Effects of school environment, classroom instruction, and self-efficacy on Chinese students’ motivation for oral English

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Abstract

In this study, we examined the relationships among students’ self-efficacy of oral English competency, oral English environment in college, English class instruction, and motivation. The participants were 1,045 non-English-major freshman and sophomore students from a tier-one university in central China. Hypotheses were tested with a structural equation model (SEM), which controlled for gender, age, major, the score of English college entrance examination, and extra time spent on oral English learning. The overall model yielded a good fit with the data (CFI = .95, TLI = .94 RMSEA = .05, and $\chi^2(230) = 796.50, p < .01$). The results showed that students’ self-efficacy positively mediated the effects of college oral English learning environment.

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in predicting students’ oral English motivate on. The significant positive effects of the environmental and instructional factors on motivation via self-efficacy suggest that students will benefit from school activities and instructional approaches that foster their expected English learning goals. Policy recommendations to motivate university students in English-foreign-language contexts are provided based on the findings.

**Keywords:** Oral English, motivation, self-efficacy, learning environment, classroom instruction

**Introduction**

Ever since the Reform and Opening Policy in the late 1970s, China has witnessed rapid economic growth and an accelerating needs of English as a foreign language (EFL) unprecedentedly (Fang, 2018). English is the most prevailingly used and taught foreign language in China. However, Chinese learners have been reported to show low oral English performance, especially as compared to their English reading competency (Wei & Su, 2015).

This phenomenon may be because of an uneven instructional and assessment emphasis across language skills in traditional education in China (Wei & Su, 2015). As a subject taught in classrooms, English is evaluated primarily via summative and high-stake tests across different educational levels, from the primary to the college. Most of these tests are paper-pencil based, and focus on listening, reading, and writing. In the tertiary section, in many universities, College English Test (CET) Band 4 is a prerequisite for non-English major undergraduates to obtain a bachelor’s diploma (Yuan, 2013). To ensure students’ success in these tests, schools usually implement a teaching curriculum that aligns with the high-stake exams (Chang, 2006). Thus, compared to the three required sections (i.e., listening, reading, and writing) in CET-4, the speaking part has attracted far less attention from both teachers and students (Chang, 2006). Beside, insufficient access to English, and a lack of integrative motivation among Chinese college EFLs collectively lead to learners’ limited opportunities and unwillingness to practice oral English (Chen & Goh, 2011; Liu & Jackson, 2008; Peng, 2007; Peng & Woodrow, 2010).

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1 CET-4 is the fourth level College English Test administered by the Chinese Ministry of Education, and it is a large-scale standardized test. The CET is a test battery, including CET-4, the CET-6, and the CET – Spoken English Test (CETSET). The speaking is therefore tested separately. CET-4 consists of listening, reading, and writing. The format of questions in CET-4 is mainly multiple-choice questions which test students’ vocabulary and listening and reading comprehension.
In comparison to Chinese students’ reticence and unwillingness to speak English, oral English competence becomes an indispensable skill for Chinese college students in multiple aspects (Lin, 2018). The new College English Curriculum Teaching Requirements emphasize the role of the English language in modernization, highlighting the promotion of English oral competence. Specifically, non-English major undergraduates should be able to communicate in English, engage in oral discussions, and talk to English native speakers in daily topics with clarity (The Higher Education Department of the Ministry of Education, 2007). As undergraduate students continue to pursue future development in industry or academia, they will need to improve oral English, for English becomes a passport for international institutes and graduate programs at home or abroad (Hu, 2005). Specifically, oral English is a critical component in language tests such as Test of English as a Foreign Language (TOEFL) and International English Language Testing System (IELTS), which are prerequisite to apply many overseas graduate programs. In academia, oral English is tested in many Chinese universities via communicating with admission panel before accepting candidates to graduate programs. Besides, employers of international companies are very likely to give English interviews to prospective employees.

Researchers have explored approaches to enhancing EFL learners’ oral English performance. However, studies have focused on instructional approaches and tools such as YouTube videos (Watkins & Wilkins, 2011), TED (Technology, Entertainment, Design) talk (Aravind & Rajasekaran, 2019), and blended learning with the facilitation of technologies (Yang et al., 2013). Although these studies fuel in new knowledge of oral English instruction, they did not examine foreign language learning in a dynamic and comprehensive system.

Motivation has been believed to be one of the key factors that influence learners’ success of second/foreign language (L2) learning (Dörnyei, 1998). Gardner and Lambert (1959) have stated that motivation was the core in second language acquisition, according to their theory, motivation might be more important than L2 aptitude (Gardner & Lambert, 1972). High motivation in L2 can be remedies for deficiencies in learners’ L2 aptitude and learning conditions (Dörnyei, 1994, 1998). Learners with sufficient motivation are more willing to communicate in L2, invest themselves in L2 learning, and sustain such learning process in the long run. By contrast, learners with insufficient motivation can hardly persist the tedious learning process, even with outstanding language competence, these learners cannot accomplish long-term learning goals (Kim, 2009).

Given the complexity and significance of motivation in L2 learning processes and outcomes, understanding how environmental and individual characteristic factors in L2
learning can predict L2 motivation is critical. To fill the gap in the literature, we created a model to incorporate the surrounding environment, instructional quality, and learners’ differences with an emphasis on oral English learning.

In this study, we aim to evaluate how the school, classroom, and self-efficacy factors impact Chinese university students’ motivation to enhance English oral competence. The finding from the analysis helps build an optimal learning environment for undergraduate students in English-foreign-language context.

We designed a survey that inquired five themes: (1) demographics, (2) oral English learning environment in school (3) oral English instruction in classroom (4) self-efficacy in English oral competence, and (5) motivation in oral English learning. Since the measurement included latent factors, we built a structural equation model (SEM) to capture the association among these constructs. Four hypotheses guided this study:

1. School English learning environment has positive direct association with students’ motivation.
2. School English learning environment has positive indirect association with students’ motivation.
3. The effect from learning environment on motivation is positively mediated by English classroom instruction.
4. The effect from learning environment on motivation is positively mediated by students’ self-efficacy on oral English learning.

Study Background

A Typical English Class

In Chinese universities, each semester, non-English major freshman, and sophomore students take a semester-long (16–18 week) English course. The class meets twice a week for about 90 min. One of the two classes focus on listening and speaking, and the other is devoted to reading and writing. A primary goal for the course is to prepare students for CET-4. In the university where this study was conducted, a typical English classroom had more than 70 students, with one instructor lecturing. With so many students, the English classrooms were teacher-centered and provided limited opportunities for authentic communication and interaction.
Theoretical Framework

Sociocultural perspectives believe that interaction and mediation stimulate learning, and learning activity is firstly social and secondly individual (Mitchell et al., 2019). Therefore, the learning process can be influenced by society, culture and history (Mitchell et al., 2019; Vygotsky, 1978). In learning a second language, linguistic input, learning environment and instruction can impact learners’ attitudes, motivation and achievement. Since all knowledge is co-constructed interactively and is strengthened through practices, learners should be given more opportunities to practice and apply what they have learned in authentic scenarios (Walqui, 2006).

Moreover, sociocultural theories attribute learning to more capable individuals’ assistance. Based on Vygotsky’s (1978) Zone of Proximal Development (ZPD), effective learning happens when learners constantly negotiate for meaning and receive feedback. The sociocultural theory discussed people’s process of learning in relation to their social context and interaction with other people, which provided theoretical foundation for the analytical model of this study.

Motivation on Oral English Learning

Vygotskian sociocultural theory has taken L2 development as a gradual transformation from an L1 self to an L2 self (Pavlenko & Lantolf, 2000). Learners’ macro and microenvironment, personal experiences and L2 learning beliefs integrate with the process of learning L2 in the transformation toward a L2 self. Motivation to learn L2 is formed when the learner realizes the usefulness of the L2 and connects his/her life condition to L2 learning and practices (Kim, 2009). When learners interact with their surrounding environment, they integrate social and cultural contexts into their self-beliefs, which further shapes learners’ motivation and L2 self. (Ushioda, 2009).

Motivation is a significant factor in Gardner’s socio-educational model that explains learning (Gardner & MacIntyre, 1993). According to Gardner, the motivation of learning a foreign language is a complex of three components: (1) the desire for the goal of concern, (2) favorable attitudes toward language learning, and (3) the integration with L2 members as a reason to learn L2 (Gardner, 2010).

In EFL context, L2 learners’ motivation can be affected by contextual variables such as immediate learning environment, support from significant others (e.g., teachers and peers), and the dynamic in English classroom (Dörnyei & Csizér, 2002; Gardner, 1985; Ortega, 2011). Besides, learners’ attitudes towards teachers, teaching curriculum, and their evaluation of
usefulness of the contents can influence their motivation in English learning, and Chinese undergraduate students are no exceptions among these learners (Gan, 2009).

Extensive research has shown non-English major students’ unwillingness to communicate in English (Liu & Jackson, 2008; Peng, 2007; Peng & Woodrow, 2010; Zhang & Head, 2010). On the other hand, studies have found non-English major students to show high motivation in learning English (Zhang & Kim, 2013). Such seemingly controversial findings are in essence based on the same reason, that the Chinese college students were more likely to be motivated by external rewards such as score gains in English tests (Liu, 2007). In foreign language learning, learners may be highly motivated to learn a language, yet may not necessarily invest themselves in the learning practices when learners find their practices as inadequate or unworthy in their classroom or community (Darvin, 2019). Given the fact that oral English is not tested in assessments such as CET-4, most non-English major students attach limited value to English speaking and are reluctant to practice (Liu & Jackson, 2008).

In addition, gender can be a factor that influences learners’ motivation and attitudes (Clark & Trafford, 1996; Gardner & Lambert, 1972). As revealed from the studies among foreign language learners at the tertiary sector, female students display greater motivation and more favorable attitudes in learning English (e.g., Kissau, 2006; Mori & Gobel, 2006; Oxford et al., 1993). To account for the discrepancy between two genders, we controlled for students’ gender in the model analysis.

**English Classroom Instruction**

Teacher’s pedagogical knowledge and skills influence students’ participation in English class, which ultimately impact students’ learning outcomes (Hill & Chin, 2018). To optimize students’ oral English learning, teachers need to create a classroom that emphasizes the importance of oral English and allocate sufficient time in communicative practices. More practically, teachers need to provide immediate feedback to children’s practice. Teachers who facilitate students through consistent and interactive practices tend to engage students and enhance students’ opportunities to speak (Neff & Ruscynski Jr., 2013).

For most college students in China, English classroom is an important source to learn English. It was through English class that students receive language input from the teachers and the course materials (Renandya, 2013). However, in Chinese English classrooms, traditional methods of language teaching including drilling, grammar translation and teacher-centered instruction prevail (Chang, 2006). Besides, large class sizes and limited teaching resources are barriers to interactive and student-centered English instruction in Chinese
colleges (Chen & Goh, 2011). Studies have shown that English teachers often read textbook or other teaching materials and provide limited opportunities for students to interact and speak English in EFL contexts (Sun, 2006; Wu & Zhang, 2009).

Teachers, with appropriate teaching methodologies and tasks, can foster students’ motivation in the foreign language classroom (Renandya, 2013). As stated by Dörnyei (2001), that “the best motivational intervention is simply to improve the quality of our teaching” (p. 26). Thus, good teaching is always associated with higher L2 motivation among learners, which further drives students to become more energized, more engaged, and more committed to L2 learning (Dörnyei, 2001; Renandya, 2013).

**Self-Efficacy on Oral English Competence**

Self-efficacy, an indispensable component of social cognitive theory, is defined as the belief that one has on the capabilities to learn or perform behaviors at the desired levels (Bandura, 2001; Bandura, Barbaranelli, Caprara, & Pastorelli, 1996). Learners form self-efficacy based on their prior experiences, environmental conditions, social support, and personal characters (Schunk, 2003). That is to say, learning contexts including school and classroom environment can influence EFLs’ self-efficacy.

Research shows that self-efficacy influences learners’ cognitions, motivations, learning behaviors, and their learning outcomes (Schunk & Pajares, 2001; Bandura, 1977). Compared to students who doubt their capabilities, those with high self-efficacy for learning or performing are more likely to, spend more time, work harder, and be resilient when they encounter difficulties in tasks (Tseng, 2017). More importantly, they have higher chances to achieve at a higher level. In an EFL context, learners with higher self-efficacy are included to use more learning strategies and maintain low language anxiety, which can further contribute to learners’ L2 motivation and English speaking skills (Zhang & Ardasheva, 2019).

**Methodology**

**Participants**

This study serves to understand the motivation of oral English learning among non-English major students in China. Since Chinese universities do not offer English classes for students in junior and senior years, this study is inclusive among the freshman and sophomore classes. In collaboration with faculty in China, we recruited participants from a tier-one university in Wuhan, a city in central China. The fliers were posted, and survey links were sent
out to students’ emails. The recruitment procedure has been approved by the IRB board in both
the first authors’ university in the United States, and the local university in China. The returning
surveys identified 1,045 non-English major students.

**Instruments**

A survey of 29 items were designed to inquire about undergraduate students’ oral
English learning status. This survey was firstly built in English. Then a certified English-
Chinese translator was invited to translate the survey into Chinese. She then back translated
the survey from Chinese to English to check for consistency. The disparities between the
Chinese and English versions were identified, discussed, and revised by the translator and the
first author, who is also a Chinese-native speaker.

This questionnaire includes five parts. The first part consists of 10 background questions,
inquiring participants’ ethnicity, gender, age, mother language, regions that they received
secondary education, year in university, major, and department. Additional background
variables ask students’ time spent on oral English learning per week (number in hours) besides
attending English class, and English test scores in the College Entrance Examination.

The other four parts are latent constructs that inquire (1) students’ motivation to
promote English speaking, (2) English learning environment in school, (3) instruction in
English class, and (4) students’ self-efficacy on English oral competence. These four latent
structures consist of questions with answers that are in five-Likert scales, ranging from 1 to 5,
where 1 means strongly disagree, and 5 means strongly agree. Below is a detailed explanation
of the latent constructs.

**Motivation**

Four questions ask for students’ motivation to learn and improve English oral
competence. (1) I have strong personal interests in the culture of English-speaking countries,
(2) I want to excel in oral English as a competence, (3) I want to earn high grades in oral English
exams, and (4) I feel that English oral competence is influential to my future, in either academic
or career aspects. This construct has a Cronbach’s alpha $\alpha = .80$, which indicates adequate
internal reliability (George & Mallery, 2003; Gliem & Gliem, 2003).

**English Learning Environment**

The social-cultural theory of second language acquisition has clarified that the language
learning environment influences learners’ language input, which further might affect learners’ second language competency (Vygotsky, 1978). The environment factor consists of four variables that evaluate students’ perception of the oral English environment in school. The four questions are: (1) I feel that my university highlights the significance of oral English learning, (2) I feel that my university provides sufficient oral English learning opportunities, (3) I feel that my cohort emphasizes on English oral competence, and (4) I feel motivated to promote my oral English due to the school environment. The reliability of the four items on the college oral English environment scale is good based on George & Mallery’s (2003) rules of thumb, with Cronbach’s alpha $\alpha = .84$.

**Teacher Instruction**

This construct inquires students’ comments on English class instruction quality. The five items are (1) my teacher emphasizes on oral English learning, (2) my teacher’s teaching methods are effective, and I can learn new knowledge in the class, (3) the classroom contents are useful for me, (4) my teacher provides timely and helpful feedback to our practices, and (5) my teacher provides adequate opportunities to practice oral English in the classroom. The Cronbach’s alpha for the teacher instruction construct is $\alpha = .92$, which showed excellent reliability (George & Mallery, 2003; Gliem & Gliem, 2003).

**Self-Efficacy on English Oral Competence**

According to Bandura, self-efficacy is “beliefs in one’s capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1997, p.3). According to Riggs et al. (1994), a sample question from the self-efficacy scale is “I have confidence about my competency.” In this study, questions were adjusted to inquire students’ self-efficacy on their English oral competency.

Speaking is an interactive process through which people produce, receive information so as to share meanings (Chaney, 1998; Brown, 1994; Burns & Joyce, 1994). Speaking requires the speaker, at the same time, be a competent listener who can master the interactional and unpredictable dynamics of speech (Ellis, 2014). Therefore, oral language competency includes both active speaking and passive listening (Brown & Abeywickrama, 2010).

The self-efficacy factor includes six variables. For the significance of listening competence in oral communication, two questions regarding students’ listening competency were included as observed variables. (1) I am confident that I can understand other people’s speaking in oral communication, and (2) I am confident that I can understand other people’s
speaking in formal speech/presentation. The rest four questions evaluate students’ self-efficacy on active oral output, including the confidence to use grammar correctly, the confidence of the ability to utilize the appropriate words and expressions, the confidence of pronunciation, and aptitudes in oral English. The Cronbach’s alpha for this construct is $\alpha = .90$, which implies excellent internal consistency (George & Mallery, 2003; Gliem & Gliem, 2003).

**Data Analysis**

We used STATA 16 (StataCorp, 2017) for data analysis. To start with, we examined the means, standard deviation for continuous variables, and frequency for categorical variables. Next, we checked the Pearson correlation between all the variables included in the model. Further, we built a structural equation model based on the literature and theory: students’ L2 motivation on oral English was the outcome factor predicted by the school English learning environment, classroom instruction and students’ self-efficacy. The controlling variables included two binary variables: students’ gender and year in university (i.e., freshman or sophomore). Besides, three continuous variables: age, English scores in college entrance examination (the total scores are 150), and extra time spend on oral English learning each week were included in the model.

We embedded mediation analysis within the SEM model. A mediator is a variable that allows researchers to understand the mechanism through which a variable/factor predicts an outcome (Kenny, 2018). For our model in hand, the effects from school learning environment on learners’ motivation were mediated by classroom instruction and students’ self-efficacy on oral English competence. Figure 1 shows the hypothesized SEM model.
Figure 1. Hypothesize model

We used a maximum likelihood estimation for the analysis. For the results, an alpha level of 0.05 is adopted to test the significance of effects. To assess model fit, we utilize the following criteria: Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) of 0.95 or higher; root mean square error of approximation (RMSEA) 0.06 (Hu & Bentler, 1999). Since a large sample size makes it unlikely to have a non-significant chi-square (Kenny, 2015), the CFI, TLI and RMSEA are given more weight as we interpret the model fit (Froiland & Davison, 2014). Because measures of a construct taken at the same time period are considered to covary, errors of the observed variables in each construct were allowed to correlate (Zanto et al., 2011).

Modification Indices for Measurement Models

Before analyzing the overall model, each latent construct was measured via the SEM method. The CFI, TLI, and RMSEA were examined to determine the goodness of fit. To improve model fitness, constructs with lower fitness were adjusted via adding paths based on the modification of indices values. A given modification index (MI) indicates the minimum value that the chi-square statistic decreases if the corresponding parameter is freed (Hox & Bechger, 1998). We, therefore, used the MI value incorporating theories to conduct a sequential model modification. At each step, we freed the parameter that produced the largest MI value,
and we continued the procedure until an adequate fit was reached. All the measurement models were modified. Table 1 shows the change of fitness indices before and after the modification for all the measurement models.

Table 1 Improving model fit based on modification indices

<table>
<thead>
<tr>
<th>Measurement model</th>
<th>Chi-Square</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>AIC</th>
<th>BIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Self-Efficacy</td>
<td>Before</td>
<td>(\chi^2(9) = 295.70)</td>
<td>.92</td>
<td>.87</td>
<td>.18</td>
<td>12594.62</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>(\chi^2(6) = 18.82)</td>
<td>1.00</td>
<td>.99</td>
<td>.05</td>
<td>12323.74</td>
</tr>
<tr>
<td>Oral English Environment</td>
<td>Before</td>
<td>(\chi^2(2) = 4.20)</td>
<td>.98</td>
<td>.94</td>
<td>.14</td>
<td>8559.66</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>(\chi^2(1) = 7.75)</td>
<td>1.00</td>
<td>.98</td>
<td>.08</td>
<td>8529.21</td>
</tr>
<tr>
<td>English Class Instruction</td>
<td>Before</td>
<td>(\chi^2(5) = 74.34)</td>
<td>.98</td>
<td>.97</td>
<td>.12</td>
<td>10214.00</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>(\chi^2(3) = 3.89)</td>
<td>.99</td>
<td>.98</td>
<td>.10</td>
<td>10182.96</td>
</tr>
<tr>
<td>Oral English Motivation</td>
<td>Before</td>
<td>(\chi^2(2) = 84.89)</td>
<td>.89</td>
<td>.78</td>
<td>.19</td>
<td>13363.94</td>
</tr>
<tr>
<td></td>
<td>After</td>
<td>(\chi^2(1) = 0.02)</td>
<td>1.00</td>
<td>1.00</td>
<td>.00</td>
<td>13179.71</td>
</tr>
</tbody>
</table>

**Motivation Model**

The path between the desire to earn high grades (M3) and improve oral English for better future career (M4) was added (MI = 18.76).

**School Environment Model**

One path was added between the covariances of highlights oral English learning (E1) and the cohort emphasizes on English oral competency (E3) (MI = 29.08).

**English Classroom Instruction Model**

MI values indicated two paths between the covariances. First, the path between teachers’ attitudes to oral English (I1) and classroom effectiveness (I2) was added (MI = 35.11). Next, the covariances between classroom effectiveness (I2) and usefulness (I3) was correlated (M1 = 39.55).

**Self-Efficacy Model**

The modification index for this model indicated that three paths should be added. First, the covariances between use of grammar (S3) and competence of oral expression (S4) was correlated (M1 = 168.35). Then the path of the covariances between competence in pronunciation (S5) and oral English aptitude (S6) was added (M1 = 112. 92). Finally, the
covariances between the competence in understanding listening materials in tests (S1) and understanding daily communication (S2) was correlated (M1 = 18.19).

**Results**

**Descriptive Statistics**

The participants are homogeneous in ethnic and cultural backgrounds: they were all born, raised, and received education in Mainland China. All the participants speak Mandarin Chinese as their first language. Among all the participants, 75.1% are freshmen, 24.9% are sophomore; and 42.2% are female students. The students’ age ranges from 14 to 23, with a mean of 19.1. The sample is representative of different majors of students, including students from science (mathematics and physics), engineering (information engineering, mechanical engineering, and electronic engineering), management, art, and design departments. The participating students had an average score of 120.44 in College Entrance Examination in the English subject, indicating a good overall test performance. Table 2 presents the descriptive statistical results for all the predicting and outcome variables.
Table 2 Descriptive statistics

<table>
<thead>
<tr>
<th>Construct Variables</th>
<th>Mean/Frequency</th>
<th>SD/%</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Motivation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M1. I want to improve oral English as a competence.</td>
<td>3.13</td>
<td>1.05</td>
<td></td>
</tr>
<tr>
<td>M2. I have strong personal interests in the culture of English-speaking countries.</td>
<td>3.08</td>
<td>1.06</td>
<td></td>
</tr>
<tr>
<td>M3. I want to earn high grades in oral English exams.</td>
<td>3.32</td>
<td>1.02</td>
<td></td>
</tr>
<tr>
<td>M4. I feel English oral competence is influential to my future, in either academic or career aspects.</td>
<td>3.60</td>
<td>.98</td>
<td></td>
</tr>
<tr>
<td><strong>Oral English Environment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Questions start with “I feel that”)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E1. my university highlights oral English learning.</td>
<td>2.82</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>E2. my university provides sufficient oral English learning opportunities.</td>
<td>2.90</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>E3. my cohort emphasizes on English oral competence.</td>
<td>3.00</td>
<td>.86</td>
<td></td>
</tr>
<tr>
<td>E4. I am motivated to promote my oral English due to the school environment.</td>
<td>3.22</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td><strong>Oral English Instruction</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I1. My teachers emphasize on oral English learning.</td>
<td>3.99</td>
<td>.84</td>
<td>1-5</td>
</tr>
<tr>
<td>I2. My teacher uses effective teaching methods, and I can learn new knowledge in the class.</td>
<td>3.71</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td>I3. The classroom contents are useful to me.</td>
<td>3.67</td>
<td>.97</td>
<td></td>
</tr>
<tr>
<td>I4. My teacher provides timely and helpful feedback to our oral practice.</td>
<td>3.79</td>
<td>.92</td>
<td></td>
</tr>
<tr>
<td>I5. My teacher provides adequate opportunities to practice oral English in the classroom.</td>
<td>3.68</td>
<td>.99</td>
<td></td>
</tr>
<tr>
<td><strong>Self-Efficacy on Oral English Competence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Questions start with “I am confident that/with”)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S1. I can understand other people’s speaking in oral communication</td>
<td>2.51</td>
<td>.85</td>
<td></td>
</tr>
<tr>
<td>S2. I can understand other people’s speaking in formal speech/presentation</td>
<td>2.54</td>
<td>.87</td>
<td></td>
</tr>
<tr>
<td>S3. I can use grammar correctly when speaking in English.</td>
<td>2.44</td>
<td>.83</td>
<td></td>
</tr>
<tr>
<td>S4. I can speak with proper expressions in English.</td>
<td>2.35</td>
<td>.78</td>
<td></td>
</tr>
<tr>
<td>S5. my English pronunciation.</td>
<td>2.79</td>
<td>.94</td>
<td></td>
</tr>
<tr>
<td>S6. my oral English aptitude.</td>
<td>2.64</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td><strong>Background Variables</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>19.13</td>
<td>.90</td>
<td>14-23</td>
</tr>
<tr>
<td>Grade</td>
<td>1.25</td>
<td>.42</td>
<td>1-2</td>
</tr>
<tr>
<td>Female</td>
<td>441</td>
<td>42.2%</td>
<td>0-1</td>
</tr>
<tr>
<td>College Entrance Scores</td>
<td>120.44</td>
<td>16.16</td>
<td>0-150</td>
</tr>
<tr>
<td>Extra time practicing oral English</td>
<td>2.06</td>
<td>2.00</td>
<td>0-10</td>
</tr>
</tbody>
</table>

The average scores for the university oral English environment range from 2.82 to 3.22. Students’ rated scores of the variables for classroom English instruction range from 3.67 to
3.99. Students’ self-efficacy in oral English is from 2.35 to 2.79 among different competencies. The average scores for the variables of the motivational construct range from 3.08 to 3.60, indicating that students may attach higher values to certain reasons of learning oral English, yet find other reasons less significant.

Bivariate correlations between the four latent constructs and the controlling variables are presented in Table 3. The students’ self-efficacy was positively related to motivation on oral English learning (r = .49, p < .001), to the oral learning environment in the university (r = .40, p < .001), and to teacher instruction (r = .12, p < .001). In addition, environment in the university correlated with the quality of classroom instruction (r = .42, p < .001), and to students’ motivation (r = .44, p < .001). Besides, quality of instruction was positively associated with students’ motivation to promote oral English (r = .27, p < .001).
**Table 3** Correlation matrix of the latent constructs

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Age</td>
<td>1</td>
<td></td>
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<tr>
<td>2. Gender</td>
<td>.13**</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>3. Grade Level</td>
<td>.01</td>
<td>.51**</td>
<td>1</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Extra Time on Oral English</td>
<td>-.02</td>
<td>-.01</td>
<td>-.12**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>5. College Entrance English Scores</td>
<td>-.01**</td>
<td>-.01*</td>
<td>.03</td>
<td>.04</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>6. Self-Reported Oral Competence</td>
<td>-.07*</td>
<td>-.16**</td>
<td>-.08**</td>
<td>.27**</td>
<td>.25**</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Environment</td>
<td>-.01</td>
<td>-.11**</td>
<td>-.13**</td>
<td>.12**</td>
<td>.06</td>
<td>.40**</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Instruction</td>
<td>-.05</td>
<td>-.10**</td>
<td>-.11**</td>
<td>.08**</td>
<td>-.05</td>
<td>.12**</td>
<td>.42**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>9. Motivation</td>
<td>-.07*</td>
<td>-.11**</td>
<td>-.09**</td>
<td>.23**</td>
<td>.23**</td>
<td>.49**</td>
<td>.44**</td>
<td>.27**</td>
<td>1</td>
</tr>
</tbody>
</table>

Note: **p<.01, *p<.05, **p<.001
Structural Equation Model Outcomes

The overall SEM (see Fig. 1) yielded the following fit statistics: CFI = .95, TLI = .94, and RMSEA = .05. The chi-square was ($\chi^2$ (230) = 828.98, $p < .01$). According to the model fit indexes, overall, the model fits the data well. Figure 2 presents the final tested model with path analysis results among major factors and variables.

Figure 2. The tested model with path analysis results

Note: ***$p < .001$, **$p < .01$, *$p < .05$

A better oral English environment in school may predict Chinese college students' higher motivation on oral English learning: both standardized direct and indirect effects from the oral language environment on learners' motivation are significant (direct effect = .21, $p < .001$; indirect effect = .31, $p < .001$). This result aligns with hypothesis 1 and 2. Besides, learners' self-efficacy of oral English shows a statistically significant positive effect on motivation to learn oral English, where $\beta = .56$, $p < .001$, and such finding supports hypothesis 3. In addition, quality of classroom instruction also shows positive impact on students' motivation, $\beta = .11$, $p = .02$, which supports hypothesis 4.

Besides the hypothesized effects, we also found significant effects between the
background variables and students’ motivational factor. Test in College Entrance Examine English subject is a significant predictor to students’ motivation, where $\beta = .01$, $p < .001$—indicating that when all the other variables are controlled for, one-unit increase in students’ English test scores can lead to .01 unit increase in their motivation in oral English learning. Besides, extra time spent on oral English learning is also significant, where and $\beta = .05$, $p < .001$. This finding suggests that each one hour increase in students’ extra time invested in practicing oral English, their motivation will increase in .05 unit. Gender, age, and grade in university do not show significant effects on the outcome measurement.

Overall, this model explains 39.6% of motivational factors, 20.4% of the variance in teaching instruction, and 15.9% of the variance in students’ self-efficacy of oral English.

**Discussion**

With the increment of international communication and the ever-increasing requirement for oral English skills in China, Chinese university students are aware of the significance of English-speaking skills. The gap between the unprecedented high demand for English-speaking competence and Chinese undergraduate students’ insufficient skills in English oral communication has led to the implementation of this study.

Guided by the social-cultural theory (Vygotsky, 1978), this study was conducted to examine the extent to which the school environment, classroom instruction, and students’ self-efficacy in predicting EFL college learners’ motivation of improving their English oral competency. Based on the statistical findings, recommendations on pedagogy are provided below. Overall, this study contributes to the literature in fields of both motivation in EFL context and second language acquisition.

The positive relationships found among university learning environment, classroom instruction, self-efficacy and learners’ motivation is consistent with previous studies among foreign language learners that showed students’ self-efficacy beliefs predict a higher level of motivation (Prat-Sala & Redford, 2010). Such finding also aligns with Vygotsky’s (1978) social-cultural theory that proposes the external environment of language learning (the school environment in this case) influences learners’ motivation (Yang, 2017).

It is surprising that, given the same metric, students’ oral English self-efficacy (mean = 2.55) was much lower compared to their motivation (mean = 3.28). One possible source of their low self-efficacy is that their oral English competency fails to meet their own expectations. Additionally, due to the strong emphasis on passing CET-4 in Chinese college English classrooms, many teachers spare their efforts on teaching knowledge and skills to prepare for
the test, and therefore, leaving oral English, especially communicative English behind.

Significant effects between the background variables and learners’ motivation are also worth noting. The findings show that students’ performance in College Entrance Examine is positively related to motivation, indicating that learners’ prior achievement can predict their current L2 motivation. Such connection might be because enactive mastery experience is a significant source of self-efficacy (Bandura, 1977, 1997; Bong et al., 2012; Zhang & Ardasheva, 2019), and self-efficacy further influences learners’ motivation. Unsurprisingly, extra time spent on oral English practice—a measurement of investment, is also positively related to learners’ motivation, since investment depends on L2 motivation. Gender is not a significant predictor of learners’ motivation, which does not align with previous findings (e.g., Polat & Mahalingappa, 2010; van Der Slik et al., 2015). Further studies are needed to examine the underlying reason leading to such finding among Chinese undergraduate students.

To promote learners’ self-efficacy and motivation, several policy recommendations for college English education follow from the results of the present study. Learners need to be exposed to an English environment that is relaxing and encouraging in both inside and outside classroom contexts (Noom-ura, 2008). In such an environment, teachers need to know students’ expectations and goals for learning oral English, and develop teaching pedagogy based on their own instructional knowledge and students’ needs (Lochland, 2013; Oxford et al., 1993). Previous studies have suggested implementing culturally and linguistically authentic activities for EFL students. For instance, having conversation partners with English native-speaking students, and using Western culture as tools for English oral practice (Alvermann et al., 2018). However, as the descriptive statistic for motivational variables reveals, students showed higher motivation in earning high grades and career development rather than enhancing oral English competencies and satisfying cultural interests. The result indicates that this group of learners attribute the value of practicing oral English more of instrumental purposes (Freiermuth & Ito, 2020; Gardner & Lambert, 1972). Based on this finding, we suggest schools and classrooms incorporate oral English practices with future career development. Innovative instructional approaches such as project-based learning and mock English interview (Zheng et al., 2017) can be used to enhance students’ participation in speaking activities (Rui & Joseph, 2020). Teachers can also guide students to perform self-assessment on these activities (Kissling & O’donnell, 2015).

Among all the subcategories of English oral competence, students reported the lowest scores in the ability to talk with appropriate expressions in communicative contexts, which indicates the need to improve their speaking output through practicing complete sentences and
authentic expressions. Since Chinese students rarely have access to the context that promotes authentic English speaking, this finding suggests the need for teachers to scaffold their students by providing commonly used phrases, expressions, and sentence structures (Walqui, 2006). Besides, to increase opportunities for students to practice oral English, teachers should allow students to practice in small groups, mingle with each group, and provide feedback to improve sentence quality (Neff & Ruscynski, Jr., 2013).

Conclusion and Implications

Before concluding, limitations need to be stated. First, the students reported “classroom instruction” measures, which may have led to artificial effects. Some students’ ratings could be unduly influenced by other factors, such as the frequency of their interaction with teachers in the class. Additionally, since we had access to only these Chinese EFL participants, a convenient sampling from one university was drawn. The participants were from the university in central China; an area differentiates itself from other regions such as the southeastern and inner western cities. With different dynamics and cultures in those regions, the findings from the given data should be limited to generalization to similar college contexts.

The findings from this study generate several directions for future research. First, further studies are needed to examine the relations between students’ motivation on oral English learning and their efforts and behaviors of oral English learning and learning outcomes, this line of research will provide in-depth understanding on the association among learners’ motivation, investment and their performance in the EFL context. Second, longitudinal studies need to be implemented to understand how environmental factors and self-efficacy interact with students’ motivation over time. Motivation in L2 is a dynamic entity that can change. When undergraduate students enter junior and senior years, English class is no longer provided, which can decrease their motivation to improve English oral competency. Yet, as they start to prepare for graduate programs or job-hunting, they may spare more efforts in oral English learning, depending on their plans. This line of study can provide valuable understanding on how the changing environment and students’ learning/career plan can influence students’ motivation.

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