EFL teacher self and collective efficacy scale (ETSCE): Developing efficacy measures in teaching EFL

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ABSTRACT
This study aimed to develop a self- and collective efficacy measure for Indonesian EFL teachers focusing on teaching responsibilities, undertaken student advisory, coping English as classroom communication, English milieu, and institutional tasks. This study focused on demonstrating the development and validity of EFL Teacher Self- and Collective Efficacy Scale (ETSCE). The study used a quantitative research approach with cross-sectional survey research design. There were sixty-two EFL teachers involved in the study chosen using a voluntary sampling technique. Results showed that Content Validity Ratio (CVR) index was .5 with four panelists arguing valid with no revision. The internal consistency test showed a very highly reliable ($\alpha = .977$) with no negative value in Inter-Item Correlation, which indicated all items measured the same underlying characteristics. Another result showed that all sub-scales in both self- and collective efficacy were categorized in a very highly reliable ($\alpha > .7$) Therefore, the final ETSCE

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produced by this study is valid and reliable and can be a reference for those who have sought to study self- and collective efficacy in teaching EFL in Indonesia.

**Keywords:** Teacher self-efficacy; Collective efficacy; Efficacy measures; Indonesian EFL teachers

1. Introduction

Perceiving a high sense of efficacy has been proven by many scholars to be powerfully interconnected with teacher’s performance (Asaloei et al., 2020; Poulou et al., 2019; Tschannen-Moran, Hoy & Hoy, 1998; Tschannen-Moran & Hoy, 2001). Tschannen-Moran and Hoy (2001) convey that teachers with higher self-efficacy demonstrate better teaching enthusiasm, meaning that they enjoy their profession more and always see threats as challenges instead of fear (Bandura, 1994; Hussain et al., 2022). Similarly, numbers of researchers portray that teachers with high collective efficacy are always exposed to better collaborative works to achieve greater attainments (Bandura, 1977; Loughland & Ryan, 2022). These typical teachers are indeed more able to undertake both pedagogical and non-pedagogical responsibilities than those who perceive slightly null efficacy (Pratama & Lestari, 2018). As a result, these teachers are distant from psychological problems such as stress and burnout that can jeopardize their emotions as well as their performances (Ansley et al., 2021; Skaalvik & Skaalvik, 2009; Skaalvik & Skaalvik, 2017). Moreover, they will never commit to teacher absenteeism, a condition where teachers are less-motivated to fulfill their roles (Analytical and Capacity Development Partnership, 2014).

In regard to measuring efficacy, many international scholars have worked on developing a valid measure to reveal either teacher self- or collective efficacy (Burić & Kim, 2020; Goddard, Hoy, & Hoy, 2000; Qadach et al., 2020). Unfortunately, those measures might be irrelevant for different situations. In other words, the measures are indeed context-dependent (Berg & Smith, 2016), one questionnaire might not apply to other fields and settings (Al-Shukri, 2016; Swanson, 2014). For instance, a questionnaire developed for depicting Taiwanese EFL teacher efficacy is only valid in Taiwan settings (Liaw, 2017) and is irrelevant to Turkey or Indonesia settings. By looking at the importance of the validity level to the setting applied, the availability of measures initiated by different settings becomes vital. Moreover, such measure construction should be undertaken by relevant development and validation procedures.

In Indonesia, to the best of our knowledge, there has been no study unearthing how to develop and validate self- and collective efficacy measures in teaching EFL, especially focusing on the subscales of teaching responsibilities, undertaken student advisory, coping English as classroom communication, English milieu, and institutional tasks. Though, there is an interest in researching all-related self- and collective efficacy topics within the Indonesian context (Basikin, 2006; Lailiyah & Cahyono, 2016; Syamsu, 2018; Kamil, Mukminin, & Kassim, 2013). Unfortunately, the previous studies have not included the measurement of both pedagogical and non-pedagogical responsibilities.
Filling that gap, this study aims at providing a valid Indonesian EFL teacher self- and collective efficacy scale named ETSCE that focuses on teaching responsibilities, undertaken student advisory, coping English as classroom communication, English milieu, and institutional tasks. The research question formulated in the study is: How is the ETSCE developed? and, Is the developed ETSCE valid and reliable? This study covers the development and validation of ETSCE including but not limited to its content, format, and style. The questionnaire with six Likert scales only copes with the field of teaching EFL which includes five factors namely accomplishing teaching responsibilities, doing student advisory, using English for classroom communication, creating English milieu, and accomplishing institutional tasks. Further, the final ETSCE produced by this present study can be a pioneer of teacher efficacy measures used by those who have sought to study teacher self-efficacy (SE) and collective teacher efficacy (CE) in Indonesia.

2. Literature review

2.1. Teaching EFL in Indonesia

As stated in the Law of Teachers and Lecturers Number 14 Year 2005, Indonesian EFL teachers are mandated to conduct both pedagogical and non-pedagogical responsibilities (e.g., conducting student advisory, self-development, and institutional tasks). Regarding the pedagogical responsibilities, Indonesian EFL teachers are responsible to bring English into a more authentic real-world situation, where different regions in Indonesia must understand English diversely that affect the cross-cultural understanding (Akbari & Razavi, 2016; Joraboyev, 2021). Moreover, they must be able to create a good English milieu in order to support the English acquisition process. A perfectly settled English milieu will also provide an opportunity for students to actualize their conceptual knowledge into more practical (Munandar & Newton, 2021). For instance, Indonesian EFL teachers along with the school stakeholders can promote an English-day program with many English posters and wall-magazines to give a more English atmosphere (Ying et al., 2018). Some studies believe that a good conception of the English milieu existing in a school will help enhance a student’s English learning process (Muchsonny et al., 2021). At last, they must be able to promote English as a classroom communication or instruction to support their lesson preparation, including but not limited to the lesson plan, materials, and assessments (Pratama & Lestari, 2018). Therefore, their pedagogical responsibilities are indeed complex.

Further, Indonesian EFL teachers must carry out non-pedagogical responsibilities such as student advisory, self-development, and institutional tasks. In connection with student advisory, teachers must be ready to do consultation and advisory programs when students get troubles during the learning process (Supriyanto et al., 2020). They must also give an immediate response to those who had family issues that might affect the success of the learning process. Besides, they are required by the school to attend several seminars and self-development programs and do some administrative stuff (Sancar et al., 2021).
These additional burdens might put more pressures on them, thus, Pratama and Lestari (2018) claim that there is a possibility of the existing teacher absenteeism due to overloaded works. Once they experience intense stress, their efficacy in teaching EFL might get lowered due to catastrophic stress and burnout (Eyüp, 2022; Fabelico & Afalla, 2020; Kim & Burić, 2020). Therefore, the present study aims to generate a measure that fits the context of teaching EFL especially focusing on teaching responsibilities, undertaken student advisory, coping English as classroom communication, English milieu, and institutional tasks.

2.2. Teacher self and collective efficacy (TSE and CTE)

Teacher’s personal efficacy can also be known as teacher self-efficacy (SE). Bandura (1977) defines perceived self-efficacy as one's belief in carrying out specific tasks to achieve the best outcome; similarly, SE can be defined as a teacher's belief in carrying out courses of action to enable their students to achieve the best results (Gibson & Dembo, 1984; Tschanne-Moran & Hoy, 2001). SE is more concerned with the teacher's self-efficacy than with the teacher's degree of competence (Bandura, 2006; Tschanne-Moran, Hoy, & Hoy, 1998; Skaalvik & Skaalvik, 2010). According to Tschanne-Moran, Hoy, and Hoy (1998), it is "an important distinction because people regularly overestimate or underestimate their actual abilities, and these estimations may have consequences for the courses of action they choose to pursue." Furthermore, its domains are diverse across different activity settings, levels of demands within activity settings, and ambient factors to facilitate performance (Bandura, 1977). In other words, good SE contributes a key aspect to dealing with teachers' tasks and challenges, which include deciding the outcomes of their performance.

Furthermore, another sort of teacher efficacy that influences teacher duties and difficulties is known as collective teacher efficacy (CE). This type has occurred for more than a decade due to the wider growth of SE up to engaging more institutional scope dealing with other stakeholders at school and self-belonging to the institution (Goddard & Goddard, 2001; Tschanne-Moran & Barr, 2004; Skaalvik & Skaalvik, 2007; Klassen, 2010; Versland & Erickson, 2017; Voelkel Jr. & Chrispeels, 2017). CE is defined by Donohoo (2017) as both perceptions and judgments directed against a group of teachers or educational instructors based on their skills to improve student performance. Since many studies have confirmed that CE is associated with student achievement (Goddard, Hoy, & Hoy, 2000; Tschanne-Moran & Barr, 2004), it appears to be hampered by variations in teacher self-efficacy (SE), which contributes to the successful negotiation in a joint share to carry out courses of action (Bandura, 1997; Tschanne-Moran, Hoy, & Hoy, 1998). As a result, effective TE will produce greater results in fulfilling teacher tasks and challenges in the future.

Assuming that both SE and CE are important in the issue of teachers executing their responsibilities and overcoming challenges, there must be sources of information influencing SE and CE success levels. Personal accomplishment, vicarious experience,
verbal persuasion, and psychological arousal are four main aspects of the advancement of both efficacies, according to Bandura (1977, 1986). However, when establishing the concept of social learning theory, Bandura (1971) already discusses the four sources of information indirectly. Along with theory formation, the four sources are now more commonly referred to as mastery experience, vicarious experience, social persuasion, and emotional state in a variety of research studies (Goddard, Hoy, & Hoy, 2000; Shambaugh, 2008; Derrington & Angelle, 2013; Anam & Stracke, 2016; Donohoo, 2017; Liaw, 2017; Cogaltay & Karadag, 2017); they are also becoming crucial as major determinant variables in the education area in terms of the growth of SE and CE. The four elements are thus the first examined feature in depicting teachers' efficacy.

Aside from the four basic sources, some new research suggests the presence of other components. Howardson (2015) asserts three additional sources taken under the achievement goal orientation framework, namely learning, goal-oriented performance, and goal-avoided performance, that are relevant to organizational training research. The three additional sources are drawn in response to Usher and Pajares' (2009) analysis, which did not apply analytical approaches in establishing the real support of various sources. Furthermore, Britner and Pajares (2006) agree that gender is most likely a factor in altering efficacy levels, but this sort of source of information is still contested to this day because many studies contradict their hypothesis (Lin, 2015). Another study in education deals with uncovering other probable causes of self-efficacy in student instructors and determining the complete components needed to construct their efficacy (Oh, 2011). Oh (2011) proposes nine sources of efficacy in his study, including four of Bandura's (1977) primary efficacy sources and five additional aspects covering support from cooperating teachers, university training, capacities or skills, personality characteristics, and motivation. Because efficacy level is indeed context-dependent, our current study states that there is a probability of arousing the other four Bandura's (1977) fundamental elements by viewing the enormous expanse of possibilities in raising new efficacy sources.

2.3. Developing TSE and CTE measures

Furthermore, the questionnaire is likely to be critical in measuring efficacy level to support this quantitative study design. The questionnaire is designed in the form of a Likert scale with the coping environment in mind. According to Bandura (1986, 2006), a questionnaire used to measure efficacy level is not universal, but rather applicable to a certain region and discipline. Nonetheless, it can be transferred from one discipline to another. As a result, it is critical to conduct research in which a generated questionnaire is tested to assess how valid the instrument is in the coping situation. Tschannen-Moran and Hoy (2001), for example, developed the Ohio State Teacher Efficacy Scale (OSTES) specifically for dealing with the Ohio State University context and is inapplicable to other contexts. They finally deal with three instrument modifications in order to achieve the
factor structure, reliability, and validity of the measure (Tschannen-Moran & Hoy, 2001). As a result, creating a suitable questionnaire becomes a concern.

What should a researcher keep in mind while creating an efficacy questionnaire? To begin, it is critical to recall which efficacy types a researcher works with. This is a critical first step in determining which referent model must be used. To show SE, for example, a researcher must employ the I-referent model to describe the personal rationale for the offered replies (Goddard, Hoy, & Hoy, 2004). The We-referent model, on the other hand, illustrates the attachment of one's beliefs to the faculty level, as in CE (Tschannen-Moran, Hoy, & Hoy, 1998; Goddard, Hoy, & Hoy, 2004).

Second, the contents of a produced instrument should cover the four major sources of information, which may be investigated in many efficacy aspects. For instance, when working in the field of education, it's critical to employ a variety of teaching efficiencies, including those that can influence decision-making, impact school resources, foster instructional self-efficacy, effectively address discipline, enlist community and parental involvement, and foster a positive school climate (Bandura, 2006). Furthermore, Bandura (2006) emphasizes the significance of using can rather than will when creating questionnaire items since can is a judgment of capability, whereas will is a statement of intention. As a result, a word employed in sketching the item contents must also be aware. When the questionnaire draft is complete, it must be tested in a study to ensure its reliability and validity before being finalized.

3. Method
3.1. Participants

This quantitative study used sixty-two Indonesian EFL teachers randomly chosen as the participants involved in this study. They came from different school locations in East Java Province, Indonesia, covering urban and suburban areas. Even though school locations were not the focus of the study, at least the participants nearly represented a variety of background locations. The teachers were currently working at Secondary School levels regardless of their teaching time allocation per week. Senior or Novice teachers were openly invited to take part in this study. In addition, they voluntarily completed the questionnaire and were not influenced by third parties or any political harm. In coping with the need to portray demographic data, they were asked to state their affiliation and their completed address, also the consent form, at the beginning of the questionnaire. There were also prerequisites to fulfill seven items of ETSCE Part I concerning personal information, such as gender, highest education degree, university status, teaching experience, school accreditation, school status, and English proficiency. Such demographic items are aimed at portraying the variety of participants. At last, three among the total participants were chosen randomly to have an interview section regarding the readability of the developed ETSCE.
3.2. Measures

This study used a questionnaire named EFL Teacher Self- and Collective Efficacy Scale (ETSCE) (see Fig 1 for the development procedures). The use of a questionnaire was suitable for this study that aimed at measuring construction, namely efficacy and making it into more observable data (Gass & Mackey, 2012). The initial ETSCE draft in English version consisted of two parts with a cover letter and consent form in the beginning. First, it covered demographic items that included seven points in a closed-ended format with multiple choice. The points revealed participants’ information concerning gender, the latest education degree, previous university category which they graduated from (e.g., public or private university), teaching experience, school accreditation, school category (e.g., public or private school), and their English proficiency respectively. School accreditation and category referred to an institution where the participants currently worked. In coping with English proficiency, ETSCE provided the participants with scores ranging from 1 to 100 so that they only needed to choose a score that represented their proficiency.

Figure 1. Procedures of developing a ready-used ETSCE

Second, by adapting to Bandura’s (2006) sub-skills in TSES contents, the second part of the initial ETSCE consisted of 30 items covering five sub-skills of efficacy in EFL teaching namely efficacy to accomplish teaching responsibilities, efficacy to do student advisory, efficacy to use English for classroom communication, efficacy to create English milieu, and efficacy to accomplish institutional tasks. In this case, 15 items for each aspect in teacher self-efficacy (SE) and collective teacher efficacy (CE) (see Table 1 for the stratification of items). This part was also in a form of closed-ended format with Likert’s summative scaling method. The use of such a method was to know the level of SE and CE with 6 points from strongly disagree to strongly agree without anchors to reduce
scaling confusion. There was no neutral option because participants might tend to choose to be neutral when they were unwilling to finish the questionnaire completion. There were 14 items of ETSCE adapted from Bandura’s (2006) efficacy scale and Gibson and Dembo’s (1984) TES which were relevant with the Indonesian context. Other items are created by the researcher according to the condition of Indonesian EFL teachers covering pedagogical matters.

**Table 1**

<table>
<thead>
<tr>
<th>Sub-skills of efficacy in EFL teaching</th>
<th>Item #</th>
<th>SE/CE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Efficacy to accomplish teaching responsibilities (Factor 1)</td>
<td>1-3</td>
<td>SE</td>
</tr>
<tr>
<td></td>
<td>16-21</td>
<td>CE</td>
</tr>
<tr>
<td>Efficacy to do student advisory (Factor 2)</td>
<td>4-6</td>
<td>SE</td>
</tr>
<tr>
<td></td>
<td>22-23</td>
<td>CE</td>
</tr>
<tr>
<td>Efficacy to use English for classroom communication (Factor 3)</td>
<td>7-9</td>
<td>SE</td>
</tr>
<tr>
<td></td>
<td>24-25</td>
<td>CE</td>
</tr>
<tr>
<td>Efficacy to create English milieu (Factor 4)</td>
<td>10-12</td>
<td>SE</td>
</tr>
<tr>
<td></td>
<td>26-27</td>
<td>CE</td>
</tr>
<tr>
<td>Efficacy to accomplish institutional tasks (Factor 5)</td>
<td>13-15</td>
<td>SE</td>
</tr>
<tr>
<td></td>
<td>28-30</td>
<td>CE</td>
</tr>
</tbody>
</table>

3.3. Data collection procedures and data analysis technique

To cope with the data collection procedures, the researchers prepared two forms of ETSCE: online and printed. The online form was made using Google Forms’ assistance for online administration and engaging with a wider scope of participants. Meanwhile, the printed one was provided to support direct administration. To reach the participants, the link of the online ETSCE form was copied and further broadcasted to multiple groups on social media such as WhatsApp and Facebook. While waiting for the online responses, the researchers did a direct administration by benefitting colleagues and EFL teacher communities which were still within a reachable radius. The researchers also interviewed three respondents who were chosen randomly and asked about their opinion regarding the readability of the ETSCE content. At last, the researcher recapped all responses and then began to work with data analysis.

The data obtained from both online and direct administration were input into IBM SPSS 25.0, the latest version. Afterward, descriptive statistics using frequency mode were used to reveal the demographic data showing the variety of the respondents. Moreover, testing the internal consistency to reveal the Cronbach’s alpha value ($\alpha$) was vital to see how reliable the items were based on the consideration of how every item in ETSCE was correlated between one another (Inter-Item Correlation) and with the total score scale (Average Item-to-Total Correlation) (Dornyei, 2007; Battacherjee, 2012). The total scores of SE (ETSCE Part II Section A) and CE (ETSCE Part II Section B) were tested for reliability and so were the five factors in SE and CE.
4. Findings and discussion

4.1. Demographic data

The ETSCE instrument contained seven items intended to reveal specific demographic data about the participants involved. These items covered gender, the latest education degree, previous university category (e.g., public or private university), teaching experience, school accreditation, school category (e.g., public or private school), and their English proficiency respectively. Table 2 shows the descriptive statistics of the demographic data revealing Mean and SD scores.

Table 2

Demographic data of the participants.

<table>
<thead>
<tr>
<th>Aspects (Items)</th>
<th>Category</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>School Location</td>
<td>Urban</td>
<td>31</td>
<td>50%</td>
</tr>
<tr>
<td></td>
<td>Suburban</td>
<td>31</td>
<td>50%</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>22</td>
<td>35.5%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>40</td>
<td>64.5%</td>
</tr>
<tr>
<td>Highest Education Degree</td>
<td>Bachelor</td>
<td>56</td>
<td>90.3%</td>
</tr>
<tr>
<td></td>
<td>Master</td>
<td>6</td>
<td>9.7%</td>
</tr>
<tr>
<td>University Status</td>
<td>Public University</td>
<td>57</td>
<td>91.9%</td>
</tr>
<tr>
<td></td>
<td>Private University</td>
<td>5</td>
<td>8.1%</td>
</tr>
<tr>
<td>Teaching Experience</td>
<td>Less than 5 years</td>
<td>40</td>
<td>64.5%</td>
</tr>
<tr>
<td></td>
<td>5 to 10 years</td>
<td>13</td>
<td>21%</td>
</tr>
<tr>
<td></td>
<td>10 to 20 years</td>
<td>5</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>More than 20 years</td>
<td>4</td>
<td>6.5%</td>
</tr>
<tr>
<td>School Accreditation</td>
<td>A</td>
<td>51</td>
<td>82.3%</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>7</td>
<td>11.2%</td>
</tr>
<tr>
<td></td>
<td>Others</td>
<td>4</td>
<td>6.5%</td>
</tr>
<tr>
<td>School Status</td>
<td>Public School</td>
<td>36</td>
<td>58.1%</td>
</tr>
<tr>
<td></td>
<td>Private School</td>
<td>26</td>
<td>41.9%</td>
</tr>
<tr>
<td>English Proficiency</td>
<td>11-20</td>
<td>1</td>
<td>1.6%</td>
</tr>
<tr>
<td></td>
<td>61-70</td>
<td>5</td>
<td>8.1%</td>
</tr>
<tr>
<td></td>
<td>71-80</td>
<td>24</td>
<td>38.7%</td>
</tr>
<tr>
<td></td>
<td>81-90</td>
<td>27</td>
<td>43.5%</td>
</tr>
<tr>
<td></td>
<td>91-100</td>
<td>5</td>
<td>8.1%</td>
</tr>
</tbody>
</table>

Table 2 recaps the participants’ background information to justify the results that would only comply with the participants’ characteristics. The teachers who came from urban schools were equal in numbers to the suburban ones even though 64.5% of them were female teachers. The teachers had accomplished their Bachelor's degrees and only six of them completed their Master's degrees. This meant that the teachers had passed the teacher training program and completed several teaching assessments, i.e., developing lesson plans, understanding students’ characteristics, teacher professionalism, and so on. Moreover, Table 2 explains that 64.5% of the teachers had a teaching experience of fewer than 5 years. This implied that the resulting data of the present study were relevant to young teachers. Young teachers were still fresh in knowledge and teaching techniques,
motivated, and energetic, however, they might experience various impromptu classroom management problems. Their English proficiency was in the range of 71-90, so they had conceived average to slightly above average scores on the English proficiency test.

4.2. Results of face and content validity

The ETSCE was tested for its translational validity covering content and face validation. Five independent panelists came from different backgrounds but were still related to education and psychology (see Table 3). They were first asked whether they wanted to do the validation or not. Once they accept the offer, then a pack covering the initial ETSCE along with the validation sheet and its scoring criteria correspond via email. Results of the translational validation showed that the initial ETSCE was valid according to its content and face validity proved by Content Validity Ratio (CVR) valued at .5 with 75% of the panelists arguing valid with no revision. Even so, some relevant panelists’ comments were considered to make better initial ETSCE. The revised ETSCE was then translated into Bahasa Indonesia by a sworn translator, of which it became the ready-used ETSCE for the present study.

Table 3
Independent panelists’ qualification.

<table>
<thead>
<tr>
<th>Expert</th>
<th>Qualifications</th>
<th>(\bar{x}) Scores</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Professor of Psychology, Department of Psychology, Germany</td>
<td>5</td>
<td>Valid, could be used without revision</td>
</tr>
<tr>
<td>2</td>
<td>Professor at Department of Teacher, Education and School Research, Norway</td>
<td>4.33</td>
<td>Valid, could be used without revision</td>
</tr>
<tr>
<td>3</td>
<td>Assistant Professor at Faculty of Psychology and Educational Sciences, Belgium</td>
<td>4.08</td>
<td>Valid, could be used without revision</td>
</tr>
<tr>
<td>4</td>
<td>Professor of Teaching Program and Educational Sciences, Australia</td>
<td>3.08</td>
<td>Valid, could be used with revision</td>
</tr>
<tr>
<td>5</td>
<td>Professor of English Education, Department of English Education, Indonesia</td>
<td>4.67</td>
<td>Valid, could be used without revision</td>
</tr>
</tbody>
</table>

In accordance with Table 3, Expert 4 coming from the field of the teaching program and educational psychology research stated that the questionnaire was valid but it required a revision before use. The problem underlined the double negations that appeared in the instrument. The double negations occurred in items 8 and 9 in ETSCE section II. The expert believed that the positive sentences created negative meanings, therefore, they tended to produce low efficacy even when the participants chose strongly agree. Item 8 “I feel insecure when speaking with students who are fluent in English” was then transformed into a negative form to produce a positive meaning namely “I don’t feel insecure when speaking with students who are fluent in English”. The revised sentence
was agreed upon by both the expert and researchers as it conveys high efficacy when the participants chose strongly agree. Similarly, item 9, “I hesitate to write more on a board or in students’ worksheet to avoid some grammatical errors” conveyed a negative meaning, which did not represent a high efficacy when the participants chose strongly agree. Hence, the negative form of the sentence was required, so item 9 was “I don’t hesitate to write more on a board or in students’ worksheet to avoid some grammatical errors.”

In addition, all experts claimed that the face was good but it needed further consideration of the ease of completing the questionnaire. For instance, the words strongly disagree into strongly agree should be stated after the instruction of ETSCE section II to give the participant candidates insight into what was meant by 1 to 6. This was indeed an important suggestion as the scale descriptions had given the participants insights into what to do with the scaling table. Moreover, some experts also reminded the researchers that, even if the items of the questionnaire were good, they must be in accordance with the Indonesian context. To ensure the similar conceptions of the experts, this present study invited the Indonesian Professor of English Education to consult with and share similar conceptions. After the discussion process with the panelists related to their comments or suggestions, the final draft was generated by referring to the experts’ recommendations.

4.3. Internal consistency reliability

Before leading to revealing the Cronbach’s Alpha (α) values, demonstrating descriptive statistics of the total scores of SE (ETSCE items number 1 to 15) and CE (ETSCE items number 16-30) became essential. The aim was to portray the center of answers given for each item and to exhibit the dispersion of answers given by the participant toward the six-points Likert scale. Table 4 exhibits the Mean and SD scores for the SE aspect while Table 5 for the CE aspect.

<table>
<thead>
<tr>
<th>ETSCE Items</th>
<th>Min.*</th>
<th>Max.*</th>
<th>M*</th>
<th>Std. Dev (SD)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 1</td>
<td>2.00</td>
<td>6.00</td>
<td>4.9355</td>
<td>1.12892</td>
</tr>
<tr>
<td>Item 2</td>
<td>2.00</td>
<td>6.00</td>
<td>4.9032</td>
<td>1.03559</td>
</tr>
<tr>
<td>Item 3</td>
<td>2.00</td>
<td>6.00</td>
<td>4.7742</td>
<td>.99863</td>
</tr>
<tr>
<td>Item 4</td>
<td>2.00</td>
<td>6.00</td>
<td>5.1613</td>
<td>.96145</td>
</tr>
<tr>
<td>Item 5</td>
<td>3.00</td>
<td>6.00</td>
<td>4.9032</td>
<td>.93580</td>
</tr>
<tr>
<td>Item 6</td>
<td>2.00</td>
<td>6.00</td>
<td>4.5806</td>
<td>1.33734</td>
</tr>
<tr>
<td>Item 7</td>
<td>1.00</td>
<td>6.00</td>
<td>4.1129</td>
<td>1.44976</td>
</tr>
<tr>
<td>Item 8</td>
<td>2.00</td>
<td>6.00</td>
<td>5.0161</td>
<td>1.22129</td>
</tr>
<tr>
<td>Item 9</td>
<td>2.00</td>
<td>6.00</td>
<td>4.4516</td>
<td>1.15531</td>
</tr>
<tr>
<td>Item 10</td>
<td>2.00</td>
<td>6.00</td>
<td>3.6935</td>
<td>1.08995</td>
</tr>
<tr>
<td>Item 11</td>
<td>1.00</td>
<td>6.00</td>
<td>4.4516</td>
<td>1.27623</td>
</tr>
<tr>
<td>Item 12</td>
<td>1.00</td>
<td>6.00</td>
<td>3.6935</td>
<td>1.40944</td>
</tr>
<tr>
<td>Item 13</td>
<td>2.00</td>
<td>6.00</td>
<td>4.8871</td>
<td>.95993</td>
</tr>
</tbody>
</table>
Table 4 portrays that item 4 got the highest $M$ score, whereas, item 12 got the lowest $M$ score. Even the present study did not focus on the dissemination of the $M$ score meaning, it tried to portray why such uniqueness occurred in the research. Item 4 was about the efficacy of student advisory with the sentence “I always care about every student’s performance, feeling and problem.” Specifically in Indonesia, good teachers were those who always cared about students’ learning performance, feelings, and learning problems. Caring about students’ learning performance referred to the conditions where teachers might give extra time to do remedial teaching processes when the students got low performances. They could consider some learning obstructions or problems that tended to influence their learning performance, including but not limited to internal and external factors. Internal factors covered self-motivation and learning anxiety. The external factors might come from school, family, and social environments, i.e., the availability of home learning supports. At last, teachers needed to understand the student’s feelings to eliminate communication barriers during the learning process. As such social standards of being good teachers existed in Indonesia, all teachers might perceive and share similar understanding, concepts, and ideas of how to feel and act like a good teacher.

In contrast, item 12 about the efficacy to create an English milieu got the lowest $M$ score. Item 12 stated, “To make an English milieu, I can invite other subject teachers to use English both outside and inside classroom activities”. This finding implied that the teachers were personally experiencing difficulties in inviting other subject teachers (e.g., mathematics and physics teachers) to use English in their learning process to create an English milieu. This probably occurred due to lack of school support in terms of a strict regulation to create an English milieu. For instance, in many suburban schools, their priority was introducing English to their students and not developing an international environment by appropriating English as the instructional language. Therefore, item 12 got the lowest $M$ score in the SE aspect.
ETSCE Items | Min.* | Max.* | M* | Std. Dev (SD)*
--- | --- | --- | --- | ---
Item 22 | 2.00 | 6.00 | 5.0645 | 1.05381
Item 23 | 2.00 | 6.00 | 4.8226 | 1.10919
Item 24 | 1.00 | 6.00 | 4.2581 | 1.26667
Item 25 | 1.00 | 6.00 | 4.0323 | 1.43684
Item 26 | 1.00 | 6.00 | 4.6452 | 1.25576
Item 27 | 2.00 | 6.00 | 4.7097 | 1.07714
Item 28 | 2.00 | 6.00 | 4.4839 | 1.18380
Item 29 | 1.00 | 6.00 | 4.1290 | 1.43131
Item 30 | 2.00 | 6.00 | 4.8710 | 1.24774

*N = 62

Table 5 depicts the M scores of items 16 to 30 that dealt with the CE aspect. All items got an insignificant M score distinction, however, item 21 got the highest M score.

The following Table 6 to Table 8 showed the results of internal consistency tests done to reveal α values for (1) the overall instrument (ETSCE Part II), (2) the overall SE (ETSCE Part II – Section A) including α values for each factor or subscale, and (3) the overall CE (ETSCE Part II – Section B) involving α values for each factor or subscale.

**Table 6**
Cronbach’s alpha value for the overall instrument.

<table>
<thead>
<tr>
<th>α Value</th>
<th>N items</th>
<th>N participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>.977</td>
<td>30</td>
<td>62</td>
</tr>
</tbody>
</table>

**Table 7**
Cronbach’s alpha values for overall SE items including the factors.

<table>
<thead>
<tr>
<th>Variables</th>
<th>α Value</th>
<th>N items</th>
<th>N participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall SE</td>
<td>.950</td>
<td>15</td>
<td>62</td>
</tr>
<tr>
<td>Factor 1: Accomplishing Teaching Responsibilities</td>
<td>.815</td>
<td>3</td>
<td>62</td>
</tr>
<tr>
<td>Factor 2: Doing Student Advisory</td>
<td>.790</td>
<td>3</td>
<td>62</td>
</tr>
<tr>
<td>Factor 3: Using English as Classroom Communication</td>
<td>.865</td>
<td>3</td>
<td>62</td>
</tr>
<tr>
<td>Factor 4: Creating English Milieu</td>
<td>.783</td>
<td>3</td>
<td>62</td>
</tr>
<tr>
<td>Factor 5: Accomplishing Institutional Tasks</td>
<td>.863</td>
<td>3</td>
<td>62</td>
</tr>
</tbody>
</table>

**Table 8**
Cronbach’s alpha values for overall CE items including the factors.

<table>
<thead>
<tr>
<th>Variables</th>
<th>α Value</th>
<th>N items</th>
<th>N participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall CE</td>
<td>.964</td>
<td>15</td>
<td>62</td>
</tr>
<tr>
<td>Factor 1: Accomplishing Teaching Responsibilities</td>
<td>.867</td>
<td>6</td>
<td>62</td>
</tr>
<tr>
<td>Factor 2: Doing Student Advisory</td>
<td>.927</td>
<td>2</td>
<td>62</td>
</tr>
</tbody>
</table>
5. Discussion

The researchers believe that teachers must be put in the leading priority concerning the successful learning process. They became the key to the bridge of knowledge and acted as the medium to transfer skills. Still few people understood that being a teacher is merely connected to teaching responsibility covering the preparedness of learning materials, tools, relevant media, and lesson planning. Moreover, a teacher must accomplish school administration kinds of stuff in which the works were numerous and took time to complete. This, absolutely, manipulated the perspective that teachers were those oppressed with many teaching and non-teaching responsibilities, where the situation might lead them to psychological issues or disorders. Therefore, the researchers laid such phenomena as our rationales in conducting the research where it was necessary to measure teachers’ self- and collective efficacy in teaching English as Foreign Language (EFL).

The theoretical and practical gaps were predetermined as, first, no previous studies and theories discussing Indonesian teachers with their anxiety and efficacy in teaching EFL and, second, no previous studies provided a reliable measure of Indonesian teacher self- and collective efficacy. This condition could not be let what it was for measuring teacher self- and collective efficacy contributed to the success of EFL learning in Indonesia. Once, teacher self- and collective efficacy could be revealed, the Indonesian teachers’ community along with the Indonesian government represented by the Ministry of Education could determine what solutions to the disappointment of Indonesian teachers. However, to the best of the researcher’s knowledge, there had been no studies conducting the development of a reliable measure for this psychological and teaching field. Hence, the present study developed a scale that could measure teacher self- and collective efficacy, particularly in the Indonesian context.

In accordance with the development results, the EFL Teacher Self- and Collective Efficacy Scale (ETSCE) was agreed to be a valid measure for examining teacher efficacy in teaching EFL. The scale was validated by five Professors in the fields of psychology,
education research, educational psychology, educational science, and English education fields \((CVR = .5, \text{ see Table 3})\). Each expert represented a different scope in developing this scale, thus, the scale was considered valid based on the science of psychology, education, English education, and research sciences. In addition, the statistical tests showed that the scale was also reliable. This typical measurement was commonly used by many researchers in developing test instruments or measurement tools (Mahran et al., 2023; Valdés, Riquelme, & Casal, 2022; Yusoff, 2019; Almanasreh, Moles, & Chen, 2019). Some research, however, did not invite multidisciplinary experts (Walsh et al., 2021; Sürücü & MASLAKÇI, 2020) but the present study must include those from various relevant backgrounds in order to validate the contents measured.

In coping with the Indonesian context, some researchers undertook some studies and developed an instrument for measuring teacher self-efficacy in different branches of science. Abduh et al. (2022) conducted a study examining teacher’s self-efficacy in speaking-based activities for art and design students. This qualitative study employed a questionnaire and interview in gaining data, however, the development of the questionnaire as a measure was still questionable. The study did not include the validity and reliability values so the instrument remained to be proven. Moreover, Rahmawati (2022) also conducted a study on EFL teacher self-efficacy in technology integration with the Technology Integration Self-Efficacy Questionnaire adapted from Wang, Ertmer, and Newby (2004). However, the study only mentioned the result of internal consistency test without explaining the results of content and face validity undertaken by relevant experts, in this case including experts in EFL, technology integration, or educational technology. By looking at the trend of the research, it was a breakthrough that the current study developed and discussed the essence of creating reliable and valid measures for Indonesian self- and collective efficacy.

As an implication, the study would be the pioneer in developing reliable and valid measurement tools especially in dealing psychology and education. Due to the number of Indonesian teachers and researchers’ interest in educational psychology especially self- and collective efficacy and the field of EFL, the present study helped to step forward the betterment of Indonesian research quality. In addition, the present study could be a reference for further those interested in the same field as this study for their upcoming scientific works. Even though the focus of the research was not similar, the present study would give a perspective in providing valid measures, especially coping with EFL teaching and self- and collective efficacy. Thus, this novelty could be theoretically and practically beneficial for Indonesian researchers, teachers, and those included in the outer cycle in learning English.

6. Conclusion

EFL Teacher Self- and Collective Efficacy Scale (ETSCE) was developed by adapting measures initiated by Bandura (2006) and Gibson and Dembo (1984). Some ETSCE items were developed to reflect the current condition of Indonesian EFL teachers’
pedagogical responsibilities. The final draft of ETSCE, the revised draft after being investigated in the study, was proven valid based on translational validity covering content and face validity. Four independent experts from different countries and scopes, of which were still related to education, psychology, and research, categorized ETSCE draft as valid with no revision. However, the comments were still considered to make the questionnaire better. Moreover, based on the reliability test, the questionnaire was in the category reliable to very highly reliable. Meaning that ETSCE had no problems related to its inter-item and item-to-total correlations. Resulting in very good validity, the final ETSCE draft produced here could be a reference for further related researchers doing research in similar topics. As the recommendation for further research, the ETSCE draft produced by this study should be examined again with a larger sample size to see the change of the Cronbach’s Alpha value. Moreover, with a very large sample size, ETSCE could be tested for factor analysis. Further, ETSCE could be used to investigate Indonesian teacher self-and collective efficacy in teaching EFL, or related topics.

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