

Review Article

**A META-ANALYSIS ON EFL SECONDARY TEACHERS' PROFESSIONAL COMPETENCES
IN CHINA**

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Abstract

Many researches about secondary English as a Foreign Language (EFL) teacher professional competences (TPCs) of senior high schools have been conducted through investigating teachers in some regions in China, which only reflect the status and development needs of local teachers. However, the relevant research conducted nationally was limited. Therefore, this study aims at exploring the status and needs of EFL secondary TPCs of senior high schools in China by using bibliometric method and content analysis of the meta-analysis. A review of relevant literature published between 2015 and 2019 was used to analyze the strengths and weaknesses of professional competences, causes and approaches discussed in the literature. Based on 25 studies, the results revealed that teachers have a medium level of pedagogical competence (PC). They are skilled in information and communication technology competence (ICTC) but scientific research competence (SRC) is very low. Curriculum competence (CC), reflective competence (RC) and assessment competence (AC) are low. Awareness of self-development and efficient in-service training are the key factors for improving professional competences.

Key words: EFL, Teacher Professional Competence, Teacher Professional Development, Meta-Analysis.

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INTRODUCTION

In China, there is a high demand for good English proficiency among students because English proficiency is tested in College Entrance Examinations and Senior High School Examinations. At the same time, EFL teachers are expected to master a good acquisition of professional knowledge and professional competence to meet the requirements of new trends in the field of teaching English as a foreign language.

Being a key component of teachers' professional development (PD), TPC is one of the indicators of teacher identity. TPC does not only generally determines the progress of teacher PD but also influences students' academic performance to a great extent (Enever, 2014; Karavas, 2014). On the other hand, TPC has become the focus of English teaching reform in China. As such, it is necessary to explore EFL teacher TPC and PD needs of senior high schools English teachers in the Chinese context. However, much concern about PC was conducted in some

regions rather than from the whole country (Guo, 2015; Tian, 2018; G. Wu, 2016; Y. Yang, 2015; X. Yu & Yao, 2017), which could not depict the overall TPC and PD needs. Therefore, this study will be conducted by reviewing relevant literature of five years in China to address this significant gap, aiming to offer educational authorities references of a list of weak TPC and PD needs.

EFL SECONDARY TEACHER PROFESSIONAL COMPETENCES

TPC attracts many scholars' great concern, especially concerning the status of EFL/ESL TPC development and the relationship between TPC and PD. As for the ways of improving teacher TPC, scholars demonstrated the positive correlation between TPC and PD (Kurnia Irmawati, Widiati, & Cahyono, 2017; Putri, Yoestara, Aziz, & Yusuf, 2019), the negative relationship between intercultural communication competence and demotivation (Badrkoohi, 2018).

Among the dimensions of EFL secondary TPC, some researchers recently focus on teachers' intercultural communicative competence (ICC) (Badrkoohi, 2018; Fungchomchoei & Kardkarnklai, 2016; Mostafaei Alaei & Nosrati, 2018; Zhang, 2017; Zhou, 2011), self-confidence in teaching (Gu, 2016; Rahmati, Sadeghi, & Ghaderi, 2019), teachers' Information and Commination Technology (ICT) and PD needs (Ardıç & Çiftçi, 2019). Besides, there are scholars discussing language proficiency or pedagogical competence (PC) (Kurnia Irmawati et al., 2017; Michaud, 2015; Valmori & De Costa, 2016; J. Zhao, Joshi, Dixon, & Huang, 2016), linguistic competence (LC) (Tsang, 2017; Yufrizal, 2017), reflective competence (RC) (Moradkhani, Raygan, & Moein, 2017; Nayernia & Babayan, 2019). Also, teachers' assessment literacy (Firoozi, Razavipour, & Ahmadi, 2019; Lan & Fan, 2019; Muhammad, Hama, & Bardakçı, 2019), EFL overall TPC (Panggua, Wello, Jabu, & Macdonald, 2018; Rinantanti, Rahman, Atmowardoyo, & Bin-Tahir, 2017; Sulistiyo, 2016) are focuses for researchers nowadays.

Findings from those researchers are discussed in this article. First, EFL teachers reported themselves as a lack of knowledge and skills in assessment literacy and some even did not have a clear concept of assessment literacy, which indicated that they had a very low level of language assessment literacy. Second, perceived ICT competence of EFL teachers surveyed in the study is low currently and they need a medium and higher amount of ICT training (Ölmezer-Öztürk & Aydin, 2018). Due to a lack of clear conception of ICC and low ICC, EFL teachers find it a difficult task to teach about culture in intercultural education (Fungchomchoei & Kardkarnklai, 2016; Gu, 2016; Zhang, 2017). Third, regarding teacher PC and LC, a majority of teachers seemed to acquire enhance some relevant skills (Michaud, 2015) and had the highest self-perceived ability of teaching vocabulary while reading instruction was the lowest (J. Zhao et al., 2016). However, respondents surveyed in the research stated they had good PC especially in both oral and written, productive and receptive skills in communication (Rinantanti et al., 2017).

Overall, many teachers may have only a medium level of TPC to some extent and even they are low in some specific TPCs in some areas at present. Furthermore, it is likely to cause teachers' lack of self-confidence in all aspects of educational instruction and consequently may not be conducive to the development of students' quality. For instance, a lack of self-confidence in classroom instruction may derive from some factors such as EFL teachers' limited linguistic proficiency and

lack of enough time for sufficient preparation and rare limited effective teacher training (Rahmati et al., 2019). Hence, it is obviously a must for them to employ some related in-service training or programs to satisfy the new trends in the field of educational reform. Similarly, the lack and degeneration of certain professional knowledge and competences probably exist among Chinese EFL teachers of senior high schools, which contribute to their self-perceived inadequate proficiency, a decrease in self-efficacy and less use of the target language in class, etc. To illustrate, just as Z. Tang (2008) described that teachers' ICC is far from the requirements of the Ministry of Education for cultural teaching, not to mention to meet the needs of cross-cultural communication practice. For the purpose of enhancing EFL teachers' key competences and building high-quality professional teachers of secondary and primary schools in, the Ministry of National Education in China has enacted some educational documents. In the "Teacher Education Curriculum Standards (Trial)" (2011) the Ministry of Education pointed out that in-service teachers should make full use of their own experience and advantages to further deepen and develop the curriculum goals of pre-service teacher education, namely, educational beliefs and responsibilities, educational knowledge and ability, and education practice and experience. Considering TPC, teachers had better acquire instructional implementing competence, class management and educational activities, assessment competence, communication and cooperation as well as reflective competence. "Professional Standards for Middle School Teachers (Trial)" (2012) stated that middle school English teachers should be able to improve their professional literacy from three dimensions: professional philosophy and teacher ethics, professional knowledge and professional competences. "Opinions on Comprehensively Deepening the Reform and Construction of Teachers in the New Era" (2018) emphasized the need to focus on improving ideological and political quality, comprehensively strengthening the construction of teacher morality and ethics, and vigorously revitalizing teacher education to continually improve teachers' professional competences. These standards and documents all include TPC and emphasize the importance of TPC. Nevertheless, to evaluate the level of professional knowledge and ability of teachers is a difficult and challenging job for educational authorities. Then, referring to relevant international standards, the Ministry of National Education in China is setting up "Standards for Teachers of English in Primary & Secondary Schools" (STEPSS), which is used for EFL

teaching in China different from Standards for the Accreditation of Initial Programs in P-12 ESL Teacher Education. It will clearly stipulate the professional knowledge and ability levels that English teachers of basic education should have in China, and provide guidance for the further education and PD of English teachers. Chinese scholar Gong (2011) pointed out that the professional standards of English teachers should include the following dimensions such as the English language knowledge, LC, instructional strategy and method, learning process and learners, curriculum and

instructional process, testing and evaluation, educational technology, social culture and cognitive competence. Obviously, PC is included in professional competence, which is different from classification of Indonesian EFL teacher four competences: PC, professional competence, personal competence, and social competence.

Taking into account the discussion above, this research employed EFL teachers' competences comprising the knowledge and ability to do tabulated in Table1:

Table 1: Components of EFL secondary teacher professional competences

Classifications of EFL secondary teacher professional competences		
No.	Dimensions	Sub-dimensions
1	Comprehensive foreign language competence (CFLC)	LC, Communicative competence (CC ₁), Pragmatic ability (PA), ICC (Hoffman-Hicks, 1992; Wensiu, 2002)
2	Pedagogical competence (PC)	Teaching design ability (TDA), Classroom managing ability (CMA), Knowing student ability (KSA), Teaching Implementing ability (TIA), Teaching strategy and method (TSAM), Teaching evaluation ability (TAA), Teaching research ability (TRA), Teaching cognitive ability (TCA), Concepts of English curriculum standard (COECS), Teaching coordination ability (TCA ₁), Teaching innovation ability (TIA ₁),
3	Reflective competence (RC)	Reflective activities: acquisition of educational theory, teacher-student discussion, after-class reflection notes, blog exchanges, school-based teaching and research, lesson study, classroom observation and research participation(Xu, 2011); Reflection content: teaching reflection and research reflection(P. Yu, 2004)
4	Scientific research competence (SRC)	Discovering problems, selecting optimal solutions to the problem and implementation; Critical evaluation and explanation of the obtained results (Hu, 2010; Morozova & Fadeeva, 2007)
5	Curriculum competence (CC)	Curriculum comprehension competence (CCC), curriculum development competence (CDC), curriculum evaluation competence (CEC) (Feng & Zhu, 2015; H. Wu & Liu, 2003)
6	Assessment competence (AC)	Knowledge of standards for assessment tasks(Sadler, 1998); Administering, scoring, and interpreting the results along with using assessment outcomes when making decisions (Fard & Tabatabaei, 2018); Constructing and evaluating language tests(Brindley, 2001; Giraldo, 2018; Shepard, 2000); Choosing and developing assessment methods appropriately and communicating assessment results to students, etc (Fard & Tabatabaei, 2018; Giraldo, 2018)
7	Information and communication technology competence (ICTC)	Word processing and courseware production skills, Electronic presentation skills, Web/Internet navigation skills, Database skills and Integration skills (Ardıç & Çiftçi, 2019)

RESEARCH METHODOLOGY

1) Research purposes and questions

The purpose of our study was to determine the status of EFL secondary TPCs and their professional needs. In order to achieve the purpose, four research questions were posed below.

Q1: What is the focus of Chinese scholars in terms of all dimensions of EFL secondary TPCs?

Q2: What is the status of EFL secondary TPCs? In what way are they satisfactory? What is still lacking?

Q3: What are the causes of rise of low professional competences?

Q4: What suggestions and measures do scholars offer to these unsatisfactory aspects? What can be achieved in the short term? What needs to be done in the long run?

2) Search strategy

To identify relevant studies, we searched two of main online databases with the time restriction between 2015 and 2019 in China: CNKI and CQVIP. In CNKI, We set a searching scope to China Academic Journals Online Publishing Database, China Doctoral Dissertation Full-text Database, China Excellent Masters Dissertation Full-text Database, China Conference Papers Full-text Database, International Conference Papers Full-text Database, China Important Newspapers Full-text Database, China Academic Series Full-text Database, Foreign Language Journal, and International Conference. We input searching subjects including secondary TPC, professional competence of senior high school English teachers, secondary school English teacher PD and senior high school English PD on the conditions of Chinese and English extension. In CQVIP, we used titles or key words English teacher PD plus English teacher professional literacy along with teachers' PD of senior high schools. The relation among these terms was "or" and the second retrieval was performed. Two search procedures yielded a total of 259 potentially relevant studies, 223 from CNKI and 34 from CQVIP.

3) Selection criteria

To make literature eligible for review, we used the following criteria to identify articles for inclusion in the study. First, only studies exploring EFL teachers' professional competence of senior high schools were included and participants' demographic characteristics such as gender, age, education background, teaching experience, professional qualifications, areas and others were not subject to limitation. Second, the

outcome research results were required to be either the status of overall professional competence or its sub-dimensions. Third, the studies were required to show sufficient relevant data and purely qualitative analyses without research methods were also excluded.

In the process of paper selection, the first author independently screened the titles and abstracts of identified papers. Then the first author made a meta-content matrix for further analysis after both authors examined the full texts of potentially suitable papers. Few differences of opinions arose and we determined 8 journal articles and 17 master's theses for the meta-analysis. The flow diagram for this selection process is shown in Fig. 1.

All the studies were coded for year of publication, population, surveyed area, status, reasons and suggestions and measures. As a result of the unclear boundaries of level of teacher professional competence and the vague expressions, both authors had to discuss all researched results. In particular, the category of status of TPC was divided into five levels: very high level (90%-100%), high level (80%-89%), fair level (60%-79%), low level (40%-59%), and very low level (39% below). Also, we coded the levels of TPC based on research data and research conclusions as below.

Table 2: Levels of research conclusions

No.	Expressions of research conclusions	levels
1	very excellent; very satisfactory	very high
2	relatively high; facing some challenges	high
3	still have space to improve; still to be improved; is acceptable	fair
4	not ideal; is not relatively ideal; the small number of published journal articles; the smaller number of published teaching materials; the small number of conducted or participated research projects	low
5	know nothing about; few participating in research; an urgent need to improve	very low

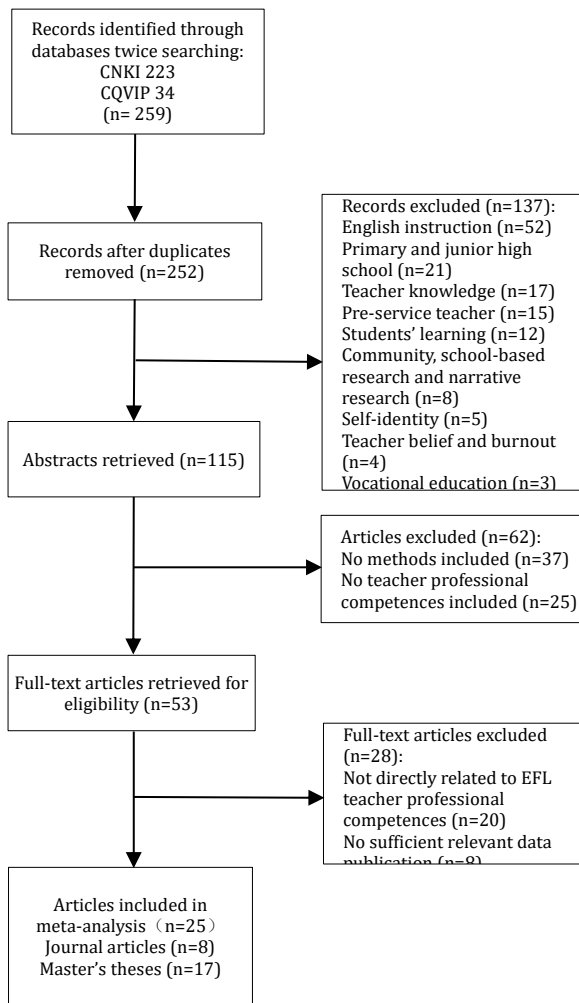


Fig.1: Flow diagram for a systematic review of competences and needs of EFL secondary teachers

FINDINGS AND DISCUSSIONS

The 25 studies with a total of 3750 participants, were summarized in the meta-analysis as listed in Table 3. They were conducted in 28 areas out of 17 provinces. Of these 25 studies, 12 studies didn't report reasons why English teachers do well or badly in TPCs. In order to answer Q1 and Q2, both authors drew Fig2, Fig3, Fig4 and Fig5 in which Arabic numbers represent the number of surveyed areas.

Table 3: A meta content analysis on EFL teacher TPCs and TPD needs of senior high schools in the Chinese context

No.	Authors	Sample	Surveyed area	Results		
				Levels of TPCs	Causes	Suggestions or measures
1	H. Tang (2019)	163	Jiangsu	Fair TPC (TDA, SRC, PC, AC) and ICTC	1. The adjustment of the urban and rural layout has allowed many high-quality teachers to gather in the city. 2. The structural lack of authorized strength has limited the improvement of TC. 3. The utilitarian drive of the college entrance examination makes the development of TC unbalanced.	1. Establish a "help" mechanism and form a teaching and research community between teachers 2. Ensure the implementation of the "help" mechanism with strict assessment requirements 3. Use online and offline language environments to eliminate the abrasion of English 4. Use various forms of "examinations and assessments" to stimulate teachers' independent and high-quality development 5. Deepen the achievement of special goals with the theme of systematic development.

2	Xie, Yang, and Xian (2018)	382	Guangdong	Low SRC	<ol style="list-style-type: none"> 1. Overloaded work 2. High standard of publishing monographs 3. Weak awareness of scientific research 4. Low professional knowledge 5. Unscientific management system, 6. Tight research funding and inefficient research training. 	<ol style="list-style-type: none"> 1. Enhance the subjective initiative of self-improvement 2. External environment should be created for teachers to conduct research
3	Hou (2017)	200	Guizhou	Low SRC Low PC	<ol style="list-style-type: none"> 1. Lack English scientific research teaching activities, 2. Low progress of teacher professional training 	<ol style="list-style-type: none"> 1. Teachers should pay attention to autonomous development; 2. Educational authorities should carry out reasonable and efficient continual education training
4	X. Yu and Yao (2017)	33	Jiangxi	Low CC High ICTC Fair ICC and SRC		<ol style="list-style-type: none"> 1. Cultivate cognition, personality, professional literacy and social literacy.
5	Zou (2015)	108	Hunan	High LC and PC Low SRC	<ol style="list-style-type: none"> 1. They are novice and very young. 2. Schools attach great importance to the assessment result of classroom achievements, so teachers generally focus on improving their teaching and managing ability 3. Despite weak awareness of self-development, they are more satisfied with the status and more confident in their professional knowledge and professional ability. 4. They are overloaded 	<ol style="list-style-type: none"> 1. Form a professional development community including peer assistance, school-based training, school-level seminars 2. Formulate professional development plans
6	Q. Li (2015)	111	Jiangxi	High PC, LC, SRC and ICTC Low RC, CC, TIA ₁		<ol style="list-style-type: none"> 1. Effectively strengthen the construction of English teaching and research groups 2. Focus on building learning teams 3. Establish and improve the

						school-based study system
7	H. Yang (2015)	30	Shanxi	Very low SRC	<ol style="list-style-type: none"> 1. Lack of motivation of research scientific research 2. Lack of conditions and atmosphere for scientific research activities 3. Fast pace of work and heavy teaching tasks; 4. Fear of specific difficulties in the research process 	<ol style="list-style-type: none"> 1. Overcome burnout and rectify the attitude of scientific research 2. Focus on self-improvement through reflection after class and classroom observation 3. Introduction of peer assistance and expert guidance in scientific research; 4. More attention to the improvement of continual professional capacity for sustainable development
8	(Y. Li, 2015)	89	Shanxi	Fair TDA Low AC and TIA	<ol style="list-style-type: none"> 1. Educational background, academic background and teaching experience have different degrees of correlation with PC of English teachers in rural middle schools. 2. Among them, academic background has the greatest correlation with teachers' PC, followed by the background of English major, and then educational background and teaching experience. 3. The background of teacher education is positively correlated with PC in teaching design, teaching implementation and teaching evaluation. 4. Teachers with English majors and higher academic qualifications have relatively higher teaching design and implementation abilities. 	<ol style="list-style-type: none"> 1. Reform the current evaluation system of English teaching in secondary schools 2. Strengthen the study of basic theories such as pedagogy, psychology, and English teaching methods 3. Strengthen continual education and improve their English professional literacy
9	Quan (2019)	94	Gansu	Fair TDA, TIA, RC and AC Low COESC,	The part of the teacher: 1). Teachers' learning status is not ideal such as	<ol style="list-style-type: none"> 1. Provide more efficient teacher training 2. Establish teachers' mutual

				TEA, TSAM High TDA, ICTC, KSA	reading and thinking 2). Teachers' improvement of educational background is slow The Part of the Student 1) Students' weak English foundation 2) The big number of students in one class The Part of the School 1) Teachers' inefficient training organized by schools 2) The lack of school's course resources	cooperation and evaluation system 3. Study the English Curriculum Standards for Senior High School (2017) comprehensively 4. Analyze and design teaching materials objectively 5. Understand students deeply 6. Develop and utilize course resources;
10	Chen (2019)	199	Guangdong	Low PC (level from high to low are TDA, TEA, TIA), Very low SRC High RC		1. Strengthen the awareness of scientific research to become research-oriented teachers 2. Increase the Investment of scientific research 3. Pay attention to teachers' mental health 4. Provide in-service education and training
11	Liang (2019)	66	Xinjiang	Fair PC Low TIA1 High ICTC		1. Teachers' self-optimization and improvement; 2. Improvement of the professional development system of English teachers in high schools
12	Tian (2018)	302	Anhui	Fair CC (From high to low: CCC, CDC, CEC)	The part of the teacher 1. More focus on teaching than the development of school curriculum. 2. Insufficient knowledge of curriculum and curriculum leadership theory 3. Weak awareness of curriculum leadership 4. Non-cooperation with related groups such as colleagues, parents, The part of the student	1. Improve English teachers' curriculum literacy 2. Build an English teacher community 3. Build a three-dimensional English teacher training model 4. Strengthen support from experts, parents and other related groups

					system: lack of economic input, (2) lack of system guarantees (3) negative impact of college entrance examination system (4) imperfect curriculum leadership training.	
13	B. Zhao (2017)	61	Gansu	Fair PC (TIA, TDA, TRA, LC, TCA). High TEA		Government: Formulate relevant policies and establish a legal guarantee system Teacher training institutions and schools: Provide pre-service and in-service training for English teachers in ethnic minorities. Teachers: Strengthen the study of contemporary education theory and education concepts.
14	He (2017)	123	Jiangxi	Fair PC (CMA and TRA) and ICTC Low RC		1. English teachers should equip themselves with the responsibilities and awareness for their own professional development and do reflection in their teaching practice 2. Schools should create good conditions and environment to facilitate teachers such as in-service training or activities. 3. Government should improve the teaching conditions such as providing basic teaching equipment for teachers. In addition, the government should distribute more money to various types of schools.
15	J. Liu (2017)	297	Sichuan	Fair PC (from high to low: LC, TDA, TIA, TEA, and TRA)		1. Adjust the curriculum setting and optimizing the curriculum structure of normal colleges; 2. Improve school-based training; 3. Strengthen the theoretical study of teachers; 4. Build a professional community; 5. Conduct teaching reflection 6. Set up lifelong learning and self-development awareness through teaching researches

16	W. Liu (2018)	362	Hebei	Very high KSA High PC (from high to low: COECS, TIA, CMA, TSAM) Fair ICTC Low LC, ICC Very low TCA and SRC		<p>1. English teachers should seriously study teaching materials, constantly learn the latest teaching methods and theories, listen to some excellent teachers' lessons, actively participate in the English teaching research activities, and do a good job in teaching plans and teaching reflection.</p> <p>2. Schools should build the harmonious and positive school environment;</p> <p>3. The government and the educational authorities should actively encourage some normal universities to combine with the county-level high schools to set up the training bases. College teachers and county-level high school English teachers should form "research community" in order to integrate the theory and the practice.</p>
17	Jing (2017)	195	Shanxi	Low LC, PC, ICTC, RC and SRC	<p>1. Low-level students will not understand if teachers insist on teaching in English and the teacher feels tired.</p> <p>2. Teachers are not good at speaking English.</p> <p>3. English teachers in rural middle schools have not really realized the necessity and importance of teaching and scientific research to improve teaching quality and teaching level.</p> <p>4. Educational authorities and schools didn't organize high-quality teaching and research activities.</p>	<p>1. Teachers should strengthen the concept of independent development, the idea of student subjectivity and life learning.</p> <p>2. Schools should strengthen professional development of teachers Management philosophy, the problem-oriented management philosophy, the motivation to lead the management philosophy and the "management and education" management philosophy.</p>
18	Jia (2017)	162	Anhui	Fair PC, SRC		<p>1. Teachers should teach according</p>

				and TRA Low KSA		to their aptitude and pay attention to individual differences. 2. Teachers should improve their professional skills and cultivate classroom instructional design and managing skills. 3. Teachers should focus on teaching and research in daily teaching practice and take an active part in the competition, class observation as well as evaluation activities. 4. Teachers should improve the use of multimedia teaching technology.
19	Tan (2017)	226	Guangdong	low LC, SRC, PC Very high ICTC Very low RC	External factors: 1. The scientific policy guidance of the government and education administrative departments 2. The inefficiency of teacher training mechanisms and training methods; 3. Heavy pedagogical tasks and psychological burden Internal factors: 1. Lack of awareness of autonomous development 2. Low professionalism	Government and schools: 1. Reform the evaluation system 2. Increase investment in continual education and training 3. Focus on teachers' mental health because most teachers are in the state of psychological sub-health; Teachers: 1. Strengthen teaching reflection and teaching research 2. Update teaching concepts and innovate classroom teaching models
20	Li (2016)	50	Jilin	Fair PC and COECS Very high ICTC Fair SRC	1. Heavy instructional tasks 2. The exam-oriented education 3. The extensive in-service training content 4. Too much living pressure	1. Awaken the awareness of new teachers 'self-development 2. Improve in-service training and activities for new teachers; 3. Scientifically guide teachers' career planning;

21	G. Wu (2016)	118	Fujian and Henan	High ICTC, TDA, TIA, TRA	<p>1. Novice teachers are able to use available information resources to explore the strategies and methods of English teaching practice in a purposeful and planned manner</p> <p>2. Novice teachers share information resources with fellow scholars and experts to discuss urgent problems in English teaching and research in high school</p>	<p>1. Educational authorities should strengthen the construction of hardware facilities and focus on the training of teachers and pre-service' information literacy</p> <p>2. Teachers should improve the awareness and ability of information-based teaching, reshape the role of teachers and promote the professional development of teachers.</p>
22	Guo (2015)	150	Yunnan	Fair PC (TIA) Low SRC Low LC	<p>1. Insufficient English teachers in rural schools</p> <p>2. Unscientific teacher structure (teaching experience, academic background) and poor stability</p> <p>3. Insufficient pre-service training and low efficient in-service training</p> <p>4. Few scientific research activities</p>	<p>1. Improve the school-based training system,</p> <p>2. Rely on distance education resources</p> <p>3. Promote multi-level training</p>
23	Yan (2016)	61	Hainan	Very low PA	<p>1. Overloaded instructional tasks</p> <p>2. Weak awareness of teaching research and linguistic knowledge</p> <p>3. Very low language proficiency and weak intercultural knowledge</p> <p>4. Lack of authentic language materials and communication context</p> <p>5. backwash effects on teaching because of impact of English test content and form</p>	<p>1. Improving teachers' language proficiency and intercultural literacy</p> <p>2. Stimulate teachers' awareness of English teaching context as a prerequisite for forming teachers' pragmatic competence</p>
24	Xiao (2015)	99	Jiangxi	Very low TIA, SRC		<p>1. Improve teachers' awareness of self-development</p>

				Fair TSAM		2. Construct a teacher learning community 3. Construct teacher action research
25	Pan (2015)	69	Wenzhou	Fair RC		1. provide more pre-service training and in-service training

Q1: What is the focus of Chinese scholars in terms of all dimensions of EFL secondary TPCs?

From Fig 2, we can see in 7 dimensions, scholars examined PC, RC, SRC, CC, ICTC and AC, and one of 7 not discussed was CFLC. As for CRLC, scholars didn't treat CFLC as a whole, but explored some of CFLC such as LC, ICC and PA, which can be seen from Fig 3. In contrast, they focused more on PC, SRC and ICTC. It is worth noting that PC, RC, AC, ICTC and CC have received great concern from scholars home and abroad. However, few scholars explored SRC of EFL teachers abroad, which is not alike that in China.

Q2: What is the status of EFL secondary TPCs? In what way are they satisfactory? In what way they are unsatisfactory?

As can be seen in Fig 2, English teachers did not have a high level of each competence and even they have a very low level in some of them. Overall, TPC level from high to low are PC, RC, SRC, AC and CC. With respect to ICTC, most teachers are able to use multimedia assisting teaching skills well and gain access to network resources. In particular, novice teachers and young teachers design lesson plans using information and communication technology better than that of skilled teachers and expert teachers (G. Wu, 2016). In terms of PC, most of

teachers only have a fair level of PC with a few for a low PC. This finding was contrary to that of Rinantanti et al. (2017), but was in line with Suhirman, Admowardoyo, and Husain (2016)'s findings that teachers do not have the necessary pedagogic skills. In terms of PC, Quan (2019) pointed out that the level from high to low is the ability to analyze teaching materials, KSA, TDA, homework design, AC and RC. This also confirms the status quo of ordinary teaching and classroom management. One of the main reasons for the improvement of TDA is the teaching and research activities in schools and various class instruction contests. Then in relation to RC, the research result is unsatisfactory in spite of a few teachers with high level. Although some teachers have good cognition of reflection, teachers only reflect limited content using backward strategies to get practical conclusion instead of theory (Liang, 2019). About SRC, the ratio of teachers with low level is the highest, followed by ones with very low level. Weak SRC is because teachers lack theoretical knowledge of education theory, research methods and reflective autonomy (Chen, 2019; Jing, 2017; W. Liu, 2018). Obviously, there is an urgent need to improve teachers' SRC. In addition, the current situation of CC is worse than that of AC.

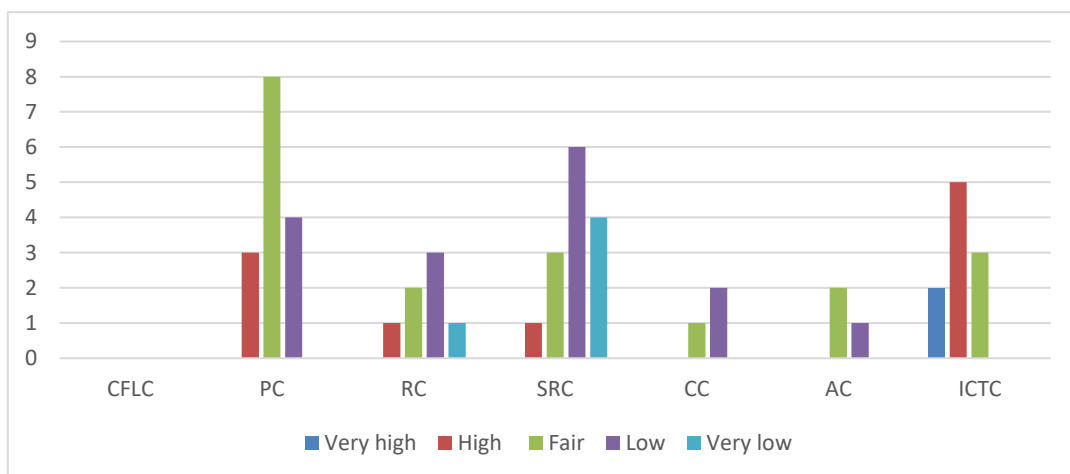


Fig.2: The bar chart of overall status of EFL secondary TPCs

Fig. 3 depicts the status of each component of PC consisting of TIA₁, KSA, COESC, TCA, TRA, TEA, TSAM, TIA, CMA and TDA. There is a great deal of difference among these aspects. Scholars pay more attention to TDA and TIA, followed by TRA, TEA, KSA, COESC, TSAM, TIA₁, and CMA. Among these aspects, only levels of TRA and TCA are considered to be high and above, while others turn out be almost levels of high, fair, low and very low. The improvement of teachers' TDA and TIA may be due to the reform of the basic education curriculum in China for many years when educational authorities held classroom teaching contests at all levels. Also, authors stated that the majority of teachers' TDA is good despite of one scholar's research result of low level. That indicates teachers don't develop evenly in these aspects. Nevertheless, among TRA, TIA and TDA, the highest rates are the fair level. Then the number of CMA is small, but that suggests that teachers' CMA is slightly over fair level. It implied that teachers are capable of managing students in class.

In the Fig. 4, we can see the current situation of teachers' CFLC where scholars' focuses are mainly on LC, followed by ICC, and PA. In China, English is learned as the foreign language and it is a compulsory course. Of course, high LC is a threshold of being an EFL teacher and an indicator for EFL teacher identity. Hence, educational authorities and teachers emphasize the importance of language proficiency, especially the oral English fluency and written skills. However, teachers have a solid knowledge of phonetics, but they are not confident in oral expression, which is reflected in the lack of pronunciation, intonation and vocabulary (J. Liu, 2017; B. Zhao, 2017).

Regarding CC₁, maybe scholars include CC₁ in LC so that there was no study concerning CC₁. However, the research result revealed that teachers in two-surveyed areas reported themselves not to have a fair level of LC, as is often the case in the countryside. An unexpected finding is that few researches concentrate on ICC and PA despite the fact that the reform of English curriculum in basic education has been implemented for many years and has gained great achievements. For example, teachers has clear concept and cognition of the importance of intercultural teaching in classroom. Although teachers are actually aware of the necessity of intercultural knowledge and ICC, they are not confident in teaching the lesson. The finding parallels those from earlier studies (Fungchomchoei & Kardkarnklai, 2016; Gu, 2016). Many researchers believe that one of foreign language instructional objectives should be to equip students with skillful intercultural skills and high foreign language proficiency to help them conduct successful communication with people from different language and cultural backgrounds (Byram, 1997; Liddicoat & Scarino, 2013). However, Zhang (2017) proposed that Teachers have mastered intercultural and linguistic knowledge but may not be competent in conducting different tasks in intercultural communication. That is mainly because they only had limited experience in different social contexts.

Fig. 5 shows the status of CC currently and few researches are fixed on CC. From Fig. 5, we can see that teachers have a weak awareness of CC and have only a fair level of CC.

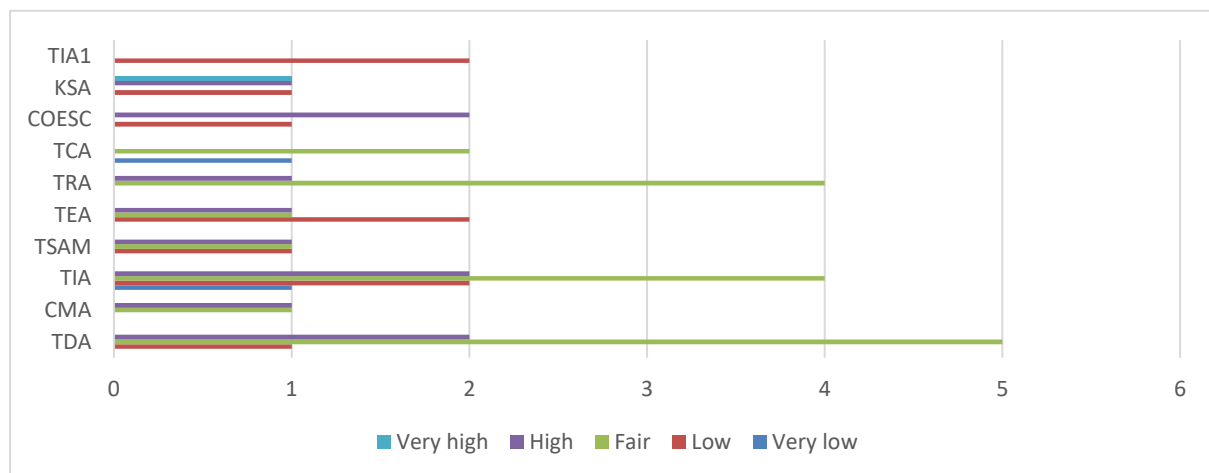


Fig. 3: The bar chart of an analysis on the components of PC

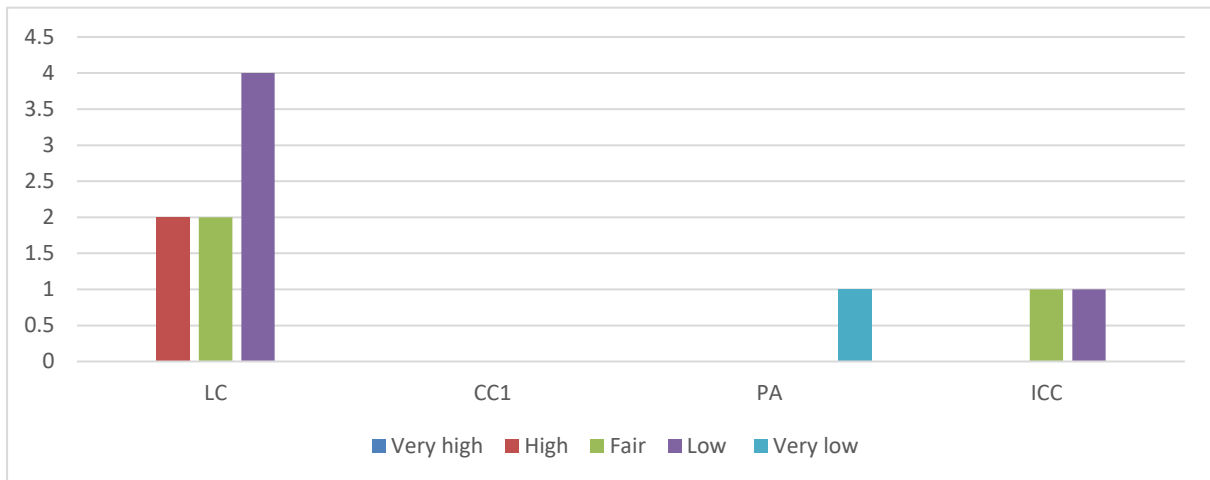


Fig. 4: The bar chart of an analysis on the components of CFLC

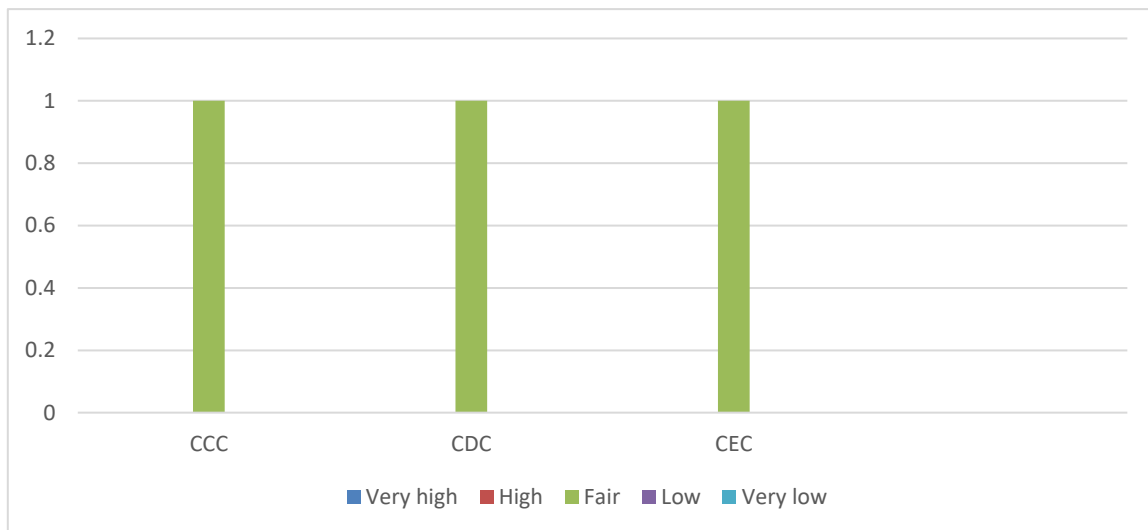


Fig. 5: The bar chart of an analysis on the components of CC

Q3: What are the causes of English teachers' low professional competences?

Based on the summary of Table 3, we found out internal and external factors causing English teachers' low professional competences shown as the principle from principal to secondary below.

Internal factors

Weak awareness of autonomous improvement, weak crisis awareness, fragile teaching faith and lack of life-learning idea;
 Low language proficiency and low professionalism including insufficient knowledge of curriculum, intercultural knowledge, and psychology;
 lack of awareness of community, closed teacher culture and

non-cooperation with related groups;
 Fear of specific difficulties in the research process;
 Low improvement of academic qualifications;

External factors

Few chances of participating in-service training as well as lack of effective professional training and activities and training mechanism to improve;
 Overloaded workload and psychological burden leading to less time for teachers to study;
 The exam-oriented education and backwash effects on teaching;
 Weak school-based teaching and research and weak school's management of teacher professional development;

Not reasonable employment system and not sound teacher evaluation mechanism;

Lack of atmosphere for scientific research activities;

Low-level students and big class size;

The shortage of education funds and the insufficient investment in education leading to the shortage of teaching facilities and learning resources and some teachers' low salary

Insufficient English teachers in rural schools and unreasonable teacher structure

On the one hand, From the perspective of internal factors, teachers' weak awareness of TPD, individual quality are the main causes hindering the development and improvement of teachers' TPCs. On the other hand, in-service training and overloaded teaching tasks are problematic in the Chinese context.

Q4: What suggestions and measures do scholars offer towards these unsatisfactory aspects? What can be achieved in the short term? What needs to be done in the long run?

According to the summary of Table 3, scholars noted some far-sighted suggestions and measures listed from principal to secondary below.

For teachers

Gradually build awareness of autonomous development and life-learning idea including the awareness of community, curriculum, reflection, information education, scientific research, learning, and autonomy;

Learn professional knowledge and skills including educational theory, the English Curriculum Standards for Senior High Schools, intercultural knowledge, psychology, linguistics and pedagogy and so on to improve education concepts and language proficiency comprehensively;

Learn to participate various school-based teaching and research activities;

Learn to do teaching reflection;

Know students well and deeply.

For educational authorities and schools

Improve in-service training system and provide teachers varieties of effective in-service training and activities such as remote training, modern educational technology, etc. in continual teacher's education;

Construct a teacher learning community and strengthen the construction of school-based training especially constructing more action researches;

Gain outer support from experts, parents and other groups and

build a harmonious and positive school environment;

Reform the current teacher evaluation system and employment policy;

Improve teacher structure and attract more teachers to the rural areas;

Strengthen the link between secondary schools and universities in teaching and research;

Improve teachers' salary and pay attention to teachers' mental health;

Offer the construction of hardware facilities and provide English teachers more learning resources.

Among the above countermeasures, upgrading hardware equipment, increasing teachers' wages and ordering education books and magazines can be achieved in the short term, but other items for both of two need to be implemented in the long term. From the perspective of external support, this study found that providing teachers with a variety of effective professional training is one of the urgently needed ways to improve TPCs. The result is in accordance with that of Firoozi et al. (2019), who suggested professional training in both knowledge and skills of language assessment. In addition, Putri et al. (2019) claimed the positive correlation between professional training and TPCs.

Overall, our study achieved our assumed aims to reveal the status of teachers' TPCs of senior schools in China, but here are still some limitations. First, our study is limited by a relative imbalance of in numbers of each dimension of TPCs because we did not input each competence as the subject or in the process of searching the literature. Therefore, we may collect restricted studies in some competences. Second, some studies without causes and different classifications of TPCs seem to lead to a biased analysis on the overall causes. Third, the coding result can be more precise and reasonable if our study include more authors. However, interested readers may contact us for some relevant information on our research findings.

CONCLUSION

The contribution of our study is to explore the weakness, strengths and development needs of EFL teacher TPCs of senior high schools in China by using the meta-analysis. Our study stated that teachers are very weak in SRC, CC, RC and AC. However, ICTC and PC are teachers' strengths. In PC, their professional competences of high level are TDA, TRA, CMA and KSA while the little lower competences are TIA, COECS, TSAM, followed by TEA, TCA, and TIA1. Then teachers have a fail level of LC. Main causes for that result are lack of effective in-service

training and too heavy instructional burden from the point view of external factors. Therefore, the most preferred measure is to provide more effective in-service training and further education. Regarding in-service trainings, different competences are in need of different forms of activities and training, just as Fungchomchoei and Kardkarnklai (2016) found out participants preferred domestic and overseas trainings related to various effective teaching methods for intercultural concepts instead of knowledge-based lectures. Ardiç and Çiftçi (2019) stated the most preferred modes of PD in ICT were immersion or internship activities while the least preferred modes of PD were workshops/conferences/seminars.

Among these TPCs, classroom instruction is the main form of education and PC is the core element of TPCs. According, PC will have key influence on students' academic achievement and further development. The purpose of research is not only to find problems, but also to propose solutions to them. Therefore, scholars may do further research on the forms of effective in-service training based on status of local teachers' TPCs.

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