonetheless, we feel that qualitative data can provide additional context for quantitative data. For this reason, this study also gathered qualitative data from students about the social climate in their online English classrooms.

Female students have a stronger feeling of classroom community than male students (Rovai, 2002; Shea, 2006). This means that female students are likely to be more supportive in all significant learning activities that involve the entire class, as they have a sense of belonging and attachment to the class's learning community (McMillan & Chavis, 1986). In online classes, there have been positive correlations between a sense of learning community and reported learning engagement, course satisfaction and learning outcomes (X. Liu et al., 2006). However, little is known about how female and male students view an online English classroom's social climate. Additionally, there is no study that we are aware of that examines the disparate perceptions of the online social climate among students of varying proficiency levels. Waluyo and Tuan (2021) conducted a study on the social climate of English as a foreign language classrooms in a face-to-face environment. They discovered distinct viewpoints on the social climate of their classrooms by gender and the direct effect of a favorable social climate on students' English proficiency development. Considering this situation, the current study investigated the following research questions:

(1) What factors contribute to the social climate in fully synchronous online English classrooms?
(2) How do students perceive and experience the social climate of fully synchronous online English classrooms?
(3) How do their perspectives and experiences differ according to their perceived English proficiency and gender?
(4) How is the social climate in fully synchronous online English classrooms associated with and predictive of students' English learning outcomes?

Method

Participants

The participants were 196 students (79.6% females and 20.4% males) between the ages of 18 and 21, with a mean age of 18.8 (*SD* = 0.71). The students majored in Management, Political Science and Law, Liberal Arts, Medicine, Public Health, Informatics, Pharmacy, Engineering, Agriculture and Architecture. Furthermore, they were first-year students who had to take fully synchronous online English classes for their first 2 trimesters due to the COVID-19 pandemic. At the time of the study (academic year 2021/2022), they were taking General English (courses, which aimed to help them improve their fundamental English skills. They had 5 to 9 years of school-based English learning experience. All participants were native Thai speakers who studied English as a foreign language. They were taught in English by foreign lecturers from a variety of nations, including Indonesia, China, Iran, the Philippines, India, Bhutan and Malaysia. The lecturers were unable to communicate in Thai and were prohibited from using the language in their classroom instruction. The fully synchronous online English classrooms used Zoom. This was the participants' first experience studying through online learning.

For ethical considerations, the participants were informed of the aims of the research and consented to participate voluntarily. No identifying information was included in the research, and the results were kept confidential. The study was approved by the research committee of our institutions.

Instrument and measures

The employed instruments and measures consisted of a survey questionnaire, a short essay, self-rated English proficiency and English course grades.

Survey questionnaire
To measure the social climate of online English classroom, this study adapted the survey instrument used by Smalley and Hopkins (2020). The survey items were edited to fit the online English learning context. Each of the items was accompanied by Thai translations to help the participants understand better. In total, there were 35 items distributed into five sub-scales: student cohesiveness, teacher support, involvement, investigation, task orientation, cooperation and equity. The responses ranged from 1 = *strongly disagree* to 5 = *strongly agree*.

The reliability analysis was performed on the survey data to reveal the internal consistencies among the items. Cronbach's alpha of .70 was set up as the minimum value for acceptance (Bland & Altman, 1997). As seen in Table 1, the results for the social climate scale showed a very high internal consistency while the results for the sub-scales indicated high internal consistency among the items, except for student cohesiveness. Since we would perform exploratory factor analysis (EFA) in the next stage, we decided to keep the sub-scale.

Table 1
Sample items and Cronbach's alpha

Scale and sub-scales	Sample item	α
Scale: Social climate of English as a foreign language classrooms		.912
Sub-scale 1: Student cohesiveness	In my online English classes, I am friendly to members of my class.	.677
Sub-scale 2: Involvement	In my online English classes, I give my opinions during class discussions.	.735
Sub-scale 3: Investigation	In my online English classes, I am asked to think about the reasons to support my statement.	.751
Sub-scale 4: Cooperation	In my online English classes, I share my books and resources with other students when doing assignments.	.801
Sub-scale 5: Equity	In my online English classes, the teacher gives equal attention to my questions and other students' questions.	.844
Sub-scale 6: Task orientation	In my online English classes, I am ready to start the class on time.	.831
Sub-scale 7: Teacher support	In my online English classes, the teacher personally knows that I need help.	.745

Short essay
To generate qualitative data, the participants were assigned to respond to a question: "How would you describe your learning experience in online English classes at the university thus far?" They could explain in either Thai or English. A total of 3351 words were collected in the study's responses. Each participant was coded with S1, S2, S3 and so forth to preserve anonymity.

Self-rated English proficiency
This research was conducted during the pandemic, when in-person classes were prohibited. The first-year students were unable to take the university's standardised English proficiency test due to safety protocols. Thus, a self-rated question was included in the survey to measure the participants' English competence. In prior investigations, self-rated proficiency has been utilised as an alternate measure of proficiency (e.g., M. Liu, 2018). Students answered the question "How would you rate your English proficiency level?", by rating on a 5-point Likert scale, ranging from 1 (*I think my English is not very good*) to 5 (*I think my English is very good*). Most of them rated their English skills as mediocre (104; 53.1%), followed by not very good (52; 26.5 %), not good (31; 15.8%) and good (9; 4.6 %). None of them thought they were very good at English.

English course grade
Students' grades in online English courses were gathered as a measure for English learning outcomes. Earlier research (e.g., Waluyo, 2020) employed students' course grades as a measure of learning outcomes, confirming the validity of this measure. These were the grades earned by students while learning in the Zoom application's fully online synchronous classrooms. The grades ranged from 1 to 100. Although the average grade was 80.29, the standard deviation was quite large (SD = 6.13), meaning that some students received exceptionally low or extremely high grades.

Data collection

The data collection occurred at the end of the academic term in 2021. The survey that included all the measures explained earlier was administered via Google Form in both Thai and English in a bid to avert misunderstanding and ensure the accuracy of the result. It consisted of three parts. Part 1 contained questions eliciting the participant's background information, such as student ID, gender, age, school and self-rated English level. Part 2 was a 35-item questionnaire, adapted from the study by Smalley and Hopkins (2020), exploring students' perceptions of the social climate in online English classes. Part 3 was the short essay question. Students' consent was obtained before the data collection started.

Results

This section presents the results of quantitative and qualitative results, followed by a discussion part.

Quantitative results

Factor contributing to the social climate of online English classrooms

The first research question examined the factors contributing to the social climate of online English classrooms. The data were normally distributed, with skewness and kurtosis values ranging between -2 and +2 for all items (George & Mallery, 2010). Then, multiple EFA were conducted to uncover latent factors associated with the survey items. The EFA processes were carried out in accordance with Phakiti's (2018) recommendations for applied linguistics research. Principal axis factoring was chosen as the extraction method since it is regarded to be robust and is often used (Fabrigar & Wegener, 2012). The number of maintained factors was determined using the Kaiser criterion eigenvalue larger than 1. The KMO and Bartlett's tests were performed to determine whether the components were extractable, with a sample adequacy criterion of .50 (Field, 2018). Because some factors were thought to be unrelated, orthogonal rotation (i.e., Varimax) was used. The cutoff criterion for factor loadings that were allowed was set at .40 (Fabrigar & Wegener, 2012). Finally, the obtained factors were renamed.

The results of EFA revealed seven factors accounting for 60% of the total variance, validated by Bartlett's test of sphericity: $\chi 2$ (595) = 3204.849, $p < .001$. The sampling adequacy was .867, higher than the threshold of .50. Each factor was labelled: Factor 1 (F1, 8 items) was task orientation (eigenvalue = 9.605; $\alpha = .869$), Factor 2 (F2, 5 items) was equity (eigenvalue = 3.689; $\alpha = .844$), Factor 3 (F3, 7 items) was involvement (eigenvalue = 2.172; $\alpha = .798$), Factor 4 (F4, 4 items) was teacher support (eigenvalue = 1.685; $\alpha = .787$), Factor 5 (F5, 2 items) was investigation (eigenvalue = 1.443; $\alpha = .837$), Factor 6 (F6, 3 items) was cooperation (eigenvalue = 1.320; $\alpha = .626$) and Factor 7 (F7, 3 items) was student cohesiveness (eigenvalue = 1.072; $\alpha = .694$). The names were given based on the survey items identified from the factor analysis. Three items were deleted because the factor loadings were lower than .40. In a nutshell, these results indicated that the seven factors identified by previous studies in the context of face-to-face classroom (e.g., Smalley & Hopkins, 2020) still existed in online English classrooms with some changes in the survey items. Concerning the reliability, except for Factors 6 and 7, the items in each factor have high internal consistencies with the α values greater than .70. The reliability of the items as a scale measuring the social climate of online classroom was, however, high ($\alpha = .910$).

Perceptions of the social climate of online English classrooms

Descriptive statistics, including means and standard deviations, were used to analyse students' perceptions of the social climate of their online English classrooms. Following Oxford (1998), the means were interpreted into three categories: 0–2.49 (not positive), 2.5–3.49 (positive), and ≥ 3.5 (very positive). Students perceived that they experienced a very positive online English classroom's social climate ($M = 3.73$). This experience was shared equally among the students, as indicated by the value of standard deviation < 1 ($SD = .46$). Nonetheless, students reported that the social climate was very positive in terms of task orientation ($M = 4.30$, $SD = .57$), equity ($M = 4.21$, $SD = .60$), teacher support ($M = 4.04$, $SD = .68$) and student cohesiveness ($M = 3.80$, $SD = .70$). Involvement ($M = 2.75$, $SD = .67$) and investigation ($M = 3.08$, $SD = .99$) were felt positively in the classroom. Students, on the other hand, did not perceive a positive environment when it came to cooperation among themselves ($M = 2.19$, $SD = .42$). The experiences of these specific factors seemed to be shared equally among the students.

Gender and proficiency effects

Multiple independent *t* tests were used to determine if female and male students' perceptions and experiences of the social climate in their online English classrooms were different. The significance level has been set at $p < .05$. The statistical analysis revealed that gender had no effect on students' perceptions and experiences of the social climate (t (195) = 1.076, $p = .283$). For the social climate factors, students had a more favorable impression of task orientation than males (t (195) = 2.666, $p = .008$). The effect size was small: Cohen's $d = (4.26 - 4.09) / 0.623899 = 0.27248$. In comparison, both male and female students had similar perceptions of the remaining six factors.

The role of English proficiency was then examined using a one-way ANOVA. The statistical analysis found that students with varying proficiency levels viewed and experienced the classroom's social climate differently (F (193) = 4.594, p =.004), with a medium impact size (f =.27). According to Tukey's honestly significant difference test results, low-proficiency students had a less favorable view and experience than higher-proficiency students. Additionally, significant differences in task orientation (F (192) = 2.944, p =.03, f =.22), involvement (F (192) = 4.703, p =.003, f =.27) and teacher support (F (192) = 2.749, p =.044, f =.21) were observed. The f values suggest that the significant outcomes had moderate effect sizes. Tukey's honestly significant difference results also indicated that students with low proficiency in these categories tended to have a less pleasant perception and experience than students with better proficiency in these factors. Students' views and experiences, however, were unaffected by equity, teacher support, student cohesiveness, or exploration.

Effects of the social climate of online English classrooms

The final research question assessed the effects of an online English classroom's social climate on students' English learning outcomes. Pearson's correlations indicated a marginally favorable relationship between social climate and learning outcomes (r =.229, p = .001). Moreover, positive relationships with task orientation (r =.254, p < .001), equity (r =.204, p = .004), cooperation (r =.151, p = .35) and student cohesiveness (r =.221, p =.002) were discovered, but not with involvement, exploration, or teacher support. Following that, multiple linear regressions were used to determine whether the social climate of students could be used to predict their English learning outcomes (t (195) = 3.272, p = .001). The findings indicated that the social climate of an online classroom may accurately predict 23% (R^2 = .23) of the variance in learning outcomes with a substantial impact size (f^2 = .30). The findings demonstrated that for every unit change in the social climate, students' English course grades would increase by 3.075 points.

Correspondingly, social climate factors such as task orientation (t (195) = 3.655, p < .001), equity (t (195) = 2.909, p = .004), cooperation (t (195) = 2.120, p = .035) and student cohesiveness (t (195) = 3.149, p = .002) were significant predictors of students' online course grades. Among these factors, task orientation explained the highest proportion of variance in students' grades, at 25% (R^2 = .25), followed by student cohesiveness (22%), equity (20%) and cooperation (15%). On the other hand, students' grades were unaffected by factors such as involvement, investigation and teacher support.

Qualitative results

Students' responses to the short essay questions were examined using a thematic analysis. Braun and Clarke (2006) stated that a thematic analysis enables qualitative researchers to identify, analyse and report patterns (themes) in data. This study specifically employed a deductive approach, meaning that we brought to the data a series of concepts, ideas, or topics to code and interpret the data. It is considered as a top-down approach where qualitative researchers prepare a foundation for analysing the data, for what meanings are coded and for how codes are clustered to develop themes (Braun et al., 2015).

After data cleaning and preparation, the qualitative data analysis was carried out, involving three stages. In the first stage, we brought to the qualitative data the concepts of the social climate of online English classrooms found in the quantitative analysis and created the codes. Second, the collected responses were grouped into the seven identified factors, constructing the online social climate elaborated earlier in tables. The students were coded with S and a continuous number (e.g., S1, S2, S3). Then, the results of the thematic analysis were summarised and checked with the findings of previous studies in the last stage. The details are presented below.

Factor 1. Task orientation

The term *task orientation* refers to the circumstances that exist in online classrooms that affect students to finish planned tasks and stay on task (Smalley & Hopkins, 2020). There were 21 students who discussed their experiences with this factor. The students demonstrated self-awareness and a desire to comprehend the task materials. Despite technological obstacles, such as an indistinct teacher's voice and an intermittent Internet connection, they refused to give up and continued with the online sessions. They did, in fact, read the materials before and following the session, particularly the lesson exercises. When students did not understand what the teacher was saying, they relied heavily on the translation software. However, when it came to grammar, they stated that they were unable to rely on the programme and were forced to grasp the

grammar classes. Weekly in-class exams were recommended as a way to keep students interested in the lesson materials.

Students were aware that they needed to adapt to the new way of learning, despite the fact that it was extremely difficult. For low-level students, witnessing classmates' complete assignments in the online class motivated them to make an effort to avoid falling too far behind. Nonetheless, when such efforts yielded benefits, such as in vocabulary and speaking examinations, they felt satisfied and motivated to do more; however, they were aware of their English deficiencies and made an effort not to feel hopeless during the learning process. Below are the extracts from the students' responses:

> You must diligently review the lessons yourself when learning English online. (S16)

> Actually, when I first learned English (online), I was overjoyed since I was aware of my language weaknesses. It makes me pleased to be learning English. However, there is an added pain. Even though I like English, I'm not very good at it; I cannot speak it and my grammar is becoming increasingly difficult. I don't have any basics, which makes me suffer straight away, but I am going to try to learn, like memorising vocabulary and speaking more. (S74)

> We must adjust to the circumstances of this era and focus more on understanding the lessons. (S54)

Factor 2. Equity

In the online classroom, equity refers to a teacher's equal treatment of all students (Smalley & Hopkins, 2020). Three students stated that they felt the teacher's equality of treatment and care in class, which encouraged them to participate in learning. The teacher deployed questions to assess the students' comprehension of the subject material. Despite the students' limited English proficiency, they noticed the teacher's efforts to make the learning materials as simple as possible for them to understand. The following are extracts from the students' responses:

> I sense equality and compassion from the teachers (in the online classroom). (S34)

> Very good. The teacher talks to all the students, enabling them to participate in learning. (S128)

> Teachers teach well and treat all students equally. Teachers try to ask all students questions to make sure they understand each other. Although I'm not very good at English, the teacher can explain the content in a comprehensible way and try to explain it as simply as possible for the students to understand. (S146)

Factor 3. Involvement

This factor includes students' engagement, participation in class discussions, performance on assigned tasks and overall enjoyment of the class (Smalley & Hopkins, 2020). Ten students showed confidence in responding to the teacher's queries, even though their responses were erroneous. They felt compelled to speak more English and the teachers' numerous conversational activities prompted them to do so. Students acknowledged that they enjoyed learning in the online session due to the variety of activities provided by the teacher each week. Not only did the classroom setting inspire students to talk more but it also made them feel enthusiastic when their names were called. They were aware that if they got the answers incorrectly, they could always seek clarification from the teacher. Below are extracts from the students' responses:

> This course was enjoyable to take. As a result, I feel more understood and am learning more effectively. It's also enjoyable to take part in the different classroom activities that teachers hold each week. (S67)

> I've picked up a number of new words. Dare to approach teachers, even if I make a mistake. I've learned a lot, whether I'm right or wrong. I am becoming more fluent in English. (S127)

Factor 4. Teacher support

Teacher support entails the teacher assisting, befriending, trusting and showing interest in students (Smalley & Hopkins, 2020). A total of 68 students attested to the presence of teacher support in their online English classes. Students discerned that their teachers made learning materials simple to comprehend and delivered them in a nice manner. Students had the opportunity to confer with the teacher during the online class, and the teacher was an excellent listener and eager to provide additional tutoring after class for those who did not comprehend. During weekly sessions, the teacher was always interested in the students, making them feel welcome and making the course simple to understand. Students used the words "fun" and "enjoyment" to convey their satisfaction of teacher help in the online classroom.

Teachers employed games and active learning activities to keep students engaged and the lesson from becoming monotonous each week. The students recognised that the teacher's in-class calls on their names were intended to encourage them to talk and practise speaking. The students liked the teacher's patience. The following are the extracts from the students' responses:

> It was a study in which I believed the teacher made an attempt to ensure that the student understood what was being taught. The teacher will allow students to read and pronounce English, as well as teach them how to pronounce it. If someone continues to say it incorrectly, the teacher will show you how to pronounce it correctly. In general, I believe that the teacher genuinely wishes to educate the students. (S53)

> It was active learning that was simple to comprehend. Teachers paid close attention to students' comprehensions or misunderstandings and repeated when tests or activities were scheduled. Teachers assisted students who did not fully comprehend and were available to confer about assignments at any time. (S110)

> Teachers engaged students in English activities via various websites, which were enjoyable and assisted me in recalling vocabulary. (S168)

Factor 5. Investigation

Investigation refers to students' problem-solving and investigative abilities and processes, as well as how they apply them in online classroom problem-solving and investigative tasks and activities (Smalley & Hopkins, 2020). Students' activities and attempts to develop their English skills in listening, reading, writing and speaking appeared to be the main component in online English classrooms. Students consistently attempted to speak in class and overcame their fear of public speaking. The investigative tasks focused on how students pushed themselves to participate more actively in in-class English skills practice, sentence composition and vocabulary acquisition. Below are extracts from the students' responses:

> It was a lot of fun, and I learned a lot from reading aloud. It assisted me in learning the correct pronunciation so that I could speak. Even if I don't always get it right, I like to keep trying. Thank you very much, teacher. The teacher is a nice person. (S105)

> I enjoy the online English class. It helps me to practise my English, which I'm not very good at, but I'll try. (106)

> This class made us learn about the use of English and how to compose sentences in various forms. (S119)

> Since starting to learn English, it's been like starting to develop yourself to know a lot of vocabulary and train yourself to be better at speaking, listening and writing. Thank you. (S139)

Factor 6. Cooperation

Cooperation explains students' cooperative efforts with peers in class rather than competitive ones (Smalley & Hopkins, 2020). When students encountered learning difficulties, it was claimed that they received assistance from their friends. Apart from talking with their teacher, they did share their learning experiences with one another. Also, seeking assistance from a friend was deemed less frightening than seeking

assistance from a teacher. One idea that was mentioned was that studying with excellent companions makes studying easier. The following are extracts from the students' responses:

> Some come to understand, while others do not. There are friends who can assist. (S38)

> There was interpersonal growth. We talked about our direct experiences with teachers and friends. It was difficult for students to study on their own. We had doubts and understanding the teachings could be more challenging since we could encounter circumstances in the classroom where we made a bewildered face, wondered, or wanted to ask but were frightened to ask the teacher. (S175)

> We meet together; if you have nice friends, studying will be simple. (S188)

Factor 7. Student cohesiveness

Cohesiveness among students is characterised as situations in which students know, assist and support one another (Smalley & Hopkins, 2020). The students admitted that the online environment made it extremely difficult to practise English with peers in class when they had no one to help them practise English at home. As a result, practising using an online application became a possibility. They recognised the restricted number of interactions possible in an online environment, particularly while working in groups, not only due to the online environment but also because they did not know each other well in some scenarios. The following are extracts from the students' responses:

> I feel that learning English online makes information unclear because my Internet has a problem. Working in groups is very difficult because most people don't know each other very well. (S124)

> In terms of learning, I believe it should be the same as in the classroom. Interaction between friends and teachers, on the other hand, may be limited. You may lose focus from time to time. Working in groups is challenging. (S133)

> I make every effort to learn and utilise English as much as possible. However, due to the nature of the atmosphere, English speaking practice can only be done in the classroom. or by yourself if the others around you are unable to train with me. I occasionally try to practise in accordance with the application. But every now and again, I meet into people that are intimidating and threatening. (S170)

Discussion

Using a mixed-methods approach, this study examined the social climate of online English classrooms and its impacts. The first finding identified the sources of social climate in online English classrooms, as well as students' perceptions and experiences. Seven factors influenced the social climate: task orientation, equity, involvement, teacher support, investigation, cooperation and student cohesiveness (see Figure 1). Research in online settings has established the existence of teacher and student factors (Kaufmann et al., 2016; Pianta et al., 2012), students' interactions with learning materials (Coomey & Stephenson, 2001; Panigrahi et al., 2018) and equal treatment and opportunity in classroom learning (Kaufmann & Vallade, 2020). The current study corroborates previous findings and contributes to our understanding of the factors that contribute to the social climate of online English classrooms. As evidenced by the qualitative findings, students encountered these seven factors in class. Both quantitative and qualitative data indicated a very good classroom climate, particularly in terms of task orientation and teacher support. Teachers can affect students' emotional and social development in a variety of ways, including through developing positive connections with them and promoting healthy relationships among students (Pianta et al., 2012). When students develop positive and warm relationships with their teachers, they are more likely to adhere to classroom rules and to be more motivated and interested in a learning environment (Rubie-Davies et al., 2016). The increase in task orientation may be a result of the weekly formative evaluations that kept students focused on the upcoming tests (Waluyo & Tuan, 2021).

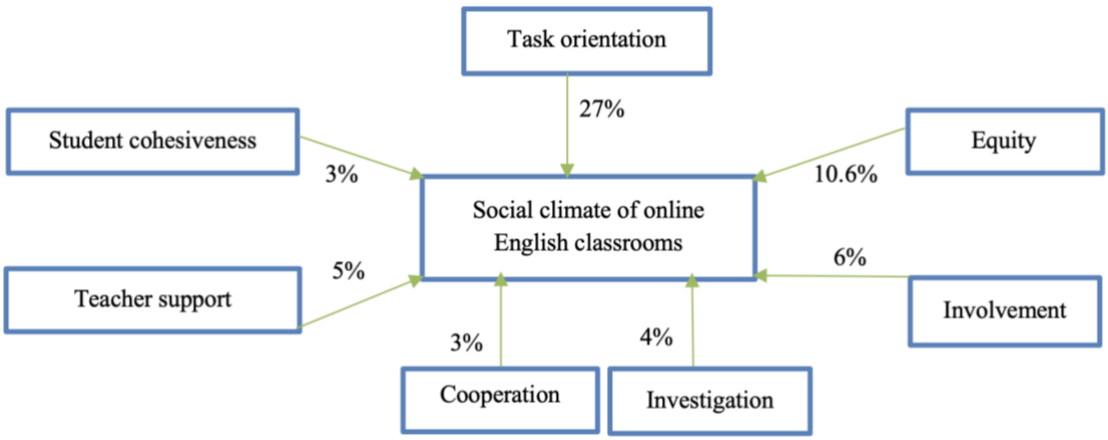

Figure 1. The percentage of variance contributed by each factor to the online English classroom's social climate

The second finding disclosed that while gender had no effect on how students perceived and experienced the overall social climate of the online English classroom, female students expressed a more favourable impression of the task orientation atmosphere. Studies in this area are still scarce. One possible explanation is that female students have a stronger sense of community in the classroom than male students (Rovai, 2002; Shea, 2006). This means that female students are more likely to be supportive in all significant learning activities involving the entire class, as they have a sense of belonging and attachment to the class's learning community (McMillan & Chavis, 1986), leading to improved learning engagement, course satisfaction and learning outcomes (X. Liu et al., 2006). Nevertheless, students with low English proficiency levels are likely to have a less favourable view and experience of the social climate in online classrooms than those with higher proficiency. This was also reflected in the qualitative data, in which the majority of students mentioned requesting help when they had difficulty understanding the instructional topic, but none of them mentioned helping their peers. It could be related to the students' proficiency background, as none of them believed their English proficiency to be very good. More research is needed in this area because the corpus of literature does not provide sufficient evidence to refer to.

Regarding its effects (Figure 2), this study discovered a positive association between the social climate of an online English classroom and students' course grades. More crucially, it could predict 23 % (R^2 = .23) of the variance in learning outcomes with a significant impact size (f^2 = .30), with each unit change in the social climate increasing students' English course grades by 3.075 points. Among the factors, task orientation, cooperation and student cohesiveness may be major predictors of students' grades. These findings are consistent with those of Singhal et al.'s (2021) study, which revealed that students who studied in such a classroom setting increased their scores by 30% and their long-term average marks by 66.9%. Studies have proven that student perceptions of online active learning practices and online learning climate predict online course engagement and influence students' perceptions of rapport, climate and loneliness (Cole et al., 2021; Kaufmann & Vallade, 2020), so the current study's findings have added the direct influence of this social climate variable to students' English learning outcomes.

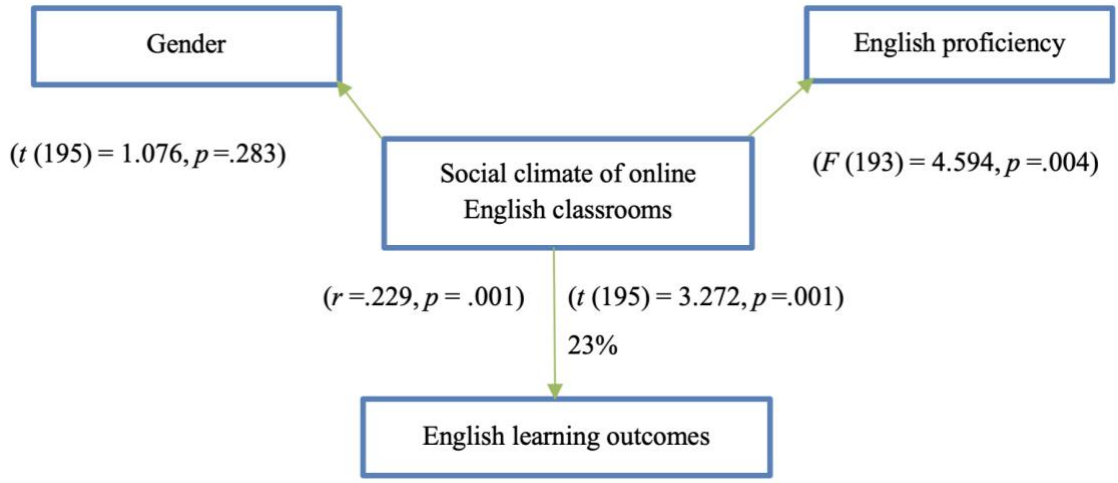

Figure 2. Effects of the social climate of online English classroom

Implication of the findings

The results of this study have implications for three areas: teaching and learning, educational policy and a future research agenda.

(1) Teaching and learning

Online English courses should provide the same learning quality as in a face-to-face environment, which also applies to other courses. One way to achieve such a condition is by enhancing the seven factors that construct a positive online English classroom climate. In this instance, teachers are the key players because they are the ones who design and plan learning materials and activities. Teachers should emphasise English course designs with active learning mediated by online technology tools and formative assessments. Active learning is a learning concept that engages students in a variety of activities, as opposed to just listening a lecture and taking notes (Felder & Brent, 2009). It is founded on constructivist theory and emphasises practical, activity-based teaching and learning in which students create their own cognitive processes throughout the process (KeenGwe et al., 2009). Among the exercises are think-pair-share and thinking aloud pair problem-solving, which require students to work alone and in pairs before sharing their results in class. It puts emphasis on learning outcomes and requires thoughtful participation from students (Prince, 2004).

Since the online learning setting limits physical contact, teachers can integrate Internet-based applications that can promote individual and collaborative work depending on the focused English skills being learned by students. For example, teachers could use Write About (https://www.writeabout.com/) for writing activities; Quizizz (https://quizizz.com/) for students to work on a quiz type exercise individually and in pair or group modes; Vimeo (https://vimeo.com/) for watching and sharing ideas. These activities would increase students' involvement, cooperation and inquiry skills while teachers maintain equity and their support throughout the learning process in the online class. Continuous implementations of a variety of active learning activities would potentially train students' concentration on task completion. Formative assessments can enhance such learning processes as they allow teachers to monitor student progress at certain times and students to shape and improve their learning competence at each stage of the learning period (Black et al., 2004). In its implementation, teachers should pay more attention to males and low-proficiency students since they would feel less engaged compared to females and proficient students. Most of the time, teachers cannot control these two factors in their online English courses. Therefore, conducting preliminary demographic profiles of the students before the first-class meeting starts is very crucial because teachers can adjust the arrangements of each learning activity in a way that involves males and low-proficiency students more. In an online setting, students cannot discuss as much as they can in a traditional classroom. Nevertheless, teachers address it by dividing task responsibilities among students in pairs or groups of work.

(2) Educational policies

Educational policies should be directed at addressing issues that can question the quality of online learning over face-to-face learning, especially in the case of online English courses. Most universities in the world have now had the experience of delivering synchronous online English learning due to the COVID-19 outbreak (Crawford et al., 2020). Even after the pandemic is over, relevant online learning instructions and practices will continue to be implemented and will most likely become ingrained in teachers' and students' daily routines, particularly in higher educational institutions, because of the significant changes that teachers and students have experienced over the last several years (Zhao & Watterston, 2021). This study's findings are implicated in the need to create educational policies that emphasise building positive social climates in online classrooms as it will lead to both better learning outcomes and experiences.

(3) Future research agenda

This research marks the beginning of an investigation into the social climate of online English courses and its effects on learners' learning outcomes. We believe that the results of this study are crucial in laying the groundwork for future study regarding online English learning. Because online learning typically involves teachers and students residing in different locations, future research may explore further the roles of culture and individual differences in influencing the social climate of online English classes. The research agenda may include how native and non-native English teachers construct the social climate of their online English courses and what outcomes they lead to. There is also a possibility to observe the differences between synchronous and asynchronous online learning classes in terms of the classroom's social climate.

Conclusion

The relationship between the teacher and students and among the students themselves shapes the social climate in educational settings, including online classrooms. It affects not only the classroom performance but also the students' self-concept, motivation, confidence and competence. The purpose of this research was to explore the social climate in online English classrooms and its effect on students' learning outcomes. Despite the limitations of this research, such as the fact that it was the students' first fully synchronous online English class and the fact that the teachers were foreign lecturers who were not permitted to speak in their native language, the study was able to come up with relevant findings from a specific target group which are valuable in addressing the challenges of online learning. Social climate factors such as student cohesiveness, involvement, investigation, cooperation, equity, task orientation and teacher support may be reinforced to develop the skills students need to recognise and manage emotions, establish and maintain relationships and achieve positive goals.

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