Abstract
The study aims to investigate the English presentation self-efficacy of ESP undergraduate students through a longitudinal-experimental research design. Rooted in Bandura's social cognitive theory, it addresses two research problems: how Indonesian ESP undergraduate students' English presentation self-efficacy developed when they were exposed to mastery experience in the form of presentation tasks, and how individual and group presentation tasks affected the English presentation self-efficacy development. Three groups of ESP undergraduate students (n = 107) taking ESP English for Management were purposively selected as the participants for the study. Each group was exposed to one of the three forms of interventions:
individual presentation tasks, homogeneous-group presentation tasks, and heterogeneous-group presentation tasks. A Likert-type presentation self-efficacy questionnaire validated by exploratory factor analysis (EFA) was utilized to collect the data in Weeks 3, 8, 12, and 16 of the semester. The study found that the Indonesian ESP undergraduate students' English presentation self-efficacy developed significantly as they completed the presentation tasks. The homogeneous-group presentation task outperformed both the heterogeneous-group and individual presentation tasks in enhancing English presentation self-efficacy. Implications for the teaching practices, study limitations, and future research recommendations are presented.

Keywords: English presentation self-efficacy; ESP students; homogeneous group; longitudinal study; presentation tasks

Introduction

Presentation and communication skills are key to successful academic and professional careers (Gedamu & Gezahegn, 2023). For the students of the Management study program in particular, these skills should get more attention as jobs and careers in management mostly require the ability to communicate and present information orally, fluently, and confidently to diverse audiences. Communication skill is a job applicant’s essential attribute that employers seek (Grant-Smith et al., 2016). Those with good communication skills are in high demand as communication plays a vital role in the success of individual employees and the company. It is, therefore, crucial for teachers and lecturers to include English presentation and communication skills in their ESP curriculum.

Making a presentation in a foreign language is a challenging task. This public speaking skill is hard to master (Bankowski, 2010). It requires knowledge of the topic presented, the language and discourse structure, and controls of voice tones, body language, and affective states. In addition, self-confidence and practice are essential for improving competence (Agustina, 2019). When doing presentations, many students feel enormously anxious and highly stressed. Some students even experience glossophobia, a social phobia resulting in extreme avoidance of speaking in front of people because of fear of embarrassment and humiliation (Hancock et al., 2010). Presentation self-efficacy is another essential factor affecting presentation performance (Schickel & Ringeisen, 2020). It is one's judgment of his/her ability to accomplish a particular presentation task. Poor presentation self-efficacy may result in low performance (Adams, 2004).

Despite a large body of research on self-efficacy development in ELT contexts, such as Chen and Hsu (2022), Law et al. (2015), Mizumoto (2013), and Zheng et al. (2009), and in non-ELT contexts, such as Huang et al. (2020), Huang and Mayer (2018), Walter et al. (2015), and Getachew and Birhane (2016), research on presentation self-efficacy (PSE for short) has yet to be comprehensive (Amirian & Tavakoli, 2016). Based on research participants, for example, previous studies mostly focused on EFL students (Amirian & Tavakoli, 2016; Gedamu & Gezahegn, 2023; Rahmania, 2020; Zhang & Ardasheva, 2019). This current study aimed to fill the paucity in the field of PSE development studies by focusing on the development of English PSE of undergraduates taking an English for Specific Purposes (ESP) course. Two research questions were set to guide the study: how Indonesian ESP undergraduate students' English PSE developed when they were exposed to mastery experience in the form of presentation tasks (PT for short), and how individual and group PTs affected these ESP undergraduates' English PSE development.

The research questions are crucial for three reasons. Firstly, mastery experience is the most dominant and informative source of self-efficacy development (Bandura, 1997; Palmer, 2006; van Dinther et al., 2011; Wright et al., 2016). However, in the field of English PSE studies in Indonesia,
how this mastery experience develops ESP undergraduate students' English PSE needs further exploration. Secondly, there have been studies investigating group work in classroom contexts (Cheng et al., 2008; Öntaş & Tekindal, 2015; S. L. Wang & Lin, 2007; Z. Wang, 2013), but how group work affects self-efficacy, more particularly the ESP undergraduate students' English PSE, is still rare. Finally, many previous studies on self-efficacy development, especially those involving interventions, focused on the end results of the PSE interventions (Huang et al., 2020; Huang & Mayer, 2018). Though these studies are important in proving or disapproving of self-efficacy development, they fail to see the process of the changes closely. A longitudinal study, as this study adopted, offered an advantage as the researchers could detect the changes within the observed period.

**Literature review**

**Self-efficacy and its development**

The construct of self-efficacy was first introduced by Bandura (1977) in his social cognitive theory formulated to develop a unified theory of behavioral change (Gallagher, 2012). It is defined as people's beliefs in their ability to execute actions necessary to achieve desired goals and exercise influence over events that affect their lives (Bandura, 1977, 1997; Liu et al., 2020). It is someone's evaluation of whether he/she can perform the necessary actions required to achieve something. These beliefs affect how people think, feel, behave, and motivate themselves (Wilde & Hsu, 2019; Zulkosky, 2009). Therefore, it is very fundamental and determining.

According to Bandura (1977), human functioning is influenced by the people themselves (e.g., cognitions and emotions), social environment, and behaviors in triadic reciprocity. What people think affects their actions, and these actions can change the environment. This environment, in turn, can change people's thoughts (Schunk & DiBenedetto, 2021). In this way, self-efficacy predicts an individual's behavior in a specific task (Ferrell & Barbera, 2015; Liu et al., 2020). It affects someone's initial decision to undertake an action, the amount of effort and perseverance invested, the ability to manage affective influences while doing the task, and persistence in the face of troubles (Bandura, 1977; Grether et al., 2018; Leeming, 2017). Students with high self-efficacy believe in their capabilities and see challenges as tasks to master rather than threats to avoid. They will exert better commitment and easily recover from setbacks (Wilde & Hsu, 2019).

Previous studies suggest four sources of self-efficacy development: mastery experience, vicarious experience, social persuasion, and affective states (Bandura, 1997; Usher & Pajares, 2008). Mastery experience, also called enactive experience, is someone's experience of doing the assigned task. It is the interpreted result of purposive performance. Vicarious experience is someone's experience of observing other persons doing the things he or she would be assigned to. This experience serves as a diagnostic indicator of one's capabilities. Social persuasion, as the third source of self-efficacy, serves as a means to strengthen one's beliefs of the capability of doing a task. Positive faith and encouragement of people around would strengthen self-efficacy, while negative ones would weaken it. The last source is physiological and affective states. People often judge their capabilities based on somatic information conveyed by physiological and emotional states. Feelings of stress, anxiety, fear, pains, aches, and fatigue indicate emotional and physical inefficacy.

**English presentation self-efficacy**

Referring to Bandura (1977), English presentation self-efficacy in this study is the undergraduate ESP students' judgment of their ability to accomplish presentation tasks assigned to
them successfully. Similar to another form of self-efficacy, the judgment of this ability is theoretically influenced by mastery experience, vicarious experience, social persuasion, and physiological and affective states. On how these sources affect presentation self-efficacy, previous researchers had different ways of investigation. For example, Amirian and Tavakoli (2016) only focused on how mastery experience impacted students' presentation self-efficacy. Their study compared the academic presentation self-efficacy of EFL learners with one of the non-EFL majors. The study found a significant positive correlation between participants' experience of presenting course content orally and oral presentation self-efficacy. On the other hand, Zhang and Ardasheva (2019) explored the four sources suggested by Bandura. A study that involved 263 students learning public speaking of English as a foreign language found that three of Bandura's hypothesized sources of self-efficacy development, namely enactive mastery experience, vicarious experience, and social persuasion, gave unique contributions in predicting English public speaking self-efficacy. However, physiological and affective states did not.

In a business communication course involving 97 participants, Cavanagh et al. (2019) developed a teaching strategy by explicitly weaving the four sources of self-efficacy (enactive mastery, vicarious experience, verbal persuasion, and psychological arousal) to improve students' presentation performance. Enactive mastery was developed by assigning the students to deliver presentations in front of the class. Vicarious experience was developed by assigning the students to observe presentations throughout the semester so that they had ample opportunities to watch and learn from the success of their peers. Social persuasions were provided both by the instructors and fellow students by convincing them of their ability to make progress. For psychological arousal, the students were taught techniques to reduce stress levels and channel nervous energy. The course significantly increased students' oral communication self-efficacy scores. In addition, self-efficacy positively and significantly correlated with course performance, and the increase in self-efficacy positively and significantly correlated with the changes in overall course grade performance.

However, some studies had different findings. While social cognitive theory generally views higher performers as enhancing the observer's self-efficacy better, Adams (2004) found that observing peer models resulted in higher self-efficacy development than observing expert models. In a case study involving 14 participants who were divided into two different treatment groups, namely expert model observers and peer model observers, the study found that students in the expert model observers did not show significantly different scores between the pre-test and post-test. In contrast, the students in peer model observers show significantly different scores. The study concluded that observing peer models was more effective in enhancing students' self-efficacy than observing expert ones. For the students of English as a foreign or second language in Asian contexts, Jun (2020) even concluded that students' presentation self-efficacy development is not only affected by the four sources suggested by Bandura but also by language problems, cultural differences, and personality, such as extroversion and introversion.

**Method**

**Research design**

This study adopted a longitudinal-experimental design as it used interventions to stimulate the development of the ESP undergraduate students' PSE, and the data were collected several times during the course of the intervention. A longitudinal study enriches the literature as longitudinal research on self-efficacy development in language acquisition is still limited (Piniel & Csizér,
The first author, assisted by the authors, set and conducted the experiment in ESP classes for a semester.

Participants

Three groups of students taking ESP English for Management (n=107) were purposively recruited as the participants of the study. Based on gender, 41 students (38.3%) were male, and 66 (61.7%) were female. Based on ages, 46 students (43.0%) were between 17-18 years old, 56 students (52.3%) were between 19-20 years old, and five students (4.7%) were above 20 years old. No respondent randomization was applied as they remained in their existing groups. Randomization, however, was applied to the presentation task assignment. With a simple lottery, Group A (n = 37) was assigned to the Homogeneous-group presentation tasks, Group B (n = 36) was assigned to the Individual presentation tasks, and Group C (n = 34) was assigned to the Heterogeneous-group presentation tasks. A homogeneous group is one in which the members come from the same achieving groups, whether low, moderate, or high. On the contrary, a heterogeneous group is one in which the members of the group come from different achieving groups (Aluvalu et al., 2017; Millrood, 2002). Achieving groups were set based on the performance of Presentation Task 1 (PT-1).

Instrument

Previous studies did not offer a single model of the instrument to measure PSE. Adams (2004) used a Likert-type questionnaire of 7 scales, Amiran and Tavakoli (2016) used 5 scales of confidence level, and Zhang et al. (2020) used 5 scales of agreement to the statements of the questionnaire. Bandura suggests that there is no 'single measure fits for all' self-efficacy instrument. The strength of a self-efficacy questionnaire lies in the specificity of the beliefs measured (Bandura, 1997; Leeming, 2017). As self-efficacy is domain and context-specific (Fisher, 2014; Sabokrouh, 2014), designing an instrument that mostly fits the topic is critical.

Considering that the respondents of the study had heterogeneous levels of English-speaking skills, an English PSE questionnaire was designed and used to collect the data. It had 15 statements measuring the respondents' beliefs in doing English presentation tasks (see Appendix). Following Bandura (2006), it was a Likert-type questionnaire with 'can-do' statements. The participants were required to respond to the questionnaire items based on their beliefs about their ability to perform the tasks on a scale of 1 to 7. Scale 1 refers to 'I absolutely cannot do it,' while Scale 7 refers to 'Surely, I can do it.' Before being used, the instrument was tried out. Exploratory Factor Analysis (EFA) and Cronbach's Alpha for internal consistency were run to assess its validity and reliability.

Prior to the EFA analysis, however, the Kaiser–Meyer–Olkin (KMO) sampling adequacy test and Bartlett's test of sphericity were run. The KMO test statistic is 0.947, far above the threshold suggested by Hair et al. (2010). Bartlett's test of sphericity is statistically significant (Sig. = 0.000), and The Measure of Sampling Adequacy (MSA) of all the variables is above 0.5. These signify that EFA could appropriately be run. The principal component analysis shows that the extraction of all the items in the questionnaire is higher than 0.5, which were loaded under two components. The components record two eigenvalues above 1 (10.308 and 1.310), explaining 77.455% of the total variance. Cronbach's Alpha of internal consistency is 0.965. Therefore, this study's English presentation self-efficacy questionnaire was valid and reliable.
Interventions and procedure

Modeling of Chen and Yu (2019), this longitudinal study took place for a semester-long and was conducted on stages that signify the interventions and data collection. Table 1 briefly presents the interventions and data collections.

Table 1. The Interventions and data collections

<table>
<thead>
<tr>
<th>Week</th>
<th>Interventions</th>
<th>Data Collection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>Introduction to English presentation and practices</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>PT-1: Presenting one's self</td>
<td>PSE-1</td>
</tr>
<tr>
<td></td>
<td>Graded for categorizing SS into low, moderate, and high group</td>
<td></td>
</tr>
<tr>
<td>5-7</td>
<td>Feedback on PT-1, preparing and practicing for PT-2. Topic: Human resources in business</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>PT-2: Human resource in business: Its importance and how to improve the quality. It’s graded for the midterm exam.</td>
<td>PSE-2</td>
</tr>
<tr>
<td>12</td>
<td>PT-3: Presenting business tables, charts, and graphs such as sales reports, business growths, financial statements</td>
<td>PSE-3</td>
</tr>
<tr>
<td>13-15</td>
<td>Feedback on PT-3, preparing and practicing for PT-4: Presenting products to customers</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>PT-4: Presenting products to customers. It’s graded for the final exam.</td>
<td>PSE-4</td>
</tr>
</tbody>
</table>

Notes:
PT: presentation task; PSE: presentation self-efficacy.

The PSE-1, PSE-2, and PSE-3 data were collected before the participants delivered the presentation, while the data of PSE-4 were collected after they completed the presentation. Preparing and practicing for PT covered reading on the topic assigned, classroom and group discussions, vocabulary development, and presentation practices, either individual or group presentations. PT-1 was an individual. PT-2, PT-3, and PT-4 were conducted based on the participants' group (individual, homogeneous group, or heterogeneous group). Based on a survey, the mean scores of Task Difficulty rating were obtained. This rating indicated the participants' perception of PT difficulty. On a scale of 1 to 5, the mean score of PT-1 was 2.290, PT-2 was 2.523, PT-3 was 2.766, and PT-4 was 2.617. Knowing these difficulty ratings is essential, as students' perceptions of task difficulty may influence their self-efficacy (Lee & List, 2021).

Data analysis
Before the main analysis was conducted, the data went through a normality test to see whether the data were normal. Then, they went to descriptive and inferential analysis using the SPSS v.25 application. Mean scores, minimum and maximum scores, and standard deviation were identified. Mean scores were compared, and the results were interpreted.

Results
Indonesian ESP undergraduate students' English PSE development
The first research question to answer in this study is how the Indonesian undergraduate ESP students' English PSE developed when they were exposed to mastery experience in the form
of PTs in a semester-long course. For that purpose, the four PSE data of the three groups were analyzed as a single set. The mean scores of PSE-1 and PSE-4 were compared to see whether there was a significant change in the PSE before and after the intervention. The mean score of PSE-1 is 53.458 and the one of PSE-4 is 73.336 (see Table 3). The result of the pair-sample test is presented in Table 2.

### Table 2. Paired-sample t-test of PSE-1 and PSE-4

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>1.193</td>
<td>-22.243</td>
<td>-17.514</td>
</tr>
<tr>
<td>Std. Error Mean</td>
<td>106</td>
<td>.000</td>
<td></td>
</tr>
</tbody>
</table>

The table shows that the mean difference of PSE-1 and PSE-4 is 19.878, and Sig. (2-tailed) is 0.000 (<0.05); therefore, the difference is significant. As data of PSE-1 was taken in Week 3 before the students delivered their first presentation task (PT-1) and the data of PSE-4 was taken in Week 16 as the students completed the course during the semester, the difference in the mean scores of PSE-1 and PSE-2 can be interpreted as the ESP undergraduate students under the study experienced a significant change in their English PSE. This difference signified a development of the students' PSE from the beginning to the end of interventions. The students’ PSE developed significantly during the semester as they were exposed to PTs.

A descriptive analysis of the four PSE mean scores shows the minimum, maximum, and mean scores and the standard deviation (see Table 3). PSE-1 mean score is 53.458. This is the beginning level, as the data were taken before the respondents had PT-1. It then increased significantly to 69.645, fell slightly to 69.094, and went up to 73.336. The minimum scores started with 22.00 but then increased significantly in PSE-2, increased again in PSE-3, and remained. The maximum scores showed a different pattern. It started low, increased significantly, remained high, then fell down slightly. From the standard deviation, it is informed that the scores of PSE-1 and PSE-4 were more tightly clustered than the ones of PSE-3 and PSE-4.

### Table 3. Descriptive statistics of PSE scores

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSE-1</td>
<td>107</td>
<td>22.00</td>
<td>78.00</td>
<td>53.458</td>
<td>12.972</td>
</tr>
<tr>
<td>PSE-2</td>
<td>107</td>
<td>33.00</td>
<td>101.00</td>
<td>69.645</td>
<td>14.208</td>
</tr>
<tr>
<td>PSE-3</td>
<td>107</td>
<td>43.00</td>
<td>101.00</td>
<td>69.094</td>
<td>13.009</td>
</tr>
<tr>
<td>PSE-4</td>
<td>107</td>
<td>43.00</td>
<td>99.00</td>
<td>73.336</td>
<td>12.942</td>
</tr>
<tr>
<td>Valid N</td>
<td>107</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To have a clearer sense of the PSE development during the semester, Line Chart 1 graphically depicts the changes. The PSE started low, increased significantly, fell slightly, and rebounded at the end of the semester.
The chart clearly shows that the mean scores of PSE-1 to PSE-4 do not form a straight line. Instead, it raises, falls slightly, and raises again. This means that the presentation tasks assigned to them did not result in similar effect on self-efficacy development. Some factors may play a role.

The effects of individual and group presentation tasks on PSE development

The second research question of this current study is how individual and group PTs affected ESP undergraduate students' English PSE development. To answer the question, the PSE data sets of the three groups were analyzed descriptively so that the mean score of each group was obtained. The homogeneous group has 56.108, 72.973, 72.892, and 79.324 for PSE-1, PSE-2, PSE-3, and PSE-4 consecutively. The heterogeneous group has 51.618, 68.765, 67.529, and 71.912. The individual has 52.472, 67.056, 66.667, and 68.529. Line Chart 2 displays the positions of the PSE mean score of each group to show how the group’s PSE changed during the intervention.

One-way ANOVA analysis found that though the mean scores of PSE-1 of the groups show differences, these differences are not significant because the Sig. = 0.268 (> 0.05). For PSE-4, on the other hand, the differences are significant as the Sig. = 0.001 (< 0.05)) (see Table 4). The Post Hoc tests of multiple comparisons of Bonferroni and Games-Howel indicated a significant difference between the homogeneous-group PT and heterogeneous-group PT, and between the
homogeneous-group PT and the individual PT. At the same time, there was no significant difference between the heterogeneous group and the individual.

Table 4. One-way ANOVA test of the difference between PSE-1 and PSE-4

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSE-1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>409.992</td>
<td>2</td>
<td>204.996</td>
<td>1.335</td>
<td>.268</td>
</tr>
<tr>
<td>Within Groups</td>
<td>15968.569</td>
<td>104</td>
<td>153.544</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>16378.561</td>
<td>106</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSE-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>2228.072</td>
<td>2</td>
<td>1114.036</td>
<td>7.461</td>
<td>.001</td>
</tr>
<tr>
<td>Within Groups</td>
<td>15527.816</td>
<td>104</td>
<td>149.306</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17755.888</td>
<td>106</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

The gain scores of each group were obtained by subtracting the mean scores of PSE-4 from the one of PSE-1. These gain scores may indicate how much the ESP undergraduate students' PSE had developed. The homogeneous-group PT had the highest gain score (23.216). The heterogeneous-group PT stayed in the middle (20.294), and the individual PT had the lowest gain score (16.056).

Two research findings can be presented here. The first finding concerns the PSE development of the three different groups. Line Chart 2 shows that the three groups exhibit a similar pattern of development. It was low at the beginning, increased significantly as the participants were preparing for PT-2, declined a little as they were having PT-3, and finally rebounded as they completed PT-4. It can be inferred that task types, which in this study were individual and group PTs, did not affect the pattern of PSE development. Either group presentation or individual presentation tasks had a similar pattern of development. The second finding is the effectiveness of the task types in developing PSE. The gain scores show that group PTs developed the ESP undergraduate students' PSE more effectively than the individual PTs did. In addition, the homogeneous-group PT was more effective in developing PSE than the heterogeneous-group PT was.

Discussion

The first finding of this study is that presentation tasks as a form of mastery experience effectively developed English presentation self-efficacy. By doing the task of presentations, the ESP undergraduate students under study gained confidence in delivering English presentations. This finding aligns with Bandura's source of self-efficacy. Mastery experience is the strongest factor affecting self-efficacy development (Bandura, 1997; Palmer, 2006; Usher & Pajares, 2008; van Dinther et al., 2011; Wright et al., 2016). A high efficacy expectation for a particular task is enhanced as a person successfully completes the task at hand (Ferrell & Barbera, 2015). Amirian and Tavakoli (2016) also found that students' experience in making presentations positively relates to oral presentation self-efficacy. A manageable presentation task resulting in high achievement positively affects subsequent self-efficacy of a similar task (Honicke et al., 2023). The finding of the study also supports the study of Zhang et al. (Zhang et al., 2020), suggesting a unique contribution of mastery experience on presentation self-efficacy development. At the same time, the study negates the study of Huang et al. (2020), which suggests that mastery experience alone is ineffective in enhancing self-efficacy. Huang claimed that mastery experience is effective only if it is presented with the other three sources of self-efficacy: vicarious experience, social persuasion, and affective and psychological states. However, this study clearly shows that the
effect of a mastery experience on self-efficacy development is not the same. In the study, for example, students made gains in PT-2, but it dropped in PT-3, though finally, it rebounded in PT-4. Other factors may play a role in this development.

Though not surprising, the study found that group presentation tasks were more effective in developing the ESP undergraduate students' English PSE. It has long been acknowledged that group work offers many benefits in academic and social contexts. Students can help and strengthen one another and provide mutual assistance, social support, and feedback. All are important for developing confidence. Attitudes and commitment to task completion are positively affected (Situmorang, 2021). These can be among the reasons why group work in this current study was more effective in developing students' self-efficacy than individual work was. This finding supports the study of Öntaş and Tekindal (2015), suggesting that group work positively affected self-efficacy development. However, debates are going on concerning the heterogeneous/homogeneous groupings. The heterogeneous grouping advocates, such as Webb (1989) and Slavin (1987), have long claimed that heterogeneous grouping is better because both low achievers and high achievers can get mutual benefits. The supporters of homogeneous grouping, such as Fuchs et al. (1998) and Robinson (1990), on the other hand, argued that heterogeneous grouping gives advantages to low achievers but not to high achievers. High achievers in heterogeneous groups worked less effectively and produced lower-quality work. The homogenous group in this study was proven more effective in developing the ESP undergraduate students' PSE than the heterogeneous group was. The students who worked in a homogeneous group seemed to be more easily tuned in with one another and shared similar expectations of performance level. These helped them work more conveniently and share mutual contributions and commitment to task completion. Low achievers working in heterogeneous groups experienced higher anxiety and stress as they had to keep up with high achievers. Being unable to contribute mutually and moving in the same phase as the high achievers lowers their efficacy. Being graded for the exam can be another factor causing heterogeneous groups to be less effective. High achievers in heterogeneous groups seemed worried about the group performance and burdened for not losing points.

Some other findings of the current study deserve discussion. The first is the low mean score of PSE-1. As it was collected on Week 3 of their semester, students mostly still relied on the background knowledge and learning experience acquired during their high school years, which, unfortunately, the majority of Indonesian high school students still have many speaking problems (Kirkpatrick, 2012; Rahmat & Coxhead, 2021; Wulandari et al., 2022; Zaid & Sarjiyati, 2018). Moreover, when it is about making presentations, it is a skill that is literally hard to master (Bankowski, 2010). Research suggests that Indonesian students' presentation skills are still under the expectation (Hanifa & Yusra, 2018). The low mean score of PSE-1 reflects the difficulty, anxiety, and low self-confidence in doing an English presentation. However, as they completed PT-1, the students' PSE grew. They gradually developed a positive sense of self-efficacy. This supports the findings of previous studies on the significant and dominant role of mastery experience in developing self-efficacy.

Task difficulty can be the next issue in developing PSE. The slight drop of PSE-3 from 69.645 (PSE-2) to 69.094 (PSE-3) could be associated with task difficulty. PT-3 was a task on presenting a table, chart, or graph and was considered the most difficult task as it has the highest mean score of task difficulty rating. Task difficulty is a contextual factor that affects the reciprocal relationship between efficacy and achievement (Honicke et al., 2023). This aligns with the theory of reciprocal determination, stipulating that personal, environmental, and behavioral factors
mutually interact and influence each other (Bandura, 1978). The study by Lee & List (Lee & List, 2021) involving 215 undergraduate students in the USA found that self-efficacy was associated with students' rating of task difficulty. Task importance can be the last point deserving attention. The increasing score of PSE-2 and PSE-4 could be due to the statuses of PT-2 and PT-4, which were graded for mid and final terms. Students usually perceive exam scores as high-stakes factors in their learning success (Bai et al., 2020). Therefore, they exert more learning efforts by preparing better and practicing more. This practice eventually led to their more robust sense of confidence. Therefore, task importance can have a moderating effect.

The findings of the current study bring some implications. Since the ability to use the target language communicatively is an important indicator of successful language learning (Fitriati et al., 2021), English presentations need to be intensively taught to ESP students. Presentation and communication skills for ESP students are crucial as they can help them find and succeed in their jobs after they graduate. ESP curriculum needs to include presentation and communication skills to be the core skills of the subject. The ESP English teachers must also improve their teaching strategy as teachers play a key role in students learning (Rosyidah et al., 2022). As many students perceive that doing English presentations is a difficult and threatening job, developing self-efficacy in the first place is profoundly urgent. Teachers and educators can start by assigning them to an easy and manageable task on a familiar topic. Several tasks with graded difficulty need to be prepared during the semester so that students can gradually develop confidence. Group-work PTs should be given more frequently than individual PTs, and grouping is set based on the student's competence. A low-achieving student works together with a low-achieving student. Similarly, a high-achieving student should work together with a high-achieving student.

Conclusion

The current study proved that the ESP undergraduate students successfully developed their English PSE as they were assigned to deliver presentations. This emphasizes the significance of mastery experience in one's self-efficacy development. However, the effect of doing presentations on self-efficacy may be affected by other factors, such as presentation task difficulty and task importance. High-stake tasks draw higher efforts, which lead someone to a higher level of efficacy. The second finding deals with group work. Group presentation tasks are more effective in developing the non-EFL students' English presentation self-efficacy than individual tasks are. The gain scores of both heterogenous and homogeneous group tasks outperformed individual tasks. In addition, a homogeneous group is more effective than a heterogeneous group.

The current study has limitations. Among the four sources of self-efficacy development, it focused only on the mastery experience. Future research should extend the scope by investigating all the sources, such as modeling, social persuasion, and affective states, individually or in combination. In addition, the study was conducted in classes where regular teaching and learning practices took place. Teachers' modeling and encouragement might not be easily avoided. Future researchers are expected to conduct research on a similar topic but with interventions on the four sources of self-efficacy development. Having an experiment involving four groups in which each group receives a single source of self-efficacy will be very interesting.

Declaration of conflicting interest
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References


Grant-Smith, D., Cathcart, A., & Williams, P. (2016). Enhancing management students’ professional presentation skills through self & peer assessment calibrating judgement using the 3D presentation framework. https://api.semanticscholar.org/CorpusID:149341493


Appendix: English presentation self-efficacy questionnaire

<table>
<thead>
<tr>
<th>No</th>
<th>Statements</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>I can appropriately greet the audience.</td>
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<td>2</td>
<td>I can introduce myself to the audience well.</td>
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<td>3</td>
<td>I can present the purpose of my presentation.</td>
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<td>4</td>
<td>I can present the outline of my presentation.</td>
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<td>5</td>
<td>I can elaborate on the topic and subtopics of my presentation</td>
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<tr>
<td>6</td>
<td>I can present facts and or examples relevant to my topic.</td>
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<td>7</td>
<td>I can organize my presentation in such a way that it is easy to follow.</td>
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<td>8</td>
<td>During my presentation, I can talk in grammatically correct English.</td>
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<td>9</td>
<td>During my presentation, I can use appropriate words and phrases.</td>
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<tr>
<td>10</td>
<td>During my presentation, I can pronounce English words and phrases correctly.</td>
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<td>11</td>
<td>During my presentation, I can make interaction (eye contact) with the audience</td>
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<td>12</td>
<td>During my presentation, I can speak with low anxiety (not nervous).</td>
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<td>13</td>
<td>I can make appropriate gestures during my presentation.</td>
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<td>14</td>
<td>I can summarize the topic of my presentation.</td>
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<td>15</td>
<td>I can close my presentation well.</td>
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