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Factors Affecting Online Teaching Anxiety among Tertiary EFL Teachers in Taiwan: A Survey Study of Synchronous English Instruction

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ABSTRACT

Following the abrupt global outbreak of COVID-19, many countries have embraced online teaching as the primary means of ensuring uninterrupted education, requiring nearly all teachers to rapidly adapt to this unfamiliar digital landscape. This study investigated the factors that may cause anxiety among tertiary English teachers in Taiwan when they teach online in three aspects: (1) teachers' perspectives on online teaching, (2) issues that influence English teachers' anxiety, and (3) the relationship between online English teaching and teaching anxiety. A survey was conducted, and the data obtained were analyzed using SPSS v.22. It was found that teachers' technical ability was the most concerning factor that aroused anxiety. Male teachers exhibited markedly greater confidence in their technical skills than their female counterparts. Additionally, external influences, such as technical malfunctions or interactions with students, were considered crucial factors that generate teaching anxiety. The results also showed that older teachers were more anxious than younger ones. Moreover, when teachers are anxious about their performance in online teaching and the possible technical problems that may arise, they tend to feel anxious about class management. The findings of this study could be beneficial for synchronous English online teaching by providing a better understanding of the factors contributing to teaching anxiety. It is hoped that these insights will help EFL teachers identify the causes of their anxiety, enhance the quality of their online teaching, and reduce their extent of anxiety in response to unforeseen changes.

Keywords: Synchronous Online Teaching Anxiety; Teaching Ability; Tertiary English Teachers

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1. Introduction

Remote teaching has played a substantial role in education. It has been a long-term alternative mode for people who cannot go to a physical classroom to learn. Generally, it involves a wide use of technologies, such as synchronous communication tools, asynchronous platforms, and online electronic resources^[1]. The COVID-19 pandemic, which has spread globally, has led to an impromptu need for emergency remote teaching (ERT). Fortunately, with the advancement in information and communication technologies (ICTs), many countries were able to adopt online teaching as one of the main ERT modes. Providing safety and flexibility, online teaching is not only a necessity during the pandemic but relatively the best way for institutions to continue providing education^[2]. Due to the unprecedented situation, most teachers who had to adjust to online teaching rapidly were compelled to hastily deliver online courses a few weeks after the start of the outbreak and were required to develop new proficiency for accessing, designing^[3], and implementing online educational activities using available technologies^[4]. Transitioning to ERT is hardly easy for many teachers; the short amount of time they were required to plan, prepare, and develop new teaching strategies has made it doubly difficult^[1, 2, 5]. The pandemic has forced teachers to make a significant leap in ICT integration^[2], develop new competencies, explore the usefulness of various ICTs, and acquire new knowledge to become familiar with online platforms. Aside from these, they needed to devise new methods of providing timely feedback, monitoring students' online learning, and offering alternative learning content^[6].

Online teaching involves teachers transitioning from on-site to virtual teaching. Because the teachers had to adapt rapidly and dramatically, recent literature has shown that most were generally inexperienced^[7, 8], ill-prepared, and struggled with virtual teaching^[9, 10]. Novice teachers struggled to integrate technology in a virtual teaching environment^[11], and many were overwhelmed in learning how to use the devices needed to teach online. They also doubted whether all teachers were ready for the sudden switch to ERT during the COVID-19 pandemic^[12]. Even if the teachers were prepared for ERT, the unfamiliar teaching modalities and the latest digital technologies might still influence their readiness and may cause anxiety. During the initial period, many teachers practiced online teaching and devoted

themselves to understanding and solving the problems they encountered^[13]. Taiwanese teachers are no exception; they must also be prepared for this sudden change. The urgency of the sudden shift from on-site to online teaching necessitated teachers to accept the situation, which may have helped them to adapt, but literacy of technologies and personal reasons may have likely contributed to teachers' anxiety in online teaching^[14].

Before the COVID-19 pandemic, most English courses were taught face-to-face and in classroom settings, and most English teachers regarded online resources as teaching supplements. When English teachers were required to teach students in a virtual environment at such short notice, some experienced anxiety due to several factors. To identify these factors, the current study explored the teachers' perspectives on online teaching, examined the factors that affect English teachers' anxiety in teaching online, and investigated the relationship between online English teaching and teaching anxiety. The research questions of this study are as follows:

Q1: What are the participants' perceived levels of online teaching ability (OTA) and teaching anxiety (TA)?

Q2: What are the differences in OTA and TA relative to the participants' individual features?

Q3: Is there any relationship between OTA and TA?

2. Literature Review

2.1. Online Teaching

With the progress of ICTs, online teaching has become the primary tool of distance education; it is a convenient and accessible way to provide an academic environment without being limited by distance and location, allowing people to learn without time and place restrictions. Furthermore, synchronous online teaching could do nearly the same things as on-site teaching, such as prompt explanation, real-time feedback, or group discussion. Online teaching has many advantages; however, it still presents problems that students and teachers have to cope with, such as the lack of facility knowledge^[15]. Teachers, they need a wide range of support to help them create digital teaching content, use technologies appropriately to deliver course content^[16], and obtain course materials to provide tasks that intrigue virtual interaction. They also need skills to carefully select techniques and tools

that encourage participation and to know how to compensate for nonverbal communication that occurs when students' cameras are turned off^[17, 18]. A study that recruited 186 EFL teachers demonstrated the differences between blended and online courses^[19]. It was found that online courses were less effective because professional development is required, suggesting that EFL teachers need to develop newer roles, strategies, and technology integration for online teaching.

2.2. Teaching Anxiety

Anxiety is defined as fear, worry, and tension. Teaching anxiety involves anxiety in preparing and implementing classroom activities^[20, 21]. When teachers encounter difficulties and negative emotions in teaching, it may cause them anxiety^[22]. There are many reasons that result in teaching anxiety. For in-service teachers, it was correlated with self-esteem^[23]. Meanwhile, other studies found that teaching experience is correlated with anxiety levels^[24, 25]. Novice teachers are usually the ones who experience a high level of anxiety^[26]. In particular, teachers with less than five years of experience were reported to have higher levels of anxiety when compared to teachers with more than five years of experience^[27]; however, the level of anxiety is lower in experienced teachers than in inexperienced teachers^[20]. In other words, gaining teaching experience is essential for lowering anxiety levels^[28].

Classroom management can easily influence teachers' feelings. The dynamic interactive relationship between teachers and students could lead to teachers' positive emotions^[29]. Teachers' satisfaction and students' motivation and discipline in class are strongly related^[30, 31]; teachers' achievements are heavily linked with students' engagement and classroom discipline. Many studies have demonstrated that the student's lack of discipline, such as unruliness in class and rudeness to teachers, is considered the most significant element that causes teachers' stress^[32, 33]. Moreover, students' lack of engagement and unpleasant classroom behaviors result in unhealthy interactions, which damage the relationship between teachers and students^[34]; in turn, this increases teachers' anxiety, stress levels, and anger and causes emotional exhaustion^[29, 30, 32, 35–37].

A negative correlation was also found between teaching anxiety and age^[25]. Another study suggested that young male teachers had higher levels of anxiety than female teachers,

regardless of age^[38]. Additionally, teachers' lack of content knowledge, pedagogical knowledge, proficiency, perceived difficulty, and negative perceptions of teaching content result in more substantial teaching anxiety. In contrast, teachers with a high level of self-efficacy have a lower degree of anxiety. Moreover, there were direct associations between perfectionism and emotional exhaustion^[39]. Other probable factors that may lead to teaching anxiety are teachers' concerns about their own reputation^[40], negative classroom experiences, and insufficient confidence in teaching the course material^[41].

In teaching English as a foreign language (EFL), the fear of negative evaluation is a potent source of teaching anxiety for pre-service EFL teachers^[42]. Further, other factors like problems related to classroom management^[43], unpleasant teaching experiences, lack of teaching experience, and problematic classroom experiences are also primary teaching anxiety sources. In short, pre-service EFL teachers who lack teaching experience suffer from teaching anxiety the most, and novice and pre-service teachers seem more anxious when compared to experienced teachers^[42].

2.3. Online Teaching Anxiety

Technical anxiety, one of the negative physical emotions that generate fear, apprehension, and agitation, is caused by the use of computers or ICTs^[44]. Nowadays, the use of technologies, tablet PCs or smartphones in particular, plays an essential role in increasing the effectiveness and efficiency of the learning and teaching processes. Female teachers seemed more anxious about using tablet PCs than males^[45]. Moreover, even if the school provides hardware and software equipment to promote teaching instruction, many teachers are still hesitant or anxious about using technology because of the complex and diverse equipment.

Since the COVID-19 pandemic started, the demand for online teaching has increased; teachers commonly use online platforms such as Zoom or Teams for online teaching, with their teaching materials uploaded to Google Classroom or Schoology^[9]. To be successful "online" teachers, they need to be adaptable and able to meet a brand new and unpredictable situation on short notice^[46–48]. They not only have to rapidly acquaint themselves with technical platforms and learn immediately to operate the latest online tools to deliver lessons, but they also have to adjust the curriculum, activities, and assignments to make them suitable for online

learning and develop video demonstrations based on student needs and access to technology^[46]. Although online teaching could be convenient and a refuge from the pandemic, the sudden demand to switch to teaching online may cause teachers' anxiety if they are unfamiliar with the required software and do not have the skills to fix technical malfunctions or failure, including loss of connectivity and lack of access to technology, resources, and teaching platforms^[46]. The stress placed on teachers during the pandemic to quickly adjust and change teaching practices to accommodate their students' learning needs also presented challenges^[49]. Most teachers explained that working remotely restricted their ability to make personal connections with their students and made a negative impact on their mental health^[11]; they experienced a considerably higher workload and level of stress^[49] and expressed negative feelings associated with delivering course content without good interaction and Internet access^[43, 50]. In addition, there is a positive relationship between computer anxiety and age among Iranian EFL teachers^[51]. It is said that the older the EFL teachers are, the higher the level of their computer anxiety is; teachers with more teaching experience were less technologically prepared than those with less teaching experience^[52].

2.4. English Teaching Anxiety

Factors related to the target learner group, lack of equipment and teaching aids, teaching particular skills like listening and speaking, teaching grammar, and implementing new materials in the classroom are associated exclusively with foreign language teaching-specific stress^[53]. Many English teachers reported that managing class time, giving instructions, responding to students' needs, and evaluating students' learning conditions can cause them anxiety. Other reasons that make EFL teachers feel anxious about English teaching include incompetence of the target language, student-teacher relationship, lack of educational resources, classroom management, fear of having an imperfect performance, fear of failure, making language proficiency-related mistakes, using the mother tongue, teaching ability, and unfair evaluation by deans and students^[54, 55].

A low level of language proficiency also results in FLTA (foreign language teaching anxiety)^[20]. A study revealed that the main source for teachers' FLA (foreign language anxiety) was worrying about their English proficiency^[55]; that is,

they were anxious about speaking "not good enough" English. They feared negative outcomes and had low confidence in English competence. Furthermore, teachers were often worried when they perceived that their ability in grammar was not enough to teach students^[56]; therefore, when students are highly concerned about the teachers' accuracy in grammar and pronunciation with the second language they are teaching, the latter tend to feel anxious about the students' evaluation.

Various studies showed that other EFL teaching anxiety provokers were failing to understand others and worrying about their teaching effectiveness^[54, 57-60]. Some studies have focused on exploring pre-service EFL teachers^[25, 57-63] while others have found that the anxiety of non-native English teachers was higher with age^[25]. Overall, in-service EFL teachers experience FLTA at a low level^[64]. More precisely, their self-perception of the target language proficiency is not a source of FLTA. However, some teachers may have their own requirements for the ideal target language ability, so while under the language level they prefer, teachers would struggle with anxiety^[56]. Finally, the lack of students' interest in foreign language classes is also a cause of FLTA.

3. Methods

3.1. Research Context

The duration of the COVID-19 outbreak has affected school education in the past two years, which led to online teaching replacing traditional classroom teaching at every level of educational sectors. Although authorities in Taiwan had informed schools to prepare against the spread of the virus through online education, not all were ready to transition and were familiar with the technological skills for implementing online teaching thoroughly. Teaching under such circumstances arouses teachers' anxiety and apprehension. Therefore, this study aims to determine and understand the factors that affect teachers' anxiety in online teaching in the hopes of reducing the extent of anxiety among teachers in their pedagogical practices.

3.2. Participants

With 12% of the response rate and 13 invalid samples removed, 263 college English teachers were recruited to participate in the study. They are comprised of 58 males

and 205 females, ranging in age from 21 to 64 years old, with one to more than 20 years of teaching experience, who came from various regions in Taiwan. In the study, purpose sampling was utilized to invite as many subjects as possible due to a group of non-probability sampling techniques. Tertiary English teachers were selected because they have the characteristics needed for the research sample.

3.3. Research Instruments

The instrument used a self-report questionnaire adopted from the Teaching Anxiety Scale (TCHAS)^[65], which included demographic information including age, gender, year of teaching experience, and education. The questionnaire assessed participants' feelings and apprehension while teaching online. The participants responded to each statement using a 5-point Likert scale (1 for never and 5 for always) to assess their level of anxiety. A high score on all items reflects the high extent of admitted anxiety. This two-section self-report questionnaire contains two-fold responses: one to assess their anxiety about teaching as a profession and the other to assess their emotional response to different teaching situations. The first aims to determine the extent of perceived teaching ability, and the second aims to address the degree of anxiety the participants have when encountering setbacks while teaching.

3.4. Data Collection Procedure and Data Analysis

The online questionnaires were distributed and collected from 1 March to 30 October 2021 to the tertiary English teachers whose e-mail contact information was provided on their universities' websites in Taiwan; then, the data were entered in the statistical software SPSS version 22 and analyzed using Descriptive statistics. Further, the t-test was used for the mean comparisons of different groups, ANOVA for the mean comparison among different groups, and the Pearson correlation coefficient (r) for the relationship of teachers' perceived abilities with the extent of teaching anxiety.

4. Discussion

The results of the analysis of the collected data were employed to answer the proposed research questions.

4.1. Perceptions of OTA and TA

The first section of the questionnaire illustrates the teachers' perceived level of online teaching abilities, including teaching, technical, and management abilities. These represent the teachers' concerns and values as a professional for online teaching success. The results of the descriptive analysis are shown in **Table 1**. Moreover, the teachers' perceived level of teaching anxiety is also presented.

As shown in **Table 1**, the mean score of online teaching ability (OTA) was above average ($M = 3.38$), indicating that tertiary English teachers in Taiwan are confident in their teaching ability, technical ability, and management ability for implementing online teaching. On the other hand, the teaching anxiety (TA) was below average ($M = 2.75$), which illustrates that teachers are not very anxious about implementing online teaching. Furthermore, the means of the three factors (teaching, technical, and management abilities) were 3.27, 3.89, and 2.97, respectively, as shown in **Table 2**. Among them, technical ability had the highest score, which means that most teachers perceive that they possess the required technical skills for online teaching. In contrast, management ability had the lowest score, indicating that most of them perceive that they lack this ability. The result showed that teachers are confident with their technical ability for online teaching but not their ability to manage online instruction. In addition, the mean of questionnaire item 4, "I have the ability to use computers to teach English online," was 4.21, indicating that teachers have a high perceived technical ability. On the other hand, item 7, "I think online English teaching could evaluate the students' learning situations," had the lowest score (2.62), indicating that most teachers were less confident in managing students' learning to achieve better learning outcomes.

Table 2 also shows the means of the anxiety that teachers experienced during online teaching. The factors included anxiety about teaching ability ($M = 2.36$), anxiety about technical ability ($M = 3.04$), and anxiety about management ability ($M = 2.87$). Among them, anxiety about technical ability had the highest score, indicating that teachers are most concerned about this; thus, it causes anxiety the most. The mean of item 19, "I think being affected by the network delay while online English teaching makes me anxious," was 3.62, and item 20, "I think unexpected situations on the equipment while online English teaching makes me anxious," was 3.76. Both

show that poor network video transmission due to network latency and insufficient bandwidth increases teachers' apprehension and nervousness while teaching. Moreover, the results showed that students' weak Wi-Fi signals led to unsuccessful access to the internet and a lack of accessible digital devices,

which caused the teaching to become more challenging and unexpected. These findings demonstrate that most teachers perceive that they have adequate technology skills for online teaching. Still, they feel anxious when assisting students with their technical problems during online teaching.

Table 1. Descriptive statistics of English teachers' perceived levels of online teaching ability (OTA) and teaching anxiety (TA).

Category of Factors	N	Min.	Max.	M	St. D
OTA	263	1.67	5.00	3.38	0.67513
TA	263	1.00	4.92	2.75	0.80534

Table 2. Descriptive statistics of the OTA and TA.

Names of Subscales	N	Means	St. D
OTA			
Teaching ability	263	3.27	0.74268
Technical ability	263	3.89	0.75125
Management ability	263	2.97	0.83868
TA			
Anxiety about Teaching ability	263	2.36	0.84525
Anxiety about Technical ability	263	3.04	0.88620
Anxiety about Management ability	263	2.87	0.93606

4.2. Differences in OTA and TA

This study also explored the OTA and TA in relation to the teachers' individual features. We investigated the possible differences in the teachers' perceived teaching abilities and teaching anxiety during online teaching based on their demographic background, such as gender, age, teaching school level, etc. **Table 3** shows that both male and female teachers perceive their online teaching ability at the intermediate level (M = 3.38). Further, the extent of anxiety of male teachers

in online teaching was M = 2.67, and for females, it was M = 2.77. Moreover, as shown in **Table 4**, the results of the t-test (t = -0.015, p = 0.988 > 0.05 for OTA and t = -0.865, p = 0.388 > 0.05 for TA) demonstrated that there were no significant differences in the extent of anxiety in terms of gender, which means that male and female teachers did not vary in the extent of anxiety on either "approach to teaching as a profession" or "emotional responses to different teaching situations."

Table 3. Descriptive statistics of OTA and TA by gender.

Category of Factors	Gender	N	Mean	St. D
OTA	Male	58	3.38	0.56346
	Female	205	3.38	0.70476
TA	Male	58	2.67	0.79730
	Female	205	2.77	0.80807

Table 4. Result of t-test on OTA and TA by gender.

Category of Factors	F	Sig.	t	df	Sig. (Two-Tailed)
OTA	3.037	0.083	-0.015	261	0.988
TA			-0.865	261	0.388

Table 5 shows that both male and female teachers gave perceived technical ability the highest score (4.07 and 3.85, respectively), which indicates that both perceive a high to intermediate level of technological literacy for online teaching. On the other hand, both male and female teachers responded

to perceived anxiety about technical ability as the highest level (2.89 and 3.08, respectively), which stated that teachers were worried more about whether the technical ability they held could handle the technological problems that happened in the online class.

Table 5. Descriptive analysis of the mean of factor by gender.

Names of Subscales	Gender	N	Mean
Teaching ability	Male	58	3.24
	Female	205	3.28
Technical ability	Male	58	4.07
	Female	205	3.85
Management ability	Male	58	2.83
	Female	205	3.01
Anxiety about Teaching ability	Male	58	2.29
	Female	205	2.38
Anxiety about Technical ability	Male	58	2.89
	Female	205	3.08
Anxiety about Management ability	Male	58	2.82
	Female	205	2.88

Furthermore, the results of the t-test presented in **Table 6** indicate a significant gender difference in perceived technical ability, with male teachers exhibiting a much higher level of confidence. This finding suggests that male teachers may have been more willing or had more opportunities to enhance their technical skills through autonomous learning or specialized training, thereby increasing their self-

confidence in their technical ability for online teaching. In other words, the significant difference in perceived confidence highlights a disparity in technological literacy between genders. These findings provide valuable insights for the education system, offering pedagogical references and practices to address gender-based differences in technological preparedness.

Table 6. Result of t-test on sub-factors on OTA and TA by gender.

Names of Subscales	T	df	Sig. (Two-Tailed)
Teaching ability	-0.442	261	0.659
Technical ability	2.311	115.700	0.023
Management ability	-1.439	261	0.151
Anxiety about Teaching ability	-0.656	261	0.513
Anxiety about Technical ability	-1.487	261	0.138
Anxiety about Management ability	-0.402	261	0.688

Table 7 shows the scores of perceived abilities and anxiety of teachers in terms of age. The means for perceived teaching ability in terms of age are as follows: for those aged between 21 and 30 years old, it was 3.47; for those between 31 and 40, it was 3.49; for those between 41 and 50, it was 3.43; those between 51 to 60 was 3.31; and those aged 61 and above was 3.13. Those aged 31 and 40 had the highest perceived teaching ability, while those aged 61 and above had the lowest. On the other hand, the means for perceived anxiety in terms of age are as follows: those between 21

to 30 years old was 2.78, those between 31 to 40 was 2.85, those between 41 to 50 was 2.59, those between 51 to 60 was 2.81, and those aged 61 and older was 3.0. Those aged 61 and above had the highest perceived level of anxiety, while those aged between 41 and 50 had the lowest. Furthermore, ANOVA was used to examine the differences in the perceived teaching ability and anxiety based on age. **Table 8** shows that $F = 1.36, p = 0.247 > 0.05$ for perceived teaching ability and $F = 1.74, p = 0.142 > 0.05$ for a perceived level of anxiety, indicating no significant differences.

Table 7. Descriptive analysis of the mean of factor by age.

Category of Factors		N	Mean	St. D
OTA	21–30	6	3.47	0.28459
	31–40	52	3.49	0.64104
	41–50	97	3.43	0.58475
	51–60	89	3.31	0.76248
	61–	19	3.13	0.80280
	Total	263	3.38	0.67513
TA	21–30	6	2.78	0.91590
	31–40	52	2.85	0.73919
	41–50	97	2.59	0.81498
	51–60	89	2.81	0.84067
	61–	19	3.00	0.64339
	Total	263	2.75	0.80534

Table 8. Results of ANOVA by age.

Category of Factors	df	MS	F	Sig.
OTA	4	0.618	1.362	0.247
	258	0.453		
	262			
TA	4	1.115	1.739	0.142
	258	0.641		
	262			

4.3. The Relationship between OTA and TA

The Correlation Coefficient Test measured the relationship between OTA and TA. A Pearson correlation between 0 and 0.39 indicates a weak positive (negative) linear relationship through a linear rule; between 0.4 and 0.69 indicates a moderate positive (negative) linear relationship; and 0.7 and above shows a strong positive (negative) linear relationship.

Table 9 shows that the teachers’ perceived teaching ability had a moderate positive relationship ($r = 0.614$) with technical ability and a strong positive relationship ($r = 0.79$) with management ability. The result illustrates that technical and management abilities could enhance teachers’ confidence in their teaching ability. That is to say, the higher the teacher’s technical ability and management ability, the higher the perceived teaching ability.

Table 9. Pearson correlation statistics for OTA and TA subfactors.

Names of Subscales	Teaching Ability	Technical Ability	Management Ability	Anxiety about Teaching Ability	Technical Ability	Management Ability
Teaching Ability	1	0.614**	0.790**	-0.387**	-0.452**	-0.402**
Technical Ability	0.614**	1	0.497**	-0.431**	-0.377**	-0.342**
Management Ability	0.790**	0.497**	1	-0.313**	-0.387**	-0.395**
Anxiety about Teaching Ability	-0.387**	-0.431**	-0.313**	1	0.653**	0.718**
Technical Ability	-0.452**	-0.377**	-0.387**	0.653**	1	0.764**
Management Ability	-0.402**	-0.342**	-0.395**	0.718**	0.764**	1

** . Correlation is significant at level 0.01 (two-tailed).

On the other hand, anxiety about management ability ($r = 0.718$ and 0.764 , respectively) indicates that if teachers feel anxious about their online teaching ability and ability to handle technical problems, they would also feel anxious about class management.

5. Conclusions

This study explored how synchronous English online teaching affects the teaching anxiety of college English teachers in Taiwan. The quantitative data obtained in the study

showed that most teachers perceive that they have high technical ability and low management ability. Although the findings showed no differences in the extent of anxiety with teachers' teaching ability or responses to varied teaching situations for both male and female teachers while teaching online, the results indicated that both genders perceived a high to intermediate level of technological literacy for online teaching. Furthermore, the study found that male teachers hold a much higher confidence level with self-equipped technical abilities.

Comparing the age groups, this study found that the older the teachers were, the lesser their perceived teaching ability was; however, teachers aged between 41 and 50 showed the lowest extent of teaching anxiety. The results also illustrated that advancing teachers' technical and management abilities could build their confidence in online teaching ability. This means that the higher the teachers' technical and management abilities, the higher their teaching ability. The results further demonstrated that teachers were less confident in managing students' learning toward achieving better learning outcomes. Also, it was found that technical problems, such as network failure or unexpected equipment malfunction, increase teachers' anxiety, causing them to become apprehensive and nervous while teaching online. Moreover, access failure or device shortages made teaching more complex and uncertain for teachers. This explains why they feel anxious about helping students with technical issues occurring during online teaching, even though most participants regarded themselves as having high technology skills for online education.

In the traditional classroom, teachers can get the students' attention quickly when they misbehave or disrupt the class; however, this is rather difficult during online teaching, which may increase teachers' anxiety^[32, 33]. On the other hand, the lack of student responses during online classes causes tertiary teachers' anxiety in Taiwan. In other words, compared to classroom teaching, class management, such as promoting student engagement, plays a more crucial role in the online teaching-learning process. In summary, online teaching anxiety in tertiary teachers in Taiwan is mainly caused by external factors such as technical glitches or student interactions, despite teachers considering themselves well-equipped with teaching-related abilities.

Although an online classroom setting is a probable al-

ternative during an epidemic, it may not guarantee the quality and effectiveness of teaching and learning. In the traditional classroom, teachers can closely observe and respond to students' reactions, but in the online setting, they have to look at and talk to the computer screen, with most of their students opting to turn off their cameras. A study explored why students in the U.S. switch off their cameras during online learning^[66], unveiling that students were concerned about their appearance, physical surroundings, internet connection, and potential to cause distraction to others. These factors reduced the interaction between teachers and students, which could increase the anxiety level among teachers. It is suggested that EFL teachers should be supported and assisted to adapt to new roles, strategies, and technology integration in online teaching^[19]. Moreover, teachers should receive appropriate training on online classroom management, improve their technical skills, encourage interactive activities, and develop interpersonal skills to teach students online communication etiquette before class^[66]. These measures could help teachers lower their online teaching anxiety.

The findings of this study provide valuable insights into synchronous online English teaching by identifying factors that contribute to teaching anxiety. However, the study has certain limitations due to time constraints. In particular, it relied exclusively on survey data to examine the factors influencing online teaching anxiety among Taiwanese tertiary English teachers. Future research could address these limitations by conducting in-depth interviews to identify specific student behaviors or aspects that provoke teaching anxiety. Extending investigations to other educational contexts, such as high school educators, could also offer a more comprehensive understanding of this issue. In conclusion, this study seeks to assist English teachers in recognizing the factors that trigger teaching anxiety, enhancing the quality of their online instruction, and alleviating their teaching anxiety. The findings also provide valuable insights to help teachers better prepare for and effectively manage future unforeseen challenges in online teaching environments.

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Both authors contributed equally to this work. All authors have read and agreed to the published version of the manuscript.

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Institutional Review Board Statement

Ethical review and approval were waived for this study due to the use of questionnaires that posed minimal risk to participants.

Informed Consent Statement

Informed consent was obtained from all subjects involved in the study.

Data Availability Statement

Data are contained within the article.

Conflicts of Interest

The authors declare no conflict of interest.

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