

Self-efficacy, stress and job satisfaction among pre-service, novice and experienced English teachers: a study of their occupational health

BACKGROUND

This study aimed to investigate English teachers' self-efficacy for student engagement, classroom management, instructional strategies and literacy instruction, as well as to determine whether teacher stress and job satisfaction may affect their occupational health (in terms of self-efficacy). In addition, this is one of the first studies to examine the differences in self-efficacy among pre-service, novice and experienced in-service teachers in a Chinese society, where English is positioned as a foreign language.

PARTICIPANTS AND PROCEDURE

271 English teachers (90 pre-service, 181 in-service) with mean teaching experience of 5.57 months for pre-service and 98.51 months for in-service participated in this quantitative research study. As the targets could not be approached randomly, the English teachers were approached individually through referral sampling, informing them of the purpose of the study and obtaining their consent.

RESULTS

It was found that both pre-service and novice in-service teachers possess the lowest self-efficacy. Moreover, teachers' stress from the classroom predicted their self-efficacy for student engagement and classroom management negatively. On the other hand, teachers' job satisfaction predicts their self-efficacy for student engagement, instructional strategies and literacy instruction positively.

CONCLUSIONS

Implications (based on the findings) are discussed in order to provide insights for schools and education departments to strengthen the teachers' capability of teaching and their occupational health.

KEY WORDS

self-efficacy; pre-service teachers; novice teachers; experienced teachers; implications

ORGANIZATION – 1: University of Macau, Macau, China · 2: University of Saint Joseph, Macau, China

AUTHORS' CONTRIBUTIONS – A: Study design · B: Data collection · C: Statistical analysis · D: Data interpretation · E: Manuscript preparation · F: Literature search · G: Funds collection

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BACKGROUND

Teaching and learning are indispensable in every government when education is considered as one of the human rights since the adoption of Universal Declaration of Human Rights in 1948. Different nations and countries have placed considerable emphasis to guarantee the optimum learning conditions for improving the educational quality (Madani, 2019). Similarly, to ensure equal opportunities for students in learning and to optimize the teaching conditions in the existing free education system in Macao, increased emphasis on education is reflected in the near doubling of the local financial budget in the period 2010-2014 (Macao Education and Youth Affairs Bureau, 2016a).

Teachers being entitled to have more monetary resources in the education process is not enough to reach the optimal goal in quality teaching; other aspects of teachers such as their emotions and cognition should also be addressed from the organizations (schools) and the educational department (Kuok & Lam, 2018; Kuok et al., 2020) for a more essential goal in terms of optimizing education circumstances. Today school teaching is becoming more sophisticated in the cosmopolitan world and especially in terms of technology. Students' learning can take place regardless of boundaries and time. Macau is dominated by tourism and the gaming industry, and its GDP per capita and purchasing power parity were among the highest among countries in the world between 2009 and 2019 (The World Bank, 2021). This privilege offers plenty of job opportunities for the next generation in the respective sector (Kuok, 2020). Salary remains the most competitive factor to retain employees in such an attractive industry (Kuok & Taormina, 2015). Educators in Macao possibly experience the same challenges as global educators in terms of educating the next generation to understand the opportunities and benefits of learning when learning outside the school context is equally attractive to our students. Therefore, whether teachers believe they have the capability to teach the students well becomes critical to the youth as teachers are among the key persons to assist them to make a decision for the future career path.

ROLE OF ENGLISH AND THE IMPORTANCE OF EFL EDUCATION

English has been widely used in commerce, tourism and academic settings worldwide and likewise in Macao. Despite the fact that the official languages in Macao are Chinese and Portuguese, English is still considered the mainstream language in the community with the phenomenon that a majority of students first start to learn English (in the form of a school subject) in schools at the age of three. In addition, a local study showed that citizens placed higher value on

learning English in comparison to other main subjects in school, i.e. Mathematics and Chinese (Chen & Sze, 2011), reflecting that citizens in Macao are good research groups among Chinese societies, in which English is an important foreign language but not the mother tongue. All these observations shed light on the important role of teachers of English as a foreign language (EFL), because they are the key input for local students to learn the language.

According to Chacon (2005), English language teachers who are very efficacious excel in more effective teaching in their instructions in terms of allocating and making better time for students' learning. Teachers criticize less students' incorrect answers and they are more effective in guiding students towards correct answers by using guiding questioning skills and techniques. In addition, they perceive better the need for utilizing a variety of class activities and being able to make appropriate explanations and using authentic materials, examples and illustrations relevant to students' learning. It is particularly important to maintain the efficacy of English language teachers as they directly affect their teaching performance, and this study aims at understanding this issue more in depth.

In the past decade, few studies were conducted to understand the factors influencing the EFL teachers' self-efficacy or to explore the difference in teachers' self-efficacy between pre-service and in-service teachers (novice and experienced). Pre-service teachers are being educated in a tertiary institute for preparing them to be teaching professionals in their later career; they will become in-service teachers after four years of training. People normally have high expectations for them even if they are at the beginning of their career because they are equipped with the latest techniques and knowledge from universities. Even novice teachers are more equipped compared to pre-service teachers, but their experience in practice (compared to experienced teachers) is limited to solve all the problems encountered in school in the first few years of teaching practice. Thus, novice teachers indeed require a lot more support (e.g. co-worker support) to socialize at schools (Taormina, 1997). Thus, teachers having sufficient beliefs in their capability to be teachers is critical to reflect their practical concerns in teaching; such information is essential to educational stakeholders for developing more relevant professional training for teachers.

Even though the concept of teachers' efficacy originated in Western culture, there are also studies in an Asian context that addresses this intrinsic quality of teachers. A Korean study that involved Korean teachers of English was designed to understanding specific teachers' self-efficacy on a general basis for their general teachers' sense of efficacy in teaching English and the personal teaching efficacy (Lee, 2009). Another study in Hong Kong attempted to expand this

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specific characteristic by comparing the general, collective, and domain-specific efficacy beliefs of Chinese language teachers (Chan, 2008). It is demonstrated in the literature that the role of quality instructions (Darling-Hammond, 2003) impacts the participation, learning and engagement of students in language. In general, studies weigh more on addressing the general construct of the language teacher efficacy for the studies of Asian contexts. In the current literature, there is not enough information to look at both general and specific efficacy of language teachers (EFL teachers) in Asian contexts. As a context where English is arranged as one of the compulsory subjects in the school curriculum, it is meaningful to explore the efficacy of Macao English teachers with respect to their actual teaching practices in terms of teaching EFL and to understand how a more domain specific instrument (teacher efficacy of literacy instruction) is applicable to be used in non-native English learning communities to ascertain the specific nature of beliefs for teachers in regard to the designated teaching subject (e.g. English learning).

In the current literature of teacher self-efficacy, its effects on both students and teachers' various outcomes have been proved conclusively (Gandara & Santibanez, 2016; Holzberger et al., 2013; Mosoge et al., 2018). However, in the investigation of how to improve self-efficacy, unquestionably, there is a main approach to adopt Bandura's (1997) four sources of self-efficacy, namely, mastery experiences, vicarious experiences, verbal persuasion, and physiological and affective states. Although it is apparent that one's belief in his/her capabilities of doing something is determined by one's personal sources, one's belief can also be undoubtedly influenced by the ecological system, e.g., one's family, people one meets, the place one lives, and the culture one belongs to. Therefore, when self-efficacy is applied to occupations, like teachers' professions in school, the teachers' beliefs in their capabilities is not mainly affected by their own personal sources, but also the factors at the organization (school). Skaalvik and Skaalvik (2016) suggested that a teacher's perception of stressors related to school may make the task more difficult to conduct, and in turn it impairs the teacher's self-efficacy. There is relatively sparse literature on studying the effects of teacher's stress on teacher's self-efficacy (Collie et al., 2012; Klassen & Chiu, 2010). In addition, another organizational factor, teacher's job satisfaction – a positive attitude and love for their jobs – is considered important to influence self-efficacy (Kasalak & Dagyar, 2020). Unfortunately, they are not focused on the Asian contexts.

The objectives of this study are: (1) to determine Macao English as a foreign language teachers' self-efficacy in terms of students' engagement, instructional strategies, classroom management, and literacy instruction; (2) to understand the self-efficacy of different groups of EFL teachers, pre-service, novice and

experienced teachers; (3) to investigate the organizational factors that influence the English teachers' self-efficacy.

TEACHERS' SELF-EFFICACY

Teachers' self-efficacy refers as a motivational construct to the amount of effort and time the teachers spend on the relevant teaching tasks to bring about a potential learning outcome (Bandura, 1977). It is also the belief of teachers in their ability to exert a positive effect on student learning (Ashton, 1985). Teachers' self-efficacy is constituted by three components, namely efficacy in student engagement – teachers' belief in their competence in engaging students in learning; efficacy in instructional strategies – teachers' belief in their competence in using instructional practices in teaching effectively, and efficacy in classroom management – teachers' belief in their competence in managing student behaviour in the classroom (Tschannen-Moran & Woolfolk Hoy, 2001).

With this belief, a teacher is relatively more competent to perform necessary behaviour for successful teaching. They believe such ability could positively implement a course of actions (e.g. teaching) favourable for students' learning (Bandura, 1997). Otherwise, teachers who have insufficient efficacy would perceive incompetence to engage in teaching tasks and contribute to students' learning achievement and motivation (Schunk, 1991).

Research suggests that general self-efficacy may not be specific enough for English teachers to recall the typical tasks that they are supposed to perform (Tschannen-Moran et al., 1998; Tschannen-Moran & Woolfolk Hoy, 2001). Furthermore, teachers' self-efficacy is argued to be situational due to different contexts and subjects (Wyatt, 2014). As English is a skill-focused language, teaching English requires different pedagogies to carry out relevant teaching tasks (Brown, 2001). Students may respond differently based on their ability in different skills of English. In addition, English teachers' self-efficacy is related to their self-reported language proficiency, teaching strategies, student management strategies, job preparedness, and professional backgrounds (Chacon, 2005). Furthermore, literacy practices in English have an impact on teachers' self-efficacy (Ulusoy & Dedeoglu, 2011), i.e. English teachers' self-efficacy of literacy instruction. On the other hand, among teachers who regard themselves as being responsible for students' reading skills and provide literacy teaching practices or strategies to students, their efficacy level is significantly improved (Akyol & Ulusoy, 2010; Timperley & Philips, 2003). The efficacy of English teachers remains flexible and contextual (Wyatt, 2016) to perform different teaching tasks in order to respond to learners' needs and in different learning environments.

SELF-EFFICACY AMONG PRE-SERVICE AND IN-SERVICE TEACHERS

Teachers with a high level of efficacy persist even when they confront obstacles, adverse experiences or unfavourable teaching conditions (Bandura, 1997); show more commitment and devotion to teaching (Coladarci, 1992); are more willing to divide the class for small group discussions in contrast to teachers with limited self-efficacy who maintain a rigid classroom by giving instructions continually (Gibson & Dembo, 1984).

In terms of more general planning for students, teachers with higher efficacy are able to plan and evaluate and maintain a positive classroom environment (Schunk, 1991) that fosters students' involvement in class (Ashton & Webb, 1986). Teachers offer more supportive feedback to students learning and facilitate constructive interactions among students (Brophy, 1983), they view mistakes differently and provide constructive feedback rather than merely criticism, which is parallel to the idea in the study of Woolfolk Hoy et al. (2009). It was found that the expansion of teachers' self-efficacy is due to the accumulation of their successful teaching experience, particularly in-service teachers, whereas pre-service teachers, who are at the stage of a teacher training programme, generally have limited contextual classroom experience and actual teaching practice for strengthening their self-efficacy. In a regional study, pre-service teachers in Macao were found out to have lower self-efficacy than those in Hong Kong (Hui et al., 2006). Whether pre-service teachers tend to rate themselves as less efficacious for geographical complexity and whether there is any difference when pre-service teachers are compared with the in-service teachers is worth exploring to a greater extent.

Although previous studies revealed that experience is a key to accumulate in-service teachers' self-efficacy, there is very limited research focused on the impacts of years of experience on in-service teachers' self-efficacy. According to organizational socialization theory, there is a lot of variation in the employees' perception and expectation of their work in the socialization process (Taormina, 1997). That is, candidates (pre-service) tend to have a high expectation before they work in the organization (schools), and the new employees (novice in-service teachers) discover the discrepancy between the reality of the organizations (schools) and their expectation before they join their organizations (schools), then after accumulating experience for years, senior employees (experienced in-service teachers) bounce back and work at the organizations (schools) successfully. Therefore, it is expected that there will be differences in teachers' self-efficacy among pre-service, novice, and experienced in-service teachers. Thus, H1: Teachers' self-efficacy of experienced in-service teachers is higher than

that of pre-service and novice in-service teachers, in which teachers' self-efficacy is in terms of (a) student engagement; (b) instructional strategies; (c) classroom management; and (d) literacy instruction.

According to the social exchange theory, people participate in exchange behaviour because they perceive that their reward would justify their cost. For many years, organizational theorists have implied employment as the exchange of employees' effort and socio-emotional benefits (Porter et al., 1974). For example, employees who perceive being stressed due to the workload offered by the organizations are less likely to have a belief of being capable to be workers in the organization (Vaezi & Fallah, 2011).

The social exchange theory was adopted in this study of teachers, who are very different from other front line employees, as teachers not only focus on the students' present needs, but also address the future development in terms of their academic, emotional and motivational needs (Hougen, 2014). Thus, teachers, who have a strong belief in their own capability, are beneficial to students (Bandura, 1997).

In this study, several socio-emotional variables are assessed, namely teachers' work stress, which is about the teachers' experience of unpleasant and negative emotions when they are performing their work. That is, if teachers perceive stress from the classroom and workload, they are less likely to believe in their capability to be teachers. Moreover, another socio-emotional variable, job satisfaction of teachers, is supposed to strengthen their willingness to take the role of teacher. If teachers feel satisfaction at work, they are more likely to have strong beliefs in being teachers. More attention and resources should be directed to facilitate the working environment of English teachers to enhance the learning experience created by teachers for their students.

TEACHERS' WORK STRESS

Teaching is regarded as a high stress profession in the discipline of studies (Geving, 2007; Kyriacou, 2001). Stress refers to the occurrence of a cognitive-affective state when an individual perceives demands or constraints of an external situation that go beyond his or her perceived ability to handle them (Lazarus, 1966). On the other hand, stress in the physiological perspective is a series of non-specific responses of the body to any demand made upon it (Selye, 1974). Work stress can be stimulated by different stressors from the workplace and manipulated organization well-being (Williams & Cooper, 2002). By identifying stress of teachers, teacher work stress is defined as "the experience by a teacher of unpleasant, negative emotions, such as anger, anxiety, tension, frustration or depression, resulting from some aspect of their work as a teacher" (Kyriacou, 2001, p. 28).

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Not surprisingly, up to one-half of beginning teachers leave within the first 5 years due to the high level of perceived stress (Ingersoll, 2001) and one third of teachers are stressed or extremely stressed (Borg & Riding, 1991). The perceived stress of teachers can be related to two main aspects, in terms of students' behaviour and discipline from the classroom (Klassen & Chiu, 2010) and workload in school, such as the increase in responsibilities and demands for students' unsuccessful learning experience (Billingsley & Cross, 1992); excessive paperwork (Inman & Marlow, 2004); big class sizes, tight yearly plans and schedules, and the increased demands of administrative work (Loeb et al., 2005).

Furthermore, the unconstructive emotions derived from teaching (Kyriacou, 2001) are negatively correlated with teachers' self-efficacy (Klassen & Chiu, 2010; Skaalvik & Skaalvik, 2007). The System Framework for Private School Teaching Staff of Non-tertiary Education in 2012 (Macao Education and Youth Affairs Bureau, 2016b) presented guidance on the recommended teaching periods for all non-tertiary education level teachers. In addition to that, teachers' workload includes non-teaching work such as preparations, events, activities and so forth, that facilitates the implementation of school teaching plans, and the teachers' workload includes both teaching and non-teaching work. Inadequate resources are offered to the stressful teachers to handle the stressful situations in the classroom and to deal with the stress from workload; they are more likely to decrease their belief of being capable as an English teacher. Thus, H2: The more stress in the classroom the teachers have, the lower is self-efficacy in (a) student engagement; (b) instructional strategies; (c) classroom management; and (d) literacy instruction.

In addition, once the English teachers experience stress from workload, they are more likely to decrease their beliefs of being capable English teachers. Thus, H3: The more stress in workload the teachers have, the lower is their self-efficacy in (a) student engagement; (b) instructional strategies; (c) classroom management; and (d) literacy instruction.

TEACHERS' JOB SATISFACTION

Job satisfaction refers to "the pleasurable emotional state resulting from the appraisal of one's job as achieving or facilitating one's job values" (Locke, 1969, p. 316). That is, it provides a sense of fulfilment and gratification from working in an occupation. Satisfaction with a job is influenced by a person's perception of their own sense of competence (Caprara et al., 2006). More important is that when people experience satisfaction at work, they can fulfil their needs and attain values (Locke, 1976). Moreover, job satisfaction refers to how much an individual feels

one's job-related needs are met (Evans, 1997). Furthermore, job satisfaction is a prominent work related aspect of well-being, in which employees make positive evaluative judgment about their job (Weiss, 2002). In return, it enhances overall well-being (Parker et al., 2012) and makes job satisfaction a powerful factor for employees to continue in the profession.

Studies indicate that employees' job satisfaction is one of the major objectives for managers to be concerned about in order to run an effective organization. Job satisfaction is important since it can impact the organizational behaviours of employees in different industries (Kuok, 2017; Taormina & Kuok, 2009). In addition, Smith et al. (1969) identified five aspects of job satisfaction: satisfaction with pay, promotion, coworkers, supervisors and the work itself. By applying these to teachers in the study, it targets the main responsibilities that a teacher has, i.e. lecturing in classes and the related administrative tasks. It is properly relevant to work satisfaction, as Smith et al. (1969) suggested.

In a more extended view, the satisfaction of teachers at work is considered when teachers make positive evaluative judgment of being a teacher, in terms of one's teaching role, knowledge, capabilities, interaction with students, classroom preparation, students' performance and engagement in learning. There is potentially an additional aspect, namely literacy instruction for language teachers. As previous studies suggest, quality instructions are fundamental and advantageous to the class participation of students (Darling-Hammond, 2003); learning and engagement in language (i.e. English) reading (Curwen et al., 2010) and writing (Grossman et al., 2000) for students. Therefore, teachers believe in their ability to have a positive effect on student teaching (Ashton, 1985), i.e. teachers' self-efficacy is very critical to successful achievement in school. While satisfaction at work is positively correlated with self-efficacy experience greater difficulties in teaching (Klassen et al., 2009), teachers' satisfaction with their choice to remain in the profession (being a teacher) strengthens their self-efficacy. Thus, H4: The more job satisfaction the teachers have, the higher is their self-efficacy in (a) student engagement; (b) instructional strategies; (c) classroom management; and (d) literacy instruction.

PARTICIPANTS AND PROCEDURE

RESEARCH DESIGN

This study adopted a quantitative survey design with quantitative methods and procedures allowing the researchers to obtain a broad and generalizable set of findings and present them succinctly and parsimoniously. That is, quantitative research can be de-

defined as research that explains phenomena according to numerical data which are analysed by means of mathematically based methods, especially statistics (Yilmaz, 2013).

PARTICIPANTS

Respondents were 271 (47 male, 224 female) English teachers in Macao. There were 90 pre-service teachers in a bachelor's degree programme of English education and 181 in-service English teachers. For the pre-service group of English teachers, they were all English majors; their average teaching experience was 5.57 months. The group of in-service teachers has an average teaching experience of 98.51 months. For the education background, 167 had a bachelor degree in English education or English, and 17 teachers had a master's degree or above. Regarding the level of students they taught, 99 taught junior secondary level and 68 taught senior secondary level; 12 teachers taught both junior and senior secondary.

MEASURES

All measures were from existing scales with established validities and reliabilities. The scales were originally developed in English; back-to-back translation was done to ensure that the language (Chinese) was comprehensible to participants who are non-native English speakers.

For the main variables, unless otherwise noted, respondents were asked about the extent to which they agreed that the statements described them. All items used a 5-point Likert scale, ranging from 1 (*nothing/no stress*) to 5 (*a great deal/extreme stress*).

Teachers' self-efficacy. Teachers' beliefs for more general aspects of teaching were assessed with the 24-item scale from the Teachers' Sense of Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001). This scale included three 8-items subscales: self-efficacy in student engagement, instructional strategies, and classroom management. For the student engagement subscale, a sample item was "How much can you do to motivate students who show low interest in schoolwork?" (original $\alpha = .87$). For the instructional strategies subscale, a sample item was "To what extent can you provide an alternative explanation for example when students are confused?" (original $\alpha = .91$). For the classroom management subscale, a sample item was "How much can you do to control disruptive behaviour in the classroom?" (original $\alpha = .90$). In addition, this 24-item scale was translated into Chinese and applied in Chinese society as well as providing evidence of validation of the Chinese version via confirmatory factor analysis (see Chen, 2019). The reliabilities in this study were .76 for stu-

dent engagement, .82 for instructional strategies, and .85 for classroom management.

Teachers' self-efficacy for literacy instruction. Specific teachers' self-efficacy was assessed by using the 22-item scale from the Teachers' Sense of Efficacy for Literacy Instruction Scale (Tschannen-Moran & Johnson, 2011). A sample item from the scale was "How much can you do to adjust your reading materials to the proper level for individual students?" (original $\alpha = .96$). The reliability in this study was .92. In addition, these 22 items were run with exploratory factor analysis (FA), with the maximum likelihood method, with 1 factor extraction (Osborne, 2014). The result suggested that all the factor loadings were above .40.

Work stress. This variable was assessed by using seven items from the Work Stress Scale (Klassen & Chiu, 2010). The scale included two subscales, classroom stress (e.g. "How great a source of stress is being responsible for students' achievement?" – original $\alpha = .85$) and workload stress (e.g. "How great a source of stress is having noisy students?" – original $\alpha = .68$). Also, one item was added: "How great a source of stress is having too much administrative work?" This adjustment was to describe the sources of teachers' stress more specifically as teachers mentioned that these two different sources increased their workload to a different extent in school. The reliabilities in this study were .90 for classroom stress and .75 for workload stress.

Job satisfaction. This variable was assessed by using ten items from the Work Satisfaction Scale (Taormina & Kuok, 2009). The items for these measures were selected from Smith et al.'s (1969) job descriptive index. A sample item from the scale was "Gives a sense of accomplishment" (original $\alpha = .81$). The respondents were asked if the items described their work. The scoring used a 3-point scale with anchors at 1 (*yes*) and 3 (*no*), with the midpoint 2 (*not sure*). The reliability in this study was .76.

PROCEDURE

Referral sampling was used to select the respondents (in-service and pre-service English teachers). The reason to apply this sampling method was to maximize the opportunities to reach the potential targets in this study. That is, for pre-service teachers, University of Macao was the only tertiary education institute that offers a bachelor programme of English education for in-service teachers. As suggested by the database of Macao Education and Youth Affairs Bureau (2016c), there were around 2800 secondary school teachers but the number of English teachers was unknown. Because English was one of the compulsory subjects in the secondary educational level, it was estimated that about one fourth of secondary teachers (approximately 700) taught English.

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Full-time secondary school English teachers were approached and asked for their referral that matched the objective of this study.

The researcher explained that a study was being conducted to understand the beliefs among Macao secondary school English teachers (both pre-service and in-service). If a teacher provided oral consent to participate in the research, a questionnaire was given to him/her for filling in, and after he/she finished, it was returned to the researcher. No names in the questionnaire were identified to ensure their anonymity and the confidentiality of their data. Participants were informed they could discontinue their participation at any time. From the 323 people asked, 271 completed questionnaires were collected, with a response rate of 83.9%. After the data collection, all the data were analysed by SPSS in terms of descriptive statistics such as means and standard deviation of the variables, and inferential statistics such as ANOVAs for testing the difference among teachers, correlations and regressions for the teachers' self-efficacy, work stress and job satisfaction.

ETHICAL CONSIDERATIONS

Ethical guidelines of the American Psychological Association were followed in the study. Verbal consent was collected from participants and the objective of the survey and the researcher's contact information were shown on the cover page of the questionnaire. Participants were notified that their participation was entirely voluntary and all their personal information and responses were kept confidential and would never be revealed to anyone, and the data were used in statistical analysis.

DATA ANALYSES

All the collected data was analysed by SPSS. ANOVA was used to test the differences of the teachers' self-efficacy among the three groups of teachers. Pearson's correlation coefficient was to test the hypotheses. Regressions were conducted to investigate the predictive effects of the independent variables on the teachers' self-efficacy.

RESULTS

ENGLISH TEACHERS' SELF-EFFICACY

In general, the four facets of self-efficacy of English teachers in Macao were all above average, as they were all above the midpoint of the measurement range from 1 to 5. Self-efficacy in student engagement was 3.42 ($SD = 0.43$), instructional strategies

was 3.68 ($SD = 0.48$), classroom management was 3.63 ($SD = 0.54$), and literacy instruction was 3.42 ($SD = 0.47$), suggesting that all four types of self-efficacy among English teachers were above average, and instructional strategies was the highest one among the four.

In addition, there were some variations among the four types of self-efficacy among English teachers; self-efficacy of instructional strategies ($M = 3.72$, $SD = 0.50$) and classroom management ($M = 3.76$, $SD = 0.54$) were significantly higher than self-efficacy of student engagement ($M = 3.43$, $SD = 0.45$) and self-efficacy of literacy instruction ($M = 3.42$, $SD = 0.48$) respectively, with all $p < .001$.

English teachers' self-efficacy

TEACHERS' SELF-EFFICACY AMONG PRE-SERVICE, NOVICE AND EXPERIENCED TEACHERS

One ANOVA was computed to test the differences of the teachers' self-efficacy, among the following three groups: the pre-service teachers who were undergoing formal education training in tertiary institution; the in-service teachers were divided into 2 groups, those who had less than 5 years of teaching experience were novice teachers, whereas those who had more than 5 years were regarded as experienced teachers. Previous studies identified that teachers worked for 3-5 years as novice teachers (see Ingersoll & Smith, 2003; Tschannen-Moran & Woolfolk Hoy, 2007). In addition, to align with the context of Macao, according to the categorization of teachers in the System Framework for Private School Teaching Staff of Non-tertiary Education (Macao Education and Youth Affairs Bureau, 2016b), teachers after 5 years are half way in their academic pathway of the framework projects. Therefore, 5 years working experience is adopted as a cut-off point for identifying novice and experienced teachers in the current study.

Another two ANOVAs were computed to test the differences of job satisfaction and work stress for the two groups of in-service teachers, as these two variables are not relevant to the pre-service teachers. No significant differences were found in job satisfaction and work stress from workload between the two groups of in-service teachers. However, a significant difference in work stress from the classroom was found between novice and experienced teachers, that is, work stress from the classroom among novice teachers ($M = 3.06$, $SD = 0.87$) was higher than that among experienced teachers ($M = 2.61$, $SD = 0.94$), with $p < .005$. For teachers' self-efficacy, significant differences were found in the group comparison of 'pre-service teachers', 'novice teachers' and 'experienced teachers' in all the variables of self-efficacy (TSE), TSE for student engagement, TSE for instructional strategies, TSE for classroom management

and TSE for literacy instruction. In terms of TSE for student engagement, experienced teachers ($M = 3.52$, $SD = 0.46$) were significantly higher than novice teachers ($M = 3.29$, $SD = 0.38$), $F(179) = 6.17$, $p < .005$, but not statistically significantly higher than pre-service teachers ($M = 3.41$, $SD = 0.41$). In the construct of instructional strategies, the TSE of experienced teachers ($M = 3.85$, $SD = 0.49$) was significantly higher than in pre-service teachers ($M = 3.60$, $SD = 0.43$) and novice teachers ($M = 3.52$, $SD = 0.44$), $F(179) = 13.04$, $p < .001$. Experienced teachers ($M = 3.92$, $SD = 0.51$) were significantly higher than novice teachers ($M = 3.52$, $SD = 0.49$) and pre-service teachers ($M = 3.38$, $SD = 0.45$), $F(179) = 33.78$, $p < .001$ in terms of TSE for classroom management. For TSE for literacy instruction, the efficacy of experienced teachers ($M = 3.50$, $SD = 0.48$) was significantly higher than in novice teachers ($M = 3.38$, $SD = 0.44$), $F(179) = 4.93$, $p < .01$, but was not statistically significantly higher than pre-service teachers ($M = 3.43$, $SD = 0.45$). These findings show that experienced and novice EFL teachers had the highest and lowest efficacy, respectively; they perceive the strongest competence in their own ability to impact students' EFL learning. These observations supported H1 (b) and (c), and partially supported H1 (a) and (d). The results are shown in Table 1.

TEACHERS' STRESS FROM THE CLASSROOM AND WORKLOAD, JOB SATISFACTION BETWEEN NOVICE AND EXPERIENCED TEACHERS

Although no hypothesis was made among the organizational variables, namely, teachers' stress from the classroom, stress from workload and teachers'

job satisfaction, in order to provide a more complete picture of the teachers, independent sample *t*-tests were run for each of these organizational variables between novice and experienced teachers (as the pre-service teachers were not actually working in the school, only in-service teachers were used for analysis).

The results showed that there was no significant difference in teachers' stress from workload and teachers' job satisfaction between novice and experienced teachers. However, the stress from the classroom for novice teachers ($M = 3.06$, $SD = 0.87$) was significantly higher than that for experienced teachers ($M = 2.61$, $SD = 0.94$) with $F(179) = 1.44$, $p < .005$.

CORRELATIONS ANALYSES

Pearson's correlation coefficient was used to measure the relationships among all variables, namely, the dependent variables, teachers' self-efficacy in student engagement (TSESE), for instructional strategies (TSEIS), for classroom management (TSECM); teachers' self-efficacy for literacy instruction (TSELI); independent variables, teacher stress for workload (TSW) and classroom (TSC) and teacher job satisfaction (TJS).

Stress from the classroom was found to have significant negative relationships with teachers' self-efficacy in student engagement ($r = -.16$, $p < .01$), instructional strategies ($r = -.17$, $p < .01$), and classroom management ($r = -.38$, $p < .001$), but not efficacy in literacy instruction, which supported H2 (a), (b), (c), but not H2 (d). Stress from workload was not found to have any significant relationships with the four facets of teachers' self-efficacy, which did not

Table 1

One-way ANOVA of self-efficacy among pre-service, novice and experienced teachers (N = 271)

	(Group A)	(Group B)	(Group C)	Simple effects: <i>F df</i> (2, 268)	Findings
	Pre-service teachers (<i>n</i> = 90)	Novice teachers (<i>n</i> = 71)	Experienced teachers (<i>n</i> = 110)		
1. Self-efficacy in student engagement	3.42 (0.41)	3.29 (0.38)	3.52 (0.46)	6.17**	C > B
2. Self-efficacy in instructional strategies	3.46 (0.43)	3.52 (0.44)	3.85 (0.49)	13.04***	C > A & B
3. Self-efficacy in classroom management	3.38 (0.45)	3.52 (0.49)	3.92 (0.51)	33.78***	C > A & B
4. Self-efficacy for literacy instruction	3.43 (0.45)	3.28 (0.44)	3.50 (0.48)	4.93**	C > B

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

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support H3 (a) to (d). Teachers' stress in the classroom was negatively linked to their competence in the general aspects of efficacy; it is constructive for EFL teachers' stress derived from adverse situations in classrooms to be reduced to enhance the efficacy of the teachers.

Job satisfaction was found to have significant positive relationships with teachers' self-efficacy in student engagement ($r = .18, p < .005$), and literacy instruction ($r = .12, p < .05$), but not in instructional strategies and classroom management, which supported H4 (a) and (d) but not H4 (b) and (c). EFL teachers' satisfaction has a stronger relation with their efficacy in involving students in actual learning tasks and in assisting students to learn English. The benefits of helping EFL teachers feel satisfied at work may be meaningful to educators to assist these EFL teachers. Results are shown in Table 2.

REGRESSION ANALYSES

To assess the strengths of the relationships among the variables, a series of hierarchical, linear multiple regressions were conducted, using teachers' self-efficacy in terms of student engagement, instructional strategies, classroom management, and literacy instruction as criterion measures, with the predictors being stress from workload, from the classroom, and job satisfaction, plus the demographic variable – teacher's gender, education, teaching level, and teaching English experience as a control variable.

For teachers' self-efficacy in student engagement, the variables teachers' stress from the classroom and workload, job satisfaction and teaching English experience were proved to be good predictors. The impact of each predictor variable and effect size (f^2 , see Cohen, 1992), were: for teachers' stress from the classroom showed that ΔR^2 was .05 (a small $f^2 = .05$) with a significant level $p < .005$. The second predictor was teaching English experience; ΔR^2 was .04 (a small $f^2 = .04$) with a significant level $p < .05$. For the third predictor, teachers' job satisfaction, ΔR^2 was .03 (a small $f^2 = .03$) with a significant level $p < .05$. These variables combined and formed powerful predictors ($R^2 = .13, F = 7.46, p < .001$) and produced an overall medium effect size of $f^2 = .15$. These results are shown in Table 3.

For teachers' self-efficacy in instructional strategies, the variables teachers' job satisfaction, education level and teaching experience were found to be good predictors. For teaching English experience ΔR^2 was .07 (a small $f^2 = .08$) with a significant level $p < .001$. For the second predictor, teachers' job satisfaction, ΔR^2 was .03 (a small $f^2 = .03$) with a significant level $p < .05$. For the last one, teacher's education level, ΔR^2 was .02 (a small $f^2 = .02$) with a significant level $p < .05$. These variables combined and formed

Table 2

Mean, standard deviation, and intercorrelations among the variables (N = 271)

Variable	M	SD	1	2	3	4	5	6	7
1. Self-efficacy in student engagement	3.42	0.43	(.76)						
2. Self-efficacy in instructional strategies	3.68	0.48	.70***	(.82)					
3. Self-efficacy in classroom management	3.63	0.54	.57***	.61***	(.85)				
4. Self-efficacy for literacy instruction	3.42	0.47	.67***	.70***	.50***	(.92)			
5. Stress from the classroom	2.95	0.90	-.16**	-.17**	-.38***	-.11*	(.90)		
6. Stress from workload	3.50	0.67	-.05	-.03	.00	-.08	.38***	(.75)	
7. Job satisfaction	2.48	0.29	.18**	.12*	-.07	.12*	-.09	-.09	(.76)

Note. Teachers' self-efficacy and stress values from 1 to 5; job satisfaction values from 1 to 3. * $p < .05$, ** $p < .01$, *** $p < .001$. Reliabilities are in parentheses along the diagonal.

English teachers' self-efficacy

Table 3*Results of a stepwise model for antecedents in explaining teachers' four types of efficacy*

Predictors	Student engagement		Instructional strategies		Classroom management		Literacy instruction	
	β	R^2	β	R^2	β	R^2	β	R^2
Gender	-.12		-.06		-.05		-.04	
Education	.11		.17*	.02	.03		.10	
Teaching level	.06		.07		.01		.05	
Teaching English experience	.14*	.04	.27***	.07	.17*	.07	.25**	.06
Stress from the classroom	-.28***	.05	-.13		-.45***	.13	-.11	
Stress from workload	-.10		-.02		-.10		-.10	
Job satisfaction	.18*	.03	.17*	.03	-.04	.	.15*	.02
Total R^2		.13		.12		.20		.08
F		7.46***		9.48***		17.87***		8.32***
(df)		(3, 177)		(3, 177)		(2, 178)		(2, 178)

Note. * $p < .05$, ** $p < .01$, *** $p < .001$.

powerful predictors ($R^2 = .12$, $F = 9.48$, $p < .001$) and produced an overall small effect size of $f^2 = .14$. These results are shown in Table 3.

For teachers' self-efficacy in classroom management, the variables teachers' stress from the classroom, and teaching experience were proved to be good predictors. For teachers' stress from the classroom ΔR^2 was .13 (a medium $f^2 = .15$) with a significant level $p < .001$. The second predictor was teaching English experience; ΔR^2 was .07 (a small $f^2 = .08$) with a significant level $p < .05$. These variables combined and formed powerful predictors ($R^2 = .25$, $F = 17.87$, $p < .001$) and produced an overall medium effect size of $f^2 = .25$. These results are shown in Table 3.

For teachers' self-efficacy for literacy instruction, the variables teachers' education background and teaching experience were found to be good predictors. For teaching English experience ΔR^2 was .06 (a small $f^2 = .06$) with a significant level $p < .005$. The second predictor was teachers' job satisfaction; ΔR^2 was .03 (a small $f^2 = .03$) with a significant level $p < .05$. These variables combined and formed powerful predictors ($R^2 = .08$, $F = 8.32$, $p < .001$) and produced an overall small effect size of $f^2 = .09$. Detailed results are shown in Table 3.

All these findings suggest that reducing teachers' stress from the classroom and increasing their satisfaction at work can enhance their different as-

pects of self-efficacy accordingly. Reducing teachers' stress from the classroom can lead to an increase in self-efficacy for making students engaged in studying and managing their classroom, while increasing their satisfaction at work can positively affect their self-efficacy in student engagement, the strategies used in instruction, as well as their literacy instruction in English.

DISCUSSION

MACAO ENGLISH TEACHERS' SELF-EFFICACY

Teachers' self-efficacy among pre-service, novice and experienced in-service English language teachers in Macao is at a moderate level (all are above the midpoint of the measurement). In addition, within the four types of teachers' self-efficacy, self-efficacy in instructional strategies and classroom management was significantly higher than self-efficacy in student engagement and literacy instruction respectively, suggesting that Macao English teachers believe they are more capable in how to teach and manage students during class. By comparison to the previous studies about teachers' self-efficacy in Asia, the findings in the current study are not so low as found in Hong Kong (Chan, 2008; Hui et al., 2006).

However, it may not be accurate to compare the findings directly because these previous studies adopted a general concept of teacher's self-efficacy rather than the specific concept of teachers' self-efficacy applied in the current study. On the other hand, in a study of specific teachers' self-efficacy in Korea, it was found that the three facets of teachers' self-efficacy, namely, student engagement, instructional strategies, and classroom management, were similar to the teachers' self-efficacy in the current study (Lee, 2009). Unfortunately, all the above studies did not cover teachers' self-efficacy of literacy instruction for English teachers in an Asian context. Thus, this study also extends the literature of self-efficacy, particularly literacy instruction in Chinese society, as the concept and measure of literacy instruction were originally developed in native English speaking cultures. This investigation provides insights for cultures (e.g. Chinese) positioning English as one of the main foreign languages.

DIFFERENCES IN SELF-EFFICACY AND STRESS FROM THE CLASSROOM AMONG PRE-SERVICE, NOVICE AND EXPERIENCED TEACHERS

Variations of teachers' self-efficacy are found among pre-service, novice and experienced in-service teachers. In particular, experienced teachers are found to have the highest self-efficacy in all the four aspects and this finding is partially similar to a previous study of Tschannen-Moran and Woolfolk Hoy (2007) that concluded that teachers with more experience have higher efficacy in instructional strategies and classroom management but not in student engagement.

The significant differences found using the group comparison in this study further provide an overview of the beliefs of EFL teachers. First, pre-service teachers reveal a lower level of efficacy in terms of instructional strategies and classroom management. It is unexpected to find novice teachers who have been teaching in an actual classroom for a few years who consider themselves the weakest in their competence to assist students' learning. With significant discrepancy of stress from the classroom between novice and experienced teachers as well as reviewing their feedback in the items from each dimension, novice EFL teachers encounter more difficulties in designing appropriate assessment for students and dealing with students' low motivation in English learning. It is possible novice teachers perceive brand new experiences in classrooms with their students; the very first teaching is easily recognized as a shocking experience to them (Caspersen & Raaen, 2014). Despite the fact that they are at an initial stage of their career, as the self-efficacy remains malleable and stress of the classroom is tremendous in the early years of their teaching career, this is an important transitional

period for these teachers (Day et al., 2007). Attention and remediation should be drawn to prepare both pre-service and novice teachers.

FACTORS PREDICTING TEACHERS' SELF-EFFICACY

Both pre-service and novice teachers have relatively low self-efficacy – teachers who will enter the teaching profession and those who have already entered the profession. To better support the EFL teachers in their career, it is important for stakeholders in education to know the factors that can influence both positively and negatively teachers' self-efficacy.

Stress from the classroom is the strongest negative predictor of efficacy in student engagement and classroom management, implying that most of the teachers' stress is derived from situations happening in the classroom. The state of vulnerability affects EFL teachers' belief in being involved and encouraging students' participation during instruction and being able to manage the class well for successful language learning.

The positive variable job satisfaction is found to predict the three facets of teachers' self-efficacy, namely, student engagement, instructional strategies, and literacy instruction. Generally, teachers who obtain satisfaction from EFL teaching are more likely to believe in their capability to engage students in their set tasks, to apply relevant teaching strategies during instructions, and in particular to believe in their competence in teaching English.

In addition, teachers' experience in teaching English is a positive predictor of all facets of teachers' self-efficacy, revealing that teachers who accumulate more experience in teaching their students are experienced in having necessary knowledge and techniques to be effective English teachers and remedy the learning problems that arise in a language classroom. Thus, they are more likely to believe they have the capability to be effective teachers in English teaching.

IMPLICATIONS

In theory and practice, the "sink or swim" method is not effective for teachers and definitely not for facilitating teachers in their profession (Varah et al., 1986). The study shows that the need for different groups of teachers is not similar and they indeed require different levels and intensity of support in their career with an adequate environment and conditions. Teachers are the most significant resources in the school environment for students' learning (OECD, 2005). It is necessary to know how to enhance the teachers' self-efficacy, especially the pre-service and novice in-service teachers.

English teachers' self-efficacy

ASSISTANCE TO IN-SERVICE EFL TEACHERS TO IMPROVE THEIR SELF-EFFICACY

Teaching is not a simple job but full of variations that emerge from students and the work environments. Teaching may become a complex process for EFL teachers, as there could be a lot of issues that need to be handled in the classroom. A potential negative effect may happen in their everyday teaching. Mainly there is very limited time for the students to practice speaking in English, which is not their first language. As teaching is considered a stressful occupation, in a study about teachers' occupational health in Macao, teachers were found to be exhausted and stressed (Kuok & Lam, 2018), which matches the results of this study, indicating that this phenomenon happens to EFL teachers in Macao. If stress from the classroom is found to be a negative predictor of teachers' self-efficacy and stress from the classroom among novice teachers was higher than in experienced teachers, having ways to minimize stress from the classroom would be beneficial to their efficacy level, especially the novice teachers. Implications can be drawn not only for the teachers individually, but also the ecological system among the teachers. First, individual stress management is needed for all the teachers in order to equip them with new coping skills with adaptive thinking and behaviour (Herman & Reinke, 2015), e.g., relaxation training, yoga as well as mental health first aid training. Second, scholars offered a suggestion to provide ecological interventions to foster the teachers' wellness, as teachers' sources of stress could be from themselves, from students' outcomes, school management, parents, and the community while resources from the teachers' ecological system are limited (Herman et al., 2018). In some sense, such a student-oriented approach may benefit the students' outcomes but not the teachers. Particularly teachers are always working on a giving basis. They have a chance to be dried out cognitively, physically and even emotionally. In turn they have to be nurtured in these domains. Thus, setting up an optimal environment for teachers is necessary (see Lewis & Sugai, 1999). It is not questionable for the school to design schoolwide strategies to meet the needs of all students, but to develop a common focus for the teachers, families and community members consistently is essential. In addition, Kuok et al. (2020) found that teachers' understanding of their role in school can decrease teachers' stress in a student-oriented approach, indicating that implementing universal management strategies across all school settings consistently is critical to teachers' stress. Therefore, extensions of the schoolwide strategies are not limited to be addressed in the classroom setting, but in the non-classroom setting as well (Lewis & Sugai, 1999), which also matched Kuok and Lam's (2018) findings. Teachers had lots of preparation tasks before they went into the class. How to

properly take care of non-classroom tasks for teachers could reduce their stress of the classroom. In return, their self-efficacy increases.

Whereas job satisfaction is a positive predictor of teachers' self-efficacy of student engagement, instructional strategies, and literacy instruction, suggest that teachers perceive their work as meaningful, challenging and useful. They believe that they are more capable to be competent EFL teachers in terms of being successful to involve students to engage in class activities. One possible implication is to obtain (1) students' evaluation for their teaching for advancement, (2) teachers' recognition for their school management and the students' parents through year-end teaching evaluation. Similar to the teaching evaluation for the academic staff in a tertiary institution, students who interact with their teachers frequently are appropriate sources to provide comments to their teachers. Both their praise and suggestions are vital for teachers in their required teaching tasks. Such information will be able to assist EFL teachers to reflect whether their work is successful or not as a discrepancy may exist between the perception of students and teachers. Moreover, instead of a single-way evaluation between students and teachers, it is credible teachers in return are given opportunities to evaluate their school management team and the contribution of students' family in the education process. This mechanism not only fosters the working environment of teachers, but also stimulates the improvement of interaction among the school, family and teachers to educate students. Under certain circumstances, this cooperative practice provides a sense of being cared for. The teachers are more likely to be satisfied with their work, then their belief of being capable to teach students improves.

STRENGTHEN THE ENGLISH PRE-SERVICE AND NOVICE TEACHERS' SELF-EFFICACY

Another critical finding of this study is a significant drop in teachers' self-efficacy from the stage of pre-service teachers to novice teachers, and they bounce back when they gain more experiences. A possible explanation of this significant drop of teacher's self-efficacy from the stage of pre-service to in-service newcomers can be the "reality shock" in the organizational socialization theory (see Taormina, 1997). One of the components of organizational socialization is future prospects, in which Taormina (1997) mentioned that due to the unrealistic expectation, workers have high prospects in the pre-arrival period, and they would have a significant drop of their prospect when they work at the company. This can be applied to teachers as well, since pre-service teachers spend the majority of their time in theoretical rather than in practical aspects. They may perceive they would

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be able to deal with it once they become teachers. On the other hand, when they are teachers, they struggle to apply those theories learnt to real life situations. Therefore, enhancement is needed for the transition period between pre-service and in-service.

ENHANCEMENT PROGRAMME FOR PRE-SERVICE ENGLISH TEACHERS

As Kleickmann et al. (2013) proposed that teacher education could be good for enhancing pre-service teachers' knowledge in both content knowledge and pedagogical content knowledge. Thus, for universities, they should address more microteaching as a main educational strategy for pre-service teachers. It is a technique to assist the pre-service teachers to have more preparation in the real classroom setting (see Brent et al., 1996). On the other hand, the school management can work with the universities closely to develop a mechanism for the pre-service teachers. Beside the traditional internship placement, the university and school management can involve more follow-up actions. They can assist the pre-service teachers to apply for a job. All interviewees shortlisted by each school need to prepare mock teaching in the interview. After the interview, all interviewees are asked to observe the in-service teachers in each school to ensure that they can get a better understanding of the culture and ways of teaching each school prefers. If possible, the mechanism above should take place in the spring semester of the last studying year of the university study. The pre-service teachers selected by each school can be invited to provide some guest lectures in the same semester. It will also be good to ask them to provide co-teaching but it depends on the numbers recruited for each school in that period. This acts as a platform for them to adopt the real life situations, to plan what they can do and learn from errors with the identity of pre-service teachers. In return, it minimizes the pre-service having unrealistic expectations for their chosen school and they avoid experiencing a reality shock when all the responsibilities come once when they are in-service teachers in the next academic year.

MENTOR PROGRAMME FOR NOVICE ENGLISH TEACHERS

According to these findings, it is possible to set up a 'mentor programme' for the novice teachers, i.e. the novice teachers can observe the experienced teachers, not only in the classroom, but also before and after class in order to learn the techniques and to discover the discrepancy between the two, especially in the aspects of designing assessment and motivating students in classroom. Such a programme is very critical to re-

duce the stress from the classroom among the novice teachers. This serves as an extended process for teachers to transcend from pre-service to novice teachers as well as from novice to experienced teachers.

Besides, as suggested by Kuok and Lam (2018), two other considerations for EFL teachers can offer opportunities for teachers to be specialists in the career. From the school management level, it is possible to build EFL teachers to be a stronger force by giving EFL teachers the options to develop into a different track of education specialists. That is, they are allowed to choose to be in a teaching track, a specialist in research or curriculum development for the school or to take up administration roles. Supporting teachers with specific training for their roles they are interested in taking up and establishing a comprehensive system for each level of evaluation to ensure their future prospects are suggestions to enhance the efficacy of the EFL team in the school.

LIMITATIONS AND FUTURE STUDIES

This study mainly focused on exploring the beliefs of EFL teachers and the possible antecedents, namely job satisfaction and stress level. There are other topics in teaching and teacher education, namely their professional knowledge, self-abilities, teaching methodologies or strategies. Their beliefs of quality for teaching English are also worthwhile to look at. Studies are encouraged to have more in-depth understanding in other dimensions of teachers' psychological aspects in order to strengthen teachers' efficacy and improve the teaching effectiveness. In addition, the current study adopted a cross-sectional design while the future studies can also adopt a longitudinal design to explore the teachers' self-efficacy. Moreover, the current study found that stress from workload was not a predictor of any of the teachers' self-efficacy. It may suggest that stress from workload can be tested as a moderator rather than an independent variable in future studies.

The measurement tool of teachers' self-efficacy for literacy instruction was used to understand the efficacy of EFL teachers in Macao in the study. The adopted measure was originally developed to measure teachers who are native English speakers in western societies. However, the targets in the study are EFL non-native teachers who do not speak English as their first language. It is possible for the teachers in Chinese societies to have some variations of English teaching in contexts, methodologies, and strategies. The results showed that experienced EFL teachers are the strongest in all the dimension of efficacy. It is assumed their experience is developed and grounded in actual EFL teaching context reflecting the specific characteristic of efficacy. It is meaningful for future studies to explore a more contextual tool to assess the efficacy for EFL teachers.

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