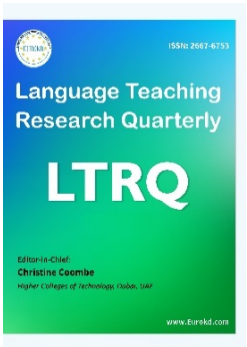

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Exploring the Relationships between Chinese Language Teachers' Perceived English Proficiency, Teaching Self-Efficacy, and Professional Development

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Abstract

Research has found a positive correlation between the English proficiency, teaching self-efficacy and professional development (PD) of English-as-a-Foreign-Language teachers who are L2 speakers of English. Yet, there is scant research on these variables for teachers of other languages teaching in English-speaking countries. This mixed-methods study investigated the connections between perceived English proficiency, self-efficacy in applying professional standards, and PD of secondary-school Chinese language teachers in the State of North Carolina. Quantitative results identified participants' perceived English proficiency as a significant predictor of self-efficacy. A significant negative correlation was found between participants' perceived English proficiency and PD benefits. Qualitative results indicate that participants' self-efficacy and perceptions of the benefits and support of PD were positively impacted by affirmation and emotional support, whereas cultural barriers and lack of PD self-initiation had adverse effects. Analyses of the integrated findings also address the study's implications for teacher educators and researchers.

Keywords: *Perceived English Proficiency, Self-Efficacy, Professional Development, Mixed Methods, Chinese as a Second Language*

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Introduction

Professional standards for educators present a consensus model of desirable teaching knowledge and practice and provide measurement tools for making professional judgments (Kleinhenz & Ingvarson, 2007) as well as quality assurance in teaching (Tang et al., 2006).

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Knowledge of these standards contributes to pre-service teachers' improved lesson planning (Cavanagh & King, 2020) and increased readiness for the teaching career (García et al., 2019). The standards also provide a framework for reflective practice and communication in the professional community (Sergiovanni & Starrat, 2002). The establishment of career paths and continued professional development (PD) will be supported by teachers' reflections on their self-efficacy in the application of professional standards through both individual and group inquiries (Kleinhenz & Ingvarson, 2007).

As a main component of the second language (L2) teachers' professional standards, the target language proficiency has been found to have a positive correlation with overall teacher efficacy and its various subscales, including instructional strategies, student engagement, and classroom management (Chacón, 2005; Choi & Lee, 2016; Eslami & Fatahi, 2008; Faez et al., 2019; Hiver, 2013; Sabokrouh, 2014; Tesfaye Mengistie & Gezahegn Belihu, 2024; Tutyandari, 2023; Yilmaz, 2011). However, the correlations reported in many of these studies were often moderate/low (i.e. between 0.2-0.4) and not all of them reported whether the correlations were significant or not (liu & Karas, 2017). Furthermore, all participants of these studies were teachers of English as a Foreign Language (EFL) whose first language (L1) is not English. For L2 teachers of languages other than English who are L1 speakers of the target language (e.g. Chinese L1 speakers teaching Chinese in the U.S.), hereafter referred to as *native L2 teachers*, however, inadequate proficiency in English rather than the target language may also pose linguistic and/or socio-cultural challenges (Chen & Yeung, 2015; He, 2014; Liu et al., 2019; Lu et al., 2019; Orton, 2011; Sun, 2012; Yue, 2017; Zhou & Li, 2015). Given Chinese L2 speakers' difficulty of achieving the "near-native proficiency", which is a standard requirement on almost all job advertisements for foreign language faculty in North American schools and universities (Train, 2003, p. 23), many CSL teachers in America are Chinese L1 speakers who were born and raised in China and immigrated to the U.S. in their adulthood. There is a strong need to explore the potential relationship between these teachers' English proficiency and teaching self-efficacy in the American context.

Given the importance of PD with regards to strengthening L2 teacher efficacy (Kleinhenz & Ingvarson, 2007; Lee & Davis, 2020; Ortaçtepe & Akyel, 2015; Salari & Farahian, 2023), it is also worthwhile to investigate whether and how English proficiency may interact with PD of native L2 teachers, since PD is generally offered in English in L2 teacher education in English-speaking countries. Yet, there is scant research on the potential relationship between English proficiency and PD of native L2 teachers. This study intends to address these research gaps by exploring the relationships between perceived English proficiency, self-efficacy in the application of professional standards (Lee et al., 2007), and PD of CSL teachers in America.

Literature Review

Theoretical Frameworks

This study is supported by two theoretical frameworks, including self-efficacy (Bandura, 1986, 1997) and communities of practice (Lave & Wenger, 1991).

A key concept in the social cognitive theory (Bandura, 1986, 1997), the perceived self-efficacy is defined as "people's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances" (Bandura, 1986, p.391). Bandura (1986) discussed four sources of self-efficacy. First, the enactive attainment is the most

influential source of self-efficacy since it provides authentic mastery experiences. Successes will lead to increased self-efficacy whereas repeated failures will result in decreased self-efficacy. Second, vicarious experience may also influence one's self-efficacy since seeing others with similar skills like oneself perform successfully may raise self-efficacy, yet observing the failure of others who are similarly competent despite the efforts may lower the observer's judgment of task capabilities and self-efficacy. Third, verbal persuasion affects self-efficacy as well since people who are persuaded that they are capable of task completion albeit demanding situations may invest greater sustained efforts to succeed, which will boost their self-efficacy. Fourth, self-efficacy may also be affected by one's physiological state. People tend to expect success in task completion when they are not discouraged by aversive arousal, which increases their self-efficacy. On the contrary, fear reactions will cause elevated levels of distress leading to unsatisfactory results, which decreases self-efficacy.

Lave and Wenger's (1991) work on situated learning is generally credited with creating the idea of communities of practice. The authors argued against the traditional view of learning as merely the reception of knowledge and information, and suggested that learning is a process of participation in communities of practice. The traditional practice of teacher training as a transmission of knowledge should also be replaced with a focus on "dialogic and collaborative inquiry" (p.165) among a community of learners involved in social interactions, according to Richards (2008), who proposed that teacher learning should be "a form of socialization into the professional thinking and practices of a community of practice" (p.160).

English Proficiency and L2 Teacher Self-Efficacy

As most EFL teachers around the world are L2 speakers of English (Richards, 2017), the potential relationship between these teachers' English proficiency and their teaching self-efficacy has received increasing attention in recent literature. Findings of a meta-analysis (Faez et al., 2019) indicate a moderate positive correlation between the teachers' English proficiency and teaching self-efficacy. In addition, further analyses identified a stronger correlation between L2 proficiency and self-efficacy in instructional strategies compared to self-efficacy in student engagement and classroom management. Hiver (2013) reported a clear connection between Korean EFL teachers' teaching self-efficacy and language self-efficacy (i.e., how confident the teachers felt as English language users). In Tutyandari's (2023) study, some pre-service teachers in a college English language education program in Indonesia reported less confidence in facilitating student learning due to low perceived English proficiency, which resulted in low teaching efficacy. Thompson and Woodman (2019) argued that efforts need to be made to not only develop EFL teachers' L2 proficiency but also their perceived L2 capability, which was reflected in the use of English in terms of talks with colleagues and challenges of communicating with students.

Previous research has also explored the relationships between EFL teachers' teaching self-efficacy and English proficiency in various skill areas. A significant positive correlation was found between self-efficacy in teaching reading and perceived English reading proficiency of secondary school EFL teachers in Ethiopia (Tesfaye Mengistie & Gezehagn Belihu, 2024). Yilmaz (2011) identified positive correlations between Turkish EFL teachers' self-efficacy in classroom management and instructional strategies and their perceived English proficiency in listening and writing skills. Eslami and Fatahi (2008) reported positive correlations between

Iranian EFL teachers' self-efficacy in classroom management and perceived English proficiency in speaking skills, and between their self-efficacy in instructional strategies and perceived English proficiency in listening, speaking, and writing skills. Chacón (2005) identified positive correlations between Venezuelan EFL teachers' self-efficacy in engagement and instructional strategies and perceived English proficiency in listening, speaking, reading, and writing skills.

A few studies investigated the interactions between EFL teachers' teaching self-efficacy, English proficiency and attitudes towards English language use. Sabokrouh (2014) revealed that Iranian EFL teachers' English proficiency and their attitudes toward the English language could significantly predict their sense of efficacy or confidence in teaching English. Choi and Lee (2016) found that Korean secondary school EFL teachers' perceived English proficiency and teaching self-efficacy were interdependent and magnified each other's impact on frequency of English use in their instruction. For teachers whose English proficiency was lower than the minimum threshold, it would be difficult to increase English use in the classroom even with a high level of self-efficacy. Meanwhile, teachers whose self-efficacy was below the minimum threshold may not use English in their instruction at a desirable level albeit high English proficiency.

There has been scarce research into the relationship between English proficiency and teaching self-efficacy of native L2 teachers. Investigating the factors influencing the teaching self-efficacy of CSL teachers in Australian schools, Chen and Yeung (2015) found that the participants perceived their English ability as insufficient as they performed essential classroom tasks using English as the medium of instruction (MOI) due to beginning students' lack of communicative competence in Chinese, and consequently questioned their own capability in teaching Chinese in Australian schools.

English Proficiency and PD of L2 Teachers

The improvement in language proficiency is often regarded as a central task of PD by non-native L2 teachers (Richards, 2017). Previous studies have examined how English proficiency and PD interact with each other in EFL teachers' teaching and career development. Kasim et al. (2024) explored the correlations among English proficiency, the Technological Pedagogical Content Knowledge, and technology applications in pre-service EFL teachers' PD teaching practice in Indonesia. The results indicated that those with higher English proficiency used technology in the classroom 3.06 times more frequently than their peers with lower English proficiency. Chen and Goh (2011) named the low self-efficacy in oral English proficiency as one of the biggest obstacles in oral English teaching of EFL teachers in China, and reported that the majority of the interviewees wished to participate in PD programs to improve their English proficiency and self-efficacy. Similarly, high school EFL teachers in Thailand listed their own English proficiency development as one of the most pressing PD needs (Noom-ura, 2013). Nakata (2010) identified the Classroom English Observation Program as a useful approach for raising Japanese EFL teachers' awareness of their classroom English use and helping them to improve classroom language proficiency. In a case study, Reis (2011) traced the evolving perspectives of an EFL teacher on the native-speaker and non-native-speaker dichotomy and her professional identity. Through PD activities such as dialogic journal writing

and participation in an online discussion group, the teacher learned to regulate her emotions and actions and repositioned herself as a legitimate English teaching professional.

Research into the English proficiency and PD of native L2 teachers has been limited. In a concurrent mixed-methods study, Liu et al. (2019) investigated the qualifications and PD needs of CSL teachers in K-12 schools in America. The majority of the participants' schools require either an intermediate level or an advanced level of English proficiency for their CSL teachers. Over half of the participants selected "high proficiency in English" as an important potential for CSL teachers. Some participants indicated PD needs in spoken English training for interactions within the classroom and oral presentations. Wang (2013) examined the use of English as a lingua franca by CSL teachers from universities in Beijing, China. All the participants acknowledged the importance of English proficiency in their career development. Participants reported the use of English in various contexts in their work, such as explaining Chinese vocabulary and culture for pedagogical purposes, managing the classroom, and establishing rapport with students. Wang (2013) suggested that a good command of English can help CSL teachers conduct linguistic analysis between Chinese and English, develop cultural awareness, and potentially benefit from academic and career advancement through international exchange.

The brief review above shows that existing research into the relationships between English proficiency, self-efficacy, and PD of L2 teachers primarily recruited EFL teacher participants. Furthermore, the limited research with native L2 teachers as participants either explored the relationships between teachers' English proficiency and self-efficacy, or the relationships between their English proficiency and PD, rather than how all three variables may interact with each other. There is a strong need to investigate the potential relationships between English proficiency, self-efficacy, and PD of native L2 teachers. This study employed an explanatory sequential mixed methods design (Creswell & Clark, 2018) to investigate the relationships among CSL teachers' perceived English proficiency, self-efficacy in applying professional standards (Lee et al., 2007), and PD in the State of North Carolina (NC). The following research questions served as the basis of this study:

RQ$_1$-Quantitative research questions:

RQ$_{1a}$: What is the relationship between participants' perceived English proficiency and self-efficacy in applying professional standards (Lee et al., 2007)?

RQ$_{1b}$: What are the relationships between participants' perceived English proficiency and self-reported PD benefits and support?

RQ$_2$-Qualitative research questions:

RQ$_{2a}$: What factors influenced the participants' self-efficacy?

RQ$_{2b}$: What factors influenced the participants' self-reported PD benefits and support?

Methods

This study employed the explanatory sequential mixed methods design (Creswell & Clark, 2018). [1] Initially, the researcher used an online survey to gather quantitative data. The researcher then created the interview protocol and chose a few individuals for follow-up

[1]This study is a part of a larger research project: https://cdr.lib.unc.edu/concern/dissertations/n8710106x?locale=en

interviews based on the quantitative results. After analyzing quantitative and qualitative data and addressing RQ1 and RQ2, the researcher conducted integrated analyses of findings from both sets of data to draw conclusions.

Research Setting and Participants

With 389 different languages spoken in the state, North Carolina is a linguistically diverse state. A predominant language other than English spoken at home is reported by about one-fifth of public school students ("Language diversity in North Carolina," 2023). With 7,225 students enrolled in the 2022-2023 academic year, Chinese was the third most popular of the 18 global languages offered in NC public schools ("World languages in North Carolina," 2024).

Participants of the study were 47 CSL teachers from NC secondary schools, 80% of whom are full-time teachers. Their schools are dispersed throughout 15 of NC's 100 counties. Public school teachers made up about 70% of the participants. Nearly 90% of the participants are women. The teachers range considerably in age from 20–29 to 60 years of age or beyond. Nearly 20% of participants have bachelor's degrees, and more than 70% have master's degrees. Doctorates have been awarded to four participants. Four people concentrated on teaching Chinese as a second language, out of the 18 participants who stated language studies/education as their major or area of interest during undergraduate or graduate studies. The NC foreign/world language teaching license is held by more than half of the participants. At the time of data collection, about half of the teachers without the license were working on the requirements for licensure. Nearly 20% of the participants had taught full-time for at least 11 years, 27.7% had taught full-time for 6–10 years, and nearly half had taught full-time for 1–5 years (Gaines & Barnes, 2017). Three participants had never taught full-time.

Instrument

A Qualtrics survey was used to gather the study's quantitative data, which examined the participants' demographics, self-reported English proficiency, self-efficacy in applying professional standards, and self-reported PD benefits and support. The Harper et al. (2018) scale was incorporated into the self-efficacy assessment. The professional standards for K-12 CSL teachers (Lee et al., 2007) served as the foundation for the can-do statements. The levels of English proficiency used in the survey referenced the Interagency Language Roundtable (ILR) scale. Considering the facts that the participants are teaching in the U.S. and that they were asked to self-assess their English proficiency, minor revisions were made to the scale, including eliminating "0, No Proficiency" and all the plus levels between the main levels such as "1+, Elementary Proficiency, Plus." The items regarding English proficiency used in the survey were: elementary proficiency, limited working proficiency, general professional proficiency, advanced professional proficiency, and functionally native proficiency.

In order to ensure content validity, the researcher based the survey's design on published surveys (Day & Shapson, 1996; Haley et al., 2013). Two L2 education experts and a survey specialist were invited to review the survey, and three CSL instructors were asked to pilot-test it. The instrument was revised based on their feedback. The complete list of survey items, as well as each set of items, including those pertaining to the participants' self-efficacy, self-

reported PD benefits, and self-reported PD support, had a Cronbach's alpha coefficient of 0.88, 0.93, 0.79, and 0.80 respectively.

Data Collection and Analyses

The Qualtrics survey was filled out by 47 CSL teachers from secondary schools in NC. The researcher chose eight teachers to participate in one-hour individual follow-up interviews via Zoom based on the statistical results regarding perceived English proficiency, self-efficacy, and self-reported PD benefits. These teachers included two with high scores (75^{th} percentile) on self-efficacy and self-reported PD benefits, two with mid-range scores (50^{th} percentile), two with low scores (25^{th} percentile), and two outliers with contrasting scores of these two variables. Additionally, the researcher purposefully chose these teachers with varied perceived English proficiency.

Univariate analyses of the participants' responses to close-ended questions in the survey were conducted in SPSS 26. In addition, descriptive statistics of the participants' composite scores for self-efficacy and self-reported PD benefits and support were examined. Then the researcher conducted multiple regressions to test whether participants' self-efficacy and self-reported PD benefits and support might be predicted by their perceived English proficiency.

For qualitative data analysis, the researcher used ATLAS.ti 8.0 for open coding of the interview transcripts, based on which themes were developed (Lichtman, 2013). For instance, when talking about their confidence or lack thereof in their ability to teach, some respondents brought up the encouraging comments they received from students, coworkers, and parents, while others shared their frustration after realizing how unmotivated their students were in learning Chinese. The researcher created the theme "affirmation and self-efficacy" by grouping five quotes under the code "affirmation" using ATLAS.ti 8.0.

Findings

Quantitative Findings

Results of the descriptive analysis indicate that teachers' perceived English proficiency is relatively high. Among 47 respondents, nine selected "functionally native proficiency," 19 selected "advanced professional proficiency", and 19 selected "general professional proficiency."

RQ_{1a}: What is the relationship between participants' perceived English proficiency and self-efficacy in applying professional standards (Lee et al., 2007)?

The correlation between participants' perceived English proficiency and self-efficacy ($r = .19$) was not statistically significant, as seen in Table 1.

Table 1

Correlation of Perceived English Proficiency and Self-efficacy

Independent Variable	Perceived English Proficiency
Self-efficacy	$r = .19$

Note. r = Pearson Product-Moment Coefficient $*p \leq .05$

The researcher next conducted a multiple regression analysis using teachers' self-efficacy as the dependent variable, their perceived English proficiency as the independent variable, and self-reported PD benefits and support and socio-professional characteristics as control variables. When control factors were held constant, this multiple regression analysis revealed that participants' perceived English proficiency was a significant predictor of their self-efficacy (see Table 2).

Table 2

Regression of Self-efficacy on Perceived English Proficiency and Control Variables

Variables	β
Perceived English proficiency	.31**
Self-reported PD benefits	.43***
Self-reported PD support	.32**
Gender	.07
Age	.65***
Highest degree obtained	-.02
Years of full-time CSL teaching	-.07
Whether or not licensed to teach a foreign language in NC	-.11
Teaching at a public school or a private school	-.27*
Teaching full-time or part-time	.15
R^2	.53***

Note. β = Standardized Coefficient *$p \leq .10$; **$p \leq .05$; ***$p \leq .01$

Table 2 indicates that 53% of the variability in teachers' self-efficacy scores can be explained by this model ($p \leq .01$). When PD-related and socio-professional factors are controlled, teachers' self-efficacy in applying professional standards can be significantly predicted by their perceived English proficiency ($p \leq .05$). Accordingly, teachers with higher self-efficacy reported being more proficient in English than those with lower self-efficacy, and vice versa.

RQ_{1b}: What are the relationships between participants' perceived English proficiency and self-reported PD benefits and support?

Table 3 indicates that there was a statistically significant correlation between participants' perceived English proficiency and self-reported PD benefits, $r(46) = -.29$, $p \leq .05$. The participants' perceived English proficiency and self-reported PD support did not significantly correlate.

Table 3

Correlation of Perceived English Proficiency and Self-reported PD Benefits and Support

Independent Variable	Perceived English Proficiency
Self-reported PD Benefits	r = -.29**
Self-reported PD Support	r = -.06

Note. r = Pearson Product-Moment Coefficient **$p \leq .05$

Multiple regression analyses identified participants' perceived English proficiency as a significantly negative predictor of their self-reported PD benefits while control variables were

held constantly (see Table 4), but not a significant predictor of their self-reported PD support (see Table 5).

Table 4

Regression of Self-reported PD Benefits on Perceived English Proficiency and Control Variables

Variables	β
Perceived English proficiency	-.34**
Self-efficacy	.52***
Self-reported PD support	-.02
Gender	-.26*
Age	-.35*
Highest degree obtained	-.13
Years of full-time CSL teaching	.16
Whether or not licensed to teach a foreign language in NC	.09
Teaching at a public school or a private school	.13
Teaching full-time or part-time	-.11
R^2	.44**

Note. β = Standardized Coefficient *$p \leq .10$; **$p \leq .05$; ***$p \leq .01$

Forty-four percent of the variation in teachers' self-reported PD benefits scores can be explained by the model in Table 4 ($p \leq .05$). When controlled for self-efficacy, self-reported PD support, and socio-professional factors, teachers' perceived English proficiency had a significantly negative predictive effect on their self-reported PD benefits ($p \leq .05$). According to this finding, self-reported PD benefits were greater for teachers with lower perceived English proficiency than for those with higher perceived English proficiency, and vice versa.

Table 5

Regression of Self-reported PD Support on Perceived English Proficiency and Control Variables

Variables	β
Perceived English proficiency	-.16
Self-efficacy	.45**
Self-reported PD benefits	-.02
Gender	.08
Age	-.69***
Highest degree obtained	-.02
Years of full-time CSL teaching	.14
Whether or not licensed to teach a foreign language in NC	.05
Teaching at a public school or a private school	.24
Teaching full-time or part-time	-.25
R^2	.35*

Note. β = Standardized Coefficient *$p \leq .10$; **$p \leq .05$; ***$p \leq .01$

Thirty-five percent of the variation in teachers' self-reported PD support scores can be explained by the model in Table 5 ($p \leq .1$). Teachers' self-reported PD support was not significantly predicted by their perceived English proficiency.

The researcher used the Variance Inflation Factor (VIF) to evaluate multicollinearity for each of the three multiple regression analyses listed above. The data satisfied the assumption of collinearity since none of the VIFs was higher than 2.

Qualitative Findings

The themes derived from qualitative data regarding participants' self-efficacy and self-reported PD benefits and support are presented in this section in order to address the qualitative research questions.

RQ_{2a}: What factors influenced the participants' self-efficacy?

Factors influencing participants' self-efficacy

Affirmation from other people. The affirmation from other parties, including students, coworkers, and professional organizations, emerged as the first theme from the interviewees' discussions about the level of confidence in their job. As one of respondents with the highest self-efficacy rating, Hao happily revealed that one of his pupils was selected as a finalist at the prestigious Bridge Chinese Speaking Contest, and that his lesson plans had received two awards. Additionally, he highlighted time and again that his AP and IB students had a 100% passing rate during his ten years of secondary school teaching.

Tong is still a novice in the field of CSL teaching, in contrast to Hao, who has extensive experience. "My students have very strong interest in my class. I have a lot of good feedback from teachers, parents and kids. … I probably feel kind of confident, because I feel like I can do it," she said in response to a question concerning her high self-efficacy rating.

Teachers with lower self-efficacy scores, on the other hand, appeared less confident in their work when compared to their peers who teach different disciplines. For example, Qian was upset when she discovered that some of her students only chose Chinese because her school's Spanish and French classes were filled. She said, "That made me feel very hurt at the beginning. … I feel like I didn't do enough to attract more students to come to my classes, you know, willingly."

Cultural barriers. Among the interviewees, three teachers who rated their self-efficacy the lowest all discussed how communication with students was hampered by cultural barriers. For example, although Xuan self-reported "functionally native proficiency" for her English proficiency, she sometimes feels disconnected from her students. She said,

> *Being a foreigner, I feel like the cultural barrier is still there. … I understand them really well, but there's just the part that you have to have gone through the educational system in America for you to understand. Like all the other teachers born and bred here, it just seems like they know their kids a lot better.*

Similar to Xuan, Na characterized her English proficiency as "*functionally native proficiency*." However, she was also worried about how her relationship with students would be impacted by cultural differences. She mentioned, "*Because of my Chinese background, there's no language barrier, but sometimes I don't think it's easy for us to get certain cultural cues. So that becomes the biggest barrier between us and our students.*"

RQ_{2b}: What factors influenced the participants' self-reported PD benefits and support?

Factors influencing self-reported PD benefits and support

Teacher-initiated PD or not. Whether PD activities were teacher-initiated had a significant impact on teachers' perceptions of PD benefits, according to the interview data. Wen, a seasoned teacher with the highest self-efficacy and self-reported PD benefits scores among all the respondents, stated that she still feels a strong desire to learn new things by attending PD activities, saying "*95% of the workshops that's out there, I went. … So they provide information, I receive and I digest. So that digest is the process of how I reflect whether I will make things happen or not.*"

On the contrary, the interviewees who rated PD benefits the lowest all talked about going to PD events as mandated by their schools. For example, Hao said, "*Wake County, they provide workshops. If we attend, they have a kind of survey. You have to do the survey, then you can get credits.*"

PD funding. Qualitative analysis indicated that participants' self-reported PD benefits were positively correlated with funding for PD. Ling, Fang and Wen brought up the financial component of the PD support provided by their schools or other professional associations. On the other hand, Xuan, who had one of the lowest self-reported PD support scores, contended that her low level of involvement in PD activities was partially caused by the school's lack of funding. As an example, she mentioned a few Advanced Placement (AP) workshops that she unfortunately missed, "*My school is willing to pay for my registration, which is actually the smallest chunk of it. You know the biggest chunk would be the ticket, the accommodation over there.*"

Emotional support from the CSL professional community. The emotional support provided by the CSL teaching community appears to be another element that influences the teachers' self-reported PD benefits and support, particularly for those with comparatively lower perceived English proficiency like Qian, Ling, and Fang. Both Ling and Fang talked about how crucial the online network of CSL teachers was for providing emotional support during the pandemic. Ling said,

> *Being a Chinese teacher is very lucky, … we all stand up and help each other to go through and navigate this hard time. So I think an online community, if you find one, make it home, it would be very comforting.*

Fang also talked about how the support from the online CSL teacher community helped her deal with stress during the pandemic.

> *I feel I'm almost crushed just by the whole thing, like trapped at home and then teaching online and all these things. And there are still some teachers, they are excited about the new semester. I feel like, how can they do that? I also feel I need to pump myself up.*

Table 6 provides a joint display of quantitative and qualitative findings on the participants' self-efficacy and perceived English proficiency. Table 7 provides a joint display of quantitative and qualitative findings on the potential relationships between the participants' perceived

English proficiency and self-reported PD benefits and support. These integrated findings are analyzed in the discussion section below.

Table 6

Joint Display of Teachers' Self-efficacy with Different Perceived English Proficiency Grouping

Group	Pseudonym	Perceived English Proficiency	Self-efficacy	
			Quantitative	Qualitative
Higher Perceived English Proficiency	Hao	Functionally native proficiency	8.87 (high)	• Teaching awards • 100% passing rate of AP and IB students
	Na	Functionally native proficiency	8.07 (mid)	• No language barrier when communicating with students, but hard to get certain cultural cues
	Xuan	Functionally native proficiency	6.87 (low)	• Does not know the students as well as her American colleagues due to cultural barriers
	Tong	Advanced professional proficiency	8.73 (high)	• Positive feedback from students and colleagues
	Fang	Advanced professional proficiency	6.47 (low)	• Need to learn more about the American culture
Lower Perceived English Proficiency	Wen	General professional proficiency	9 (high)	• Nominated "Teacher of the Year" by her students
	Ling	General professional proficiency	8.2 (mid)	• Good feedback from her mentor in the school
	Qian	General professional proficiency	7 (low)	• Feeling hurt due to students' reluctance to take Chinese classes

Table 7

Joint Display of Teachers' Self-reported PD Benefits and Support with Different Perceived English Proficiency Grouping

Group	Pseudonym	Perceived English Proficiency	Self-reported PD Benefits		Self-reported PD Support	
			Quantitative	Qualitative	Quantitative	Qualitative
Higher Perceived English Proficiency	Hao	Functionally native proficiency	1.63 (low)	Primarily attends PD activities as mandated by the school	0.83 (mid)	PD support from STARTALK programs
	Na	Functionally native proficiency	2.38 (mid)	Attends some PD activities voluntarily	0.83 (mid)	PD support from the school's administrators and coworkers

	Xuan	Functionally native proficiency	2 (low)	Primarily attends PD activities as mandated by the school	0.33 (low)	School's lack of funding for PD
	Tong	Advanced professional proficiency	2.75 (high)	Receives helpful suggestions at the school's professional learning community (PLC) meetings	2 (high)	PD support from the school's administrators and coworkers
	Fang	Advanced professional proficiency	2.71 (high)	Frequently interacts with local and online PLCs	1.5 (high)	School's funding for PD Emotional support provided by a Chinese coworker at the school
	Wen	General professional proficiency	2.83 (high)	Voluntarily participates in many PD activities	0.33 (low)	Gratitude for the school's and the professional community's support despite the low rating
Lower Perceived English Proficiency	Ling	General professional proficiency	2.56 (mid)	Values virtual CSL teaching communities as PLCs	1.5 (high)	Support provided by the CSL teacher community PD resources shared by the school's administrators
	Qian	General professional proficiency	2 (low)	Primarily attends PD activities as mandated by the school	1.33 (high)	PD support from the school's administrators Emotional support provided by local CSL colleagues

Discussion

English Proficiency and Self-Efficacy

The study's quantitative results showed that teachers' perceived English proficiency could significantly predict their self-efficacy in applying professional standards ($p \leq .05$) when control variables were maintained constant. Two themes pertaining to teachers' self-efficacy were identified through qualitative analyses. On the one hand, external affirmation had a positive effect on teachers' self-efficacy. However, cultural barriers presented challenges for teachers when communicating with students, which negatively affected their self-efficacy.

As shown in Table 6, Hao and Tong both reported high English proficiency and self-efficacy, and both of them discussed the affirmation of their work from coworkers and students. On the contrary, Qian who reported lower English proficiency and self-efficacy shared her

frustration regarding students' reluctance to take her Chinese class. With high perceived English proficiency, teachers like Hao and Tong may have received more affirmation through better understanding of their students and improved student-teacher relations (Chen & Yeung, 2015), and good communication with colleagues (Brannan & Bleistein, 2012; Thompson & Woodman, 2019), which in turn increased their self-efficacy. However, teachers like Qian with lower perceived English proficiency may have received less affirmation of their work from others due to communication issues with students (Thompson & Woodman, 2019) and principals (Walker & Slear, 2011), which had a negative impact on their self-efficacy. In these instances, verbal persuasion and physiological state (Bandura, 1986) had positive impact on the self-efficacy of teachers with higher perceived English proficiency but a negative effect on the self-efficacy of teachers with lower perceived English proficiency.

Qualitative analysis also indicated the adverse impact of cultural barriers on some participants' self-efficacy. Hu (2014) contends that many of the differences in teaching and learning activities in China and the U.S. originate from the distinct social ideologies in these two countries, as individualism and freedom of expressions are encouraged in the American culture whereas collectivism and docility are valued in the Chinese educational context. Because of these cultural barriers, CSL teachers in America may be confronted with a variety of challenges while interacting with students. One CSL instructor, for example, talked about her fruitless attempts to correct her students' sitting posture (Zhou & Li, 2015), which is frequently stressed by teachers in Chinese classrooms with younger children. Corroborating previous research, findings of the current study highlight the detrimental effects of cultural barriers on the participants' self-efficacy as they experienced changes in their physiological state due to elevated levels of stress in taxing cross-cultural communications (Bandura, 1986). It is worth noting that cultural barriers may still affect teachers like Xuan and Na, who have high perceived English proficiency. These obstacles can make it difficult for them to communicate and build relationships with students and coworkers, which can then jeopardize their self-efficacy.

English Proficiency and Self-Reported PD Benefits and Support

Participants' perceived English proficiency and self-reported PD benefits were found to be significantly correlated negatively, $r(46) = -.29$, $p \leq .05$. Qualitative analysis identified self-initiation as an important contributor to self-reported PD benefits. Research has shown that teachers tend to passively undergo PD when the training does not provide clear alignment with their teaching practice. In many traditional top-down PD mandates, administrators plan PD activities without consultation with teachers (Johnson et al., 2019). As a result, teachers experienced alienation due to lack of involvement in developing PD programs (Mohan et al., 2017; Nasser & Romanowski, 2011). Teachers' lack of active participation in these PD programs also resulted in insufficient collegial learning since many participants only played the role of audience (Mohan et al., 2017).

In this study, Hao and Xuan both attended PD events as mandated by their schools. Despite their high perceived English proficiency, both teachers reported less PD benefits compared with colleagues with lower perceived English proficiency. Conversely, although Wen's perceived English proficiency was among the lowest, she had the highest perceived PD benefits and self-efficacy ratings given her frequently voluntary participation in PD activities and

critical reflections afterwards. As Johnson et al. (2019) argued, teachers should have the opportunity to initiate differentiated and reflective PD since they have the best understanding of their work and needs. Teachers' self-efficacy will continue to grow as a result of this type of bottom-up, teacher-initiated PD (Hiver, 2013). Through frequent participation in the professional communities of practice (Lave & Wenger, 1991), Wen gained valuable vicarious experience as she observed peers' success and received verbal persuasion from colleagues regarding her curricular and pedagogical designs, both of which boosted her self-efficacy (Bandura, 1986).

Qualitative results of the study also indicate that emotional support from the CSL professional community had positive impact on teachers' self-reported PD benefits. According to Macià and García (2016), emotional support involves sharing feelings and reassuring others. Research has shown that teachers seek emotional support from the professional community due to various reasons. Tutyandari (2023) highlighted the crucial role of emotional support from mentors, peers, and school staff in developing the teaching self-efficacy of pre-service EFL teachers in Indonesia. Tytler et al. (2011) found that teachers in rural secondary schools felt professional isolation due to the limited pool of colleagues with the same specialization within the school. Professional isolation may also be linked to personal traits such as shyness and reluctance to take social risks (Ostovar-Nameghi & Sheikhahmadi, 2016).

In the current study, some participants were the only Chinese teachers in their school or even school district. Teachers like Ling and Qian with relatively lower perceived English proficiency may experience professional isolation and yearn for emotional support from the local or online CSL teacher community. Macià and García (2016) identified emotional support as one of the key motivations for teachers to participate in online communities and networks. The emotional support from the online professional community can enhance teachers' self-efficacy beliefs (Yang et al., 2024), reinforce the sense of belonging (Davis, 2015), raise level of comfort for expressions of diverse feelings including fears and concerns (El-Hani & Greca, 2013), and improve interpersonal relationships (Nazari & Xodabande, 2022). Teachers like Ling and Qian may find such emotional support in the communities of practice (Lave & Wenger, 1991) particularly beneficial.

This study identified no significant correlation between teachers' perceived English proficiency and self-reported PD support. This insignificant finding may be explained by examining the multitude of factors related to PD support such as various types of PD resources as well as the sources providing these resources. In terms of the resources for PD support, the interviewees discussed funding, information regarding PD opportunities shared by school administrators, mentoring, emotional support, among others. In terms of the sources providing these resources, the interviewees mentioned their families, school administrators, colleagues, parents, school districts, professional organizations, and so on.

Accessibility to some of these PD resources and sources, such as funding and parents' support, may be associated with the participants' perceived English proficiency. For instance, it is likely that teachers like Tong may receive more PD funding from their schools because of smoother communication with administrators given the higher perceived English proficiency. However, teachers with relatively low perceived English proficiency may still benefit from other PD resources and sources such as Chinese family members, CSL colleagues and teacher community. For example, teachers like Ling and Qian whose perceived English proficiency is

relatively low still reported high PD support since they valued the emotional support from the CSL teacher community highly.

Conclusion

This study has several limitations. First, considering the limited sample size, the results are preliminary. Second, self-perceptions, which are components of some quantitative data gathered through the Qualtrics survey, are susceptible to individual bias. Therefore, triangulating the quantitative data with focused questions during the qualitative interviews is crucial. Third, the results should be cautiously generalized for studies with participating instructors of other languages in different geographic regions, as this study's participants were restricted to CSL teachers in NC. Nonetheless, the study's findings improved our understanding of the potential relationships between L2 instructors' self-efficacy, perceived English proficiency, and PD. In particular, this study contributed to the scant investigation into the interactions among these variables for native L2 teachers teaching in English-speaking countries. The qualitative data revealed the positive and negative impact of affirmation and cultural barriers on teachers' self-efficacy respectively. Analyzed through the theoretical frameworks of self-efficacy (Bandura, 1986) and communities of practice (Lave & Wenger, 1991), these findings reiterate the importance of affirmation and cultural training on L2 teachers' self-efficacy development, even for teachers with high perceived English proficiency. Integrated findings of the study also provided possible explanations for the significant negative correlation between the teachers' perceived English proficiency and self-reported PD benefits and the insignificant correlation between their perceived English proficiency and self-reported PD support. These results, which are corroborated by previous research, highlight the importance of self-initiation and sufficient resources in the L2 teachers' PD. They also underscore the critical role that the emotional support from the communities of practice plays in the teachers' self-efficacy development and PD, particularly for those with low perceived English proficiency. Future research may employ standard proficiency tests to measure teachers' English proficiency. In addition, because the participants of this study discussed the support for their PD from school administrators and family members, future research may interview these individuals in addition to teachers to provide richer narratives in the exploration of potential relationships between teachers' English proficiency and PD benefits and support. It is hoped that more research endeavors toward these directions, especially with more diverse languages and larger samples, are forthcoming.

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Competing Interests

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