Exploring the predictive power of EFL teachers' work engagement and buoyancy in their professional development

XIAOJUAN ZHANG

Hohhot Minzu College, China

LEI YANG (Corresponding author)

Inner Mongolia University, China

Anna Lia Proietti Ergün

Yildiz Technical University, Turkey

Received: 28/4/2023 / Accepted: 10/11/2023

DOI: https://doi.org/10.30827/portalin.vi2023c.29634

ISSN paper edition: 1697-7467, ISSN digital edition: 2695-8244

ABSTRACT: The complexities and constant changes of trends in teaching the English language demand teachers to work on their pedagogical knowledge and skills continuously. These are best obtainable in professional development programs. However, the role of teacher emotions in such programs has remained unaddressed. To bridge this gap, this study examined the predicating role of second language (L2) teachers' work engagement and buoyancy in their professional development. A total of 348 Chinese teachers participated in a survey with three online questionnaires. The results of structural equation modeling (SEM) and regression illustrated that both teacher work engagement and buoyancy could predict L2 teachers' professional development. In particular, it was found that about 68% and 61% of changes in TPD could be predicted by work engagement and buoyancy, respectively. The study is momentous for L2 teaching and teacher education by calling for the integration of emotions into TPD and pedagogy.

Keywords: buoyancy, EFL teachers, Positive psychology, Professional development, SEM, Work engagement

Explorar el poder predictivo del compromiso laboral y la resiliencia de los profesores de EFL en su desarrollo profesional

RESUMEN: Las complejidades y los constantes cambios en las tendencias de enseñanza del idioma inglés exigen que los profesores trabajen continuamente en su conocimiento pedagógico y habilidades. Estas mejoras se obtienen mejor a través de programas de desarrollo profesional. Sin embargo, el papel de las emociones de los profesores en dichos programas ha quedado sin abordar. Para abordar esta brecha, este estudio investigó el papel predictivo del compromiso laboral y la resiliencia de los profesores de segunda lengua (L2) en el desarrollo profesional. Un total de 348 profesores chinos participaron en tres encuestas en línea. Los resultados del modelo de ecuaciones estructurales (SEM) y los análisis de regresión indicaron que tanto la dedicación laboral como la resiliencia pueden predecir el desarrollo profesional de los profesores de L2. Específicamente, el estudio descubrió que aproximadamente el 68% y el 61% de las variaciones en el desarrollo profesional de los profesores pueden ser respecti-

vamente predichas por el compromiso laboral y la resiliencia. Este estudio es transcendental para la enseñanza de L2 y la formación de profesores, ya que aboga por la integración de las emociones en el desarrollo profesional y la pedagogía de los profesores.

Palabras clave: profesores de EFL, Compromiso laboral, Resiliencia, Desarrollo profesional, SEM, Psicología positive

1. Introduction

With the outgrowth of English language education all around the world, teachers and educators have now verified the key role of professional development programs in ameliorating their pedagogical competencies and readiness to teach (Bhatt, 2021; Sancar *et al.*, 2021). The importance of such courses and training sessions multiplies in English as a foreign language context due to the inherent complications and idiosyncrasies of second language (L2) education (Derakhshan & Nazari, 2022). L2 teachers are now required to stay updated and constantly promote their pedagogical, professional, and repertoire of knowledge in tune with the requirements of today's education (Cosgun & Savaş, 2019). Therefore, they attend professional development courses before or alongside their instruction (Fan & Wang, 2022; Sokel, 2019). Simply, teacher professional development (TPD) refers to any piece of training delivered formally/informally and individually/collectively to increase teachers' teaching quality and pedagogical skills (Cosgun & Savaş, 2019). In contrast with traditional TPDs, nowadays pre-service and in-service teachers are involved in continuous and self-directed professional development courses (Bhatt, 2021; Zepeda, 2013).

Given its significance for the success of both teaching and learning, TPD has been a popular line of research in different contexts (Barrera-Pedemonte, 2016). Most of the studies on TPD have concentrated on the features of a successful TPD, its influence on teachers and learners, and teachers' perceptions and attitudes (Cosgun & Savaş, 2019; Porter & Freeman, 2020). Moreover, the contribution of technology and online settings to EFL teachers' professionalism has been the focus of an increasing bulk of investigations (Atmojo, 2021; Cosgun & Savaş, 2019; Estaji & Ghiasvand, 2023; Zhou *et al.*, 2022). Another area of research, which has recently grasped L2 researchers' attention, is the role of emotions in EFL teachers' professional development (Derakhshan, Greenier, *et al.*, 2023; Derakhshan, Karimpour, *et al.*, 2023a, b; Gu *et al.*, 2022; Karagianni & Papaefthymiou-Lytra, 2018). Since L2 education is highly emotional and challenging, EFL teachers usually experience different emotions and conflicts in the profession (Derakhshan, 2022; Dewaele *et al.*, 2019; Ghiasvand *et al.*, 2023; Mercer, 2020). They need to be emotionally engaged in/with their job to deal with disciplinary-specific challenges and develop their teaching effectiveness (Zou *et al.*, 2021).

Two critical psycho-affective constructs that may shape EFL teachers' professional development are work engagement and buoyancy. Work engagement is a mental state in which a person is deeply and devotedly immersed in his/her job (Schaufeli *et al.*, 2002). It is the opposite of job burnout and represents one's perceived well-being and commitment at work (Schaufeli, 2012). It is a multi-faceted construct that may develop over time and through training and consideration (Schaufeli *et al.*, 2002). Research on teacher work engagement has widely focused on its conceptualization, measurement, and correlation with other psycho-emotional constructs such as emotion regulation, well-being, immunity, flow, personality, love, self-efficacy, reflection, and creativity (e.g., Dai & Wang, 2023; Derakhshan

et al., 2022; Greenier et al., 2021; Han & Wang, 2021; Johnson, 2022; Schaufeli & Bakker, 2010; Wang et al., 2022). However, the way work engagement can influence EFL teachers' professional development has been overlooked by educational researchers. As another influential factor in TPD, teacher buoyancy is defined as one's capability to encounter and manage common setbacks that occur in daily work or instruction (Martin & Marsh, 2008). It highlights teachers' ability to detect and recover from difficulties and build on positive strengths (Martin & Marsh, 2019). Empirical studies show that teacher buoyancy is affected by different contextual and individual factors (Zhang, 2021). It has also been found that self-efficacy, well-being, creativity, burnout, classroom interaction, and engagement correlate with teacher buoyancy (Anderson et al., 2021; Collie et al., 2020; Ding & He, 2022; Farid & Ashrafzade, 2021; Parker & Martin, 2009). What is left under-researched is the predictive power of teacher buoyancy in relation to work engagement and professional development. The studies on these constructs are one-shot correlations rather than being examined jointly in a single study. Although research has investigated the contributions of work engagement and buoyancy to EFL teachers' performance, the way they influence their professionalism has been overlooked. TPD is now conceptualized as a practice that goes beyond the simple development of new teaching skills but needs to be nourished by psycho-affective factors. However, the role of psycho-affective factors in TDP has been nearly ignored in the EFL field. To bridge the gap, this study aimed to uncover the predicating role of EFL teachers' work engagement and buoyancy in their professional development. It is then unique given its focus on the interaction between psycho-emotional and professional aspects of L2 teaching in EFL contexts. If TDP is influenced by psycho-affective components, in principle we can expect that constructs like academic buoyancy and work engagement can explain, at least partially, teachers' involvement in TDP: hence, the study intended to answer the following research.

How much variance in the EFL teachers' professional development can be predicted by their work engagement, and academic buoyancy?

2. Literature review

2.1. Work engagement

Given the complications and challenges involved in teaching and testing English, EFL teachers are usually emotionally under pressure (Derakhshan, 2022; Derakhshan, Solhi *et al.*, 2023; Derakhshan, Wang, *et al.*, 2023; Ghiasvand & Banitalebi, 2023). One way to tackle such difficulties is to be immersed in the job with a positive mind (Mercer, 2020). This demands a high level of work engagement on the part of teachers (Schaufeli *et al.*, 2002). The concept of work engagement is primarily a work-related mental state, which is characterized by being physically, cognitively, and affectively involved in a profession (Kahn, 1990). It is a positive construct that affects one's professional performance and success rate (Schaufeli *et al.*, 2002). The term differs from workaholism, which is a negative feature at workplaces (Han & Wang, 2021). In their three-dimensional model of work engagement, Schaufeli *et al.* (2002) argued that vigor, dedication, and absorption constitute one's degree

of engagement in a job. By vigor, they meant an individual's willingness to dedicate time and energy to work. Dedication concerns one's passion, pride, and inspiration for what he/she is doing. Absorption is described as a person's investment in a job in a way that he/she is immensely and joyfully captivated by it (Maslach *et al.*, 2008). Drawing on these dimensions, teachers' work engagement refers to their interest in, passion for, and investment in the teaching career (Cardwell, 2011).

The construct of work engagement is originally rooted in Kahn's (1990) work engagement theory (WET), which posits that one's engagement in a profession is directed by three principal dimensions of cognitive, emotional, and physical engagement. Based on this theory, which is the first theory behind work engagement, one needs to invest in all three categories of resources (i.e., cognitive, emotional, and physical) in work in order to succeed and enjoy his/her job. Work engagement may produce several positive outcomes for teachers, one of which can be their academic buoyancy development explained below.

2.2. Academic buoyancy: Definitions and similar terms

As stated earlier, teaching English in EFL contexts is really demanding and a big challenge for teachers. They have to realize and manage several internal and external factors at the same time (Mercer, 2020). There are many adversities and conflicts other than linguistic ones that pose tensions for L2 teachers and multiply their workload (Derakhshan, 2020). To bear these pressures, EFL teachers should be tough and steady in the face of challenges (Martin & Marsh, 2019). Such an ability to understand and manage academic challenges at workplaces has been called academic buoyancy by the proponents of positive psychology (PP) which underscores the criticality of investing in positive emotions (MacIntyre *et al.*, 2019). The concept of buoyancy can be defined as an individual's capacity to navigate and tackle minor academic setbacks in academic settings (Yun *et al.*, 2018). It is the ability to overcome and recover from academic obstacles that ordinarily appear in teaching (Martin & Marsh, 2008). Buoyancy is an adaptive and positive response that a teacher shows when facing a routine setback in the class (Putwain *et al.*, 2012). Simply, buoyancy concerns one's emotive management skills.

Academic buoyancy is a complicated factor in educational contexts as it is affected by a wide range of personal, contextual, cultural, and material-related factors (Comerford *et al.*, 2015). Buoyancy focuses on "many and healthy" instead of extreme ones (Martin & Marsh, 2019). It has been synonymously used with some concepts such as resilience, immunity, hardiness, and coping. Resilience refers to one's ability to overcome general difficulties, while buoyancy is specific to academic challenges (Martin & Marsh, 2019). Teacher immunity is also considered a cognate of buoyancy. However, immunity is a defensive mechanism, which a person uses to reduce and prevent adversities that may hamper his/her performance (Hiver, 2017). Hardiness or the quality of being tough is the ability to resist challenges and negative influences on one's performance (Hiver & Dörnyei, 2017). Coping is the last similar term, which refers to different strategies that an individual uses to overcome difficulties and troubles (Somerfield & McCrae, 2000). Each of these constructs may have significant representations in teachers' professionalism and growth.

2.3. Teacher professional development

There is enough evidence that professional development programs and courses play vital roles in teachers' instructional quality and professional progress (Gore et al., 2021). TPDs revolve around practical techniques, competencies, and activities that help teachers constantly improve concerning pedagogy (Sokel, 2019). TPD refers to a wide range of activities and practices delivered to teachers to form life-long learning with regard to teaching (Borg, 2018). Traditional TPDs were one-shot, top-down, and monologic in which the teachers had no choice to question what they were receiving from the trainer (Hadar & Brody, 2010). Professional activities like workshops, seminars, and conferences were common during this era, where teachers had to apply the pedagogical points to their classes without reflection and critique (Porter & Freeman, 2020). In L2 education, which is overwhelmed by numerous psychological, cognitive, emotional, and socio-cultural factors, teachers need continuous professional development programs (Derakhshan et al., 2020). Such programs should hone teachers' professional knowledge and skills knowledge to ensure their constant improvement (Vonk, 1991). Contrary to traditional approaches to TPD, current approaches highlight interaction, collaboration, deeds analysis, and follow-up support in professional training courses (Hiew & Murray, 2021). Moreover, TPD activities should match the instructional objectives, lesson plans, and course contents of L2 education to reform instruction and cause stability in classroom activities (Zhang, 2022).

It is essential to note that TPD programs vary in form in relation to context, discipline, needs, and goals. They can be delivered in formal workshops and informal discussions with colleagues. Teachers can professionally grow both individually or in groups (Bhatt, 2021). Regardless of their delivery form, TPDs all aim to enhance teachers' teaching quality and learners' learning (Haug & Mork, 2021). To achieve such goals, effective TPD programs are characterized by being innovative, interactive, ongoing, reflective, collaborative, needs and interests-based, and practical in light of subject-specificity (Borg, 2018; Fitri *et al.*, 2021). Another expectation from a good, modern TPD is being sensitive to teachers' psycho-affective concerns and factors because teaching is not just about transferring knowledge. However, this issue has not been given due attention by L2 researchers.

2.4. Related studies

The rise of PP led to a surge of research on different psycho-affective constructs involved in L2 education (Derakhshan, 2022; Derakhshan, Solhi, et al., 2023; Derakhshan & Zare, 2023; Ergün & Dewaele, 2021; MacIntyre et al., 2019; Mercer, 2020; Wang et al., 2022). These studies verified the strong correlations between several PP constructs and the teaching and learning processes of the English language. Considering EFL teachers' work engagement, empirical studies show strong correlations between this construct and teacher immunity, self-efficacy, creativity, resilience, grit, and reflection, (Azari Noughabi et al., 2022; Derakhshan et al., 2022; Han & Wang, 2021; Xie, 2021). Additionally, Greenier et al. (2021) conducted cross-cultural research on the interaction of emotion regulation, psychological well-being, and work engagement across a sample of 108 British and 255 Iranian teachers. In the end, they found that teacher work engagement was predicted by

their emotional regulation and psychological well-being. Likewise, Dai and Wang (2023) examined the interplay of teacher flow, proactive personality, and work engagement of 350 Chinese EFL teachers in a structural equation modeling (SEM) study. They identified a positive association among the three variables, yet the sense of flow had the highest prediction power. Researchers have also examined the antecedents and consequences of teacher work engagement in the past years (Borst *et al.*, 2020; Xie, 2021). Furthermore, in a theoretical study, Dong and Xu (2022) contended that EFL teachers' optimism and job commitment were associated with their work engagement level. Another variable, which has been found as related to work engagement is buoyancy at workplaces (Parker & Martin, 2009).

Teacher buoyancy has been the focus of a bulk of research, especially its conceptualization and measurement (Collie et al., 2020; Tang et al., 2022). As with other PP constructs, buoyancy has been mainly explored in correlational and one-shot studies. Research findings reveal that teacher buoyancy correlate with their self-efficacy, engagement, creativity. well-being, and burnout (Anderson et al., 2021; Ding & He, 2022; Farid & Ashrafzade, 2021; Parker & Martin, 2009). However, the way teachers' work engagement and buoyancy situate in relation to TPD has remained unclear, so far. As research confirms, TPD is affected by a spectrum of positive emotions (e.g., motivation, grit, job satisfaction, excitement, enjoyment, happiness, etc.) and negative emotions (e.g., stress, anxiety, fear, boredom, hopelessness, burnout, etc.) (Day & Lee, 2011; Gkonou & Miller, 2021; Saunders, 2013). Despite these insightful studies, researching EFL teachers' professional development is limited to the characteristics, outcomes, and perceptions of TPDs for L2 teachers and learners (Cosgun & Savas, 2019; Porter & Freeman, 2020). Still, the role of teacher emotions in TPD is at the beginning of its long journey. In one of the first studies in this area, Gu et al. (2022) carried out a case study with 5 Chinese EFL teachers concerning the influence of emotions on their sustainable professional development. Using interviews and document analyses, they found that teachers experienced different emotions in response to the interactions they had with the working environment, students, and features/requirements of livestream teaching. The impacts were found influential in their identity development, professional understanding. and teaching motivation. However, the antecedents and facilitators of such emotions were not specified. Moreover, the mediating role of specific PP constructs/emotions in teachers' professionalism has not been addressed. To narrow these gaps, this study tried to expand the literature on the emotional basis of TPD by unmasking the predicting role of EFL teachers' work engagement and buoyancy in their professional development.

3. METHOD

3.1. Participants

A sample of 348 EFL teachers participated in this study using convenience sampling technique. They were teaching English courses in different institutes in China aged from 22 to 47 years old (M = 34.5, SD = 2.45). The sample included 158 male teachers and 190 female teachers, which accounted for 45% and 55% of the whole sample. Regarding their educational degrees, the respondents were Bachelor (79), Masters (159), and Doctorates (110) majoring in English language teaching. They had different levels of teaching experience with

the lowest experience level being 2 years and the highest level was 25 years. Before completing the survey, the participants were told about the goal of the study and their freedom and privacy were guaranteed by the researchers.

3.2. Instruments

3.2.1. Work engagement questionnaire

To measure EFL teachers' perceived work engagement, in this study, the researchers used Schaufeli *et al.*'s (2002) work engagement questionnaire (WEQ). The questionnaire involved 17 items that used a 6-point Likert scale spanning from "0" (never) to "6" (always). The instrument had three sub-component of vigor (6 items), dedication (5 items), and absorption (6 items). The overall reliability of this scale was 0.97 as estimated by Cronbach's alpha. Concerning the sub-components, the results showed that vigor, dedication, and absorption had a reliability of 0.95, 0.93, and 0.94, respectively.

3.2.2. Academic buoyancy scale

To assess EFL teachers' academic buoyancy, Martin and Marsh's (2008) scale was employed in the present study. The scale was composed of four items that were presented in a 7-point Likert scale ranging from "1" (strongly disagree) to "7" (strongly agree). The items were divided into two sub-components of 'sustainability' and 'eligibility' each including two items. "I don't let study stress get on top of me" is a sample question from the scale. Cronbach's alpha was used to examine the reliability of the scale in the context of the study. The results showed a reliability of 0.93 for the whole instrument.

3.2.3. Teacher professional development (TPD) questionnaire

Concerning this variable, the researchers used a short version of Estaji and Molkizadeh's (2022) TPD questionnaire. It was made up of 35 items in line with the purpose and objective of the study. The scale originally had 76 items. The respondents had to select an option from "1" (strongly disagree) to "5" (strongly agree). The items followed a 5-point Likert scale and they were divided into 8 sub-components of benefit, area of teaching, selection, definition, feature, factors, beliefs, and development. The reliability of the questionnaire was re-examined in this study via Cronbach's alphas. The results indicated a high-reliability coefficient of 0.98.

3.3. Data collection

To collect the data of this study that examined the interplay of three critical constructs in L2 education, the researchers took advantage of three previously developed and validated questionnaires. Before distributing the scales, the researchers first examined the items of the questionnaire carefully to make sure of their match with the objectives and goals specified for the study. Then, the questionnaires were converted into an online booklet including all three scales in a row. To do so, Google Form was used given its ease of use and popularity in EFL contexts. The Form started with a section informing them about the generic purpose

of the study and participants were asked to tick the consent box before starting the survey.

When the link was prepared, the researchers previewed the items to locate possible errors before the data collection. After ensuring the correctness of the items, the researchers shared the direct link to the booklet questionnaire with a total of 540 EFL teachers. They were provided a consent form and a brief description of the purpose of the study prior to responding to items. Since the participants were active instructors in their institutes, the researchers allocated a one-week interval for them to carefully read and answer the questionnaires and submit their final responses. They were informed that only one submission was allowed for each participant. Upon the termination of the pre-specified time in the researcher's timetable, 510 valid and complete responses were collected from the participants. Next, the data were re-examined for consistency in an Excel file making them ready for statistical analyses. Finally, the researchers used SPSS software to analyze the data set in light of the research question and hypotheses formulated in advance.

3.4. Data analysis

The obtained data were quantitatively analyzed using the most recent version of SPSS software. In particular, the researchers employed SEM and regression analysis to develop a structural model of the association among EFL teachers' work engagement, buoyancy, and professional development. Likewise, confirmatory factor analysis (CFA) was employed to attest the factorial structure of variables and test the hypothesis concerning their relationship with underlying constructs. Furthermore, the goodness of fit indices was measured to verify the model's fit and the proportion of variance that is explained. In the end, the results were shown by different Tables and Figures.

4. Results

To answer the research question of the study, the researchers ran the SEM analysis whose results revealed that EFL teachers' teachers' work engagement, buoyancy, and professional development were related and could form a structural model (Figure 1).

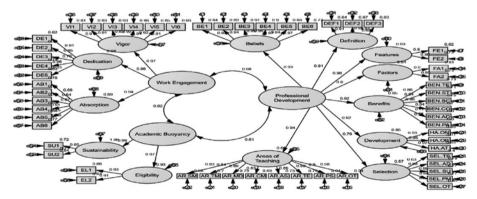


Figure 1. The Final Modified CFA Model with Standardized Estimates

Criteria		Terrible	Acceptable	Excellent	Evaluation	
CMIN	5099.061					
DF	1468					
CMIN/DF	3.473	> 5	> 3	> 1	Acceptable	
RMSEA	.081		< 0.08	< 0.06	Acceptable	
GFI	.909	> 0.8	> 0.9	> 0.95	Acceptable	
CFI	.956	> 0.8	> 0.9	> 0.95	Acceptable	
PNFI	.771		> 0.5		Acceptable	
TLI	.949	> 0.8	> 0.9	> 0.95	Acceptable	

Table 1. The Goodness of Fit Estimation

In Table 1, the result indicated that five determiners are ratio of CMIN-DF, goodness-of-fit index (GFI), comparative fit index (CFI), Parsimonious Normed Fit Index (PNFI), Tucker-Lewis Index (TLI), and root mean square error of approximation (RMSEA). The model fit indices are all within specifications. Therefore, CMIN/DF is 3.473 (spec. ≤ 3.0), GFI = 0.909 (spec. > 0.9), CFI = 0.956 (spec. > 0.9), PNFI = 0.771 (spec. > 0.5), TLI = 0.949 (spec. > 0.9), and RMSEA = 0.081 (spec. < 0.080).

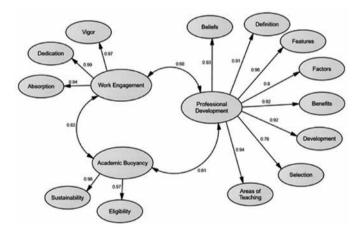


Figure 2. The Measurement Models

Table 2. Composite Reliability and Discriminant Validity of the Factors

	CR	AVE	MSV	MaxR(H)	Teachers' Professional Development		Teachers' Work Engagement
Teachers' Professional Development	0.971	0.805	0.465	0.980	0.897		
Teachers' Academic Buoyancy	0.998	0.995	0.679	1.289	0.613	0.998	
Teachers' Work Engagement	0.977	0.935	0.679	0.985	0.682	0.824	0.967

.935

The results of Table 2 show that composite reliabilities of the factors are acceptable (CR > 0.70). In other words, the model has achieved composite reliability. The values also demonstrate that the convergent validity of the factors reaches to an acceptable value (AVE > 0.50) or the model has achieved convergent validity. Another requirement of convergent validity is factor loading more than 0.50. The results of factor loading are presented in Table 4. In addition, the results indicate that the model has achieved discriminant validity (the square root of AVE > inter-construct correlations).

Estimate Definition Teachers' Professional Development .913 Feature Teachers' Professional Development .965 Factor Teachers' Professional Development .802 Benefits Teachers' Professional Development .922 Development Teachers' Professional Development .923 Teachers' Professional Development .757 Selection Vigor Teachers' Work Engagement .968 Teachers' Work Engagement Dedication .988 Teachers' Work Engagement Absorption .944 Sustainability Teachers' Academic Buoyancy .981 Eligibility Teachers' Academic Buoyancy .965 Area of Teaching Teachers' Professional Development .941

Table 3. Factor Loading and Standardized Regression Weights

The results of Table 3 show that almost all of the values are more than 0.50. It means that the model has achieved the convergent validity.

Teachers' Professional Development

			Estimate	S.E.	C.R.	P
Teachers' Academic Buoyancy	\leftrightarrow	Teachers' Work Engagement	.821	.107	10.320	.000
Teachers' Academic Buoyancy	\leftrightarrow	Teachers' Professional Development	.615	.052	8.546	.000
Teachers' Professional	\leftrightarrow	Teachers' Work Engagement	.684	.053	9.258	.001

Table 4. The Prediction Power of Every Variable in Standardized Regression Weights

The results of Table 4 represent that all null hypotheses are rejected. It means that teachers' work engagement predicts teachers' professional development. The values indicate that about 68 percent of changes in teachers' professional development can be predicted by their work engagement; about 61 percent of changes in teachers' professional development can be predicted by their teachers' academic buoyancy; about 82 percent of changes in teachers' academic buoyancy can be predicted by their work engagement.

Beliefs

5. Discussion

This study was an effort to model the association among three L2 education constructs, namely teacher work engagement, buoyancy, and professional development. It set out to see if TPD is predicted by EFL teachers' work engagement and buoyancy. The results of SEM and regression analysis evinced that teachers' work engagement could predict their professional development. This finding theoretically corroborates Kahn's (1990) WET, which maintains that an individual workforce's professional practice and quality are governed by his/her cognitive, emotional, and physical engagement in/with the job. Additionally, the result verifies Schaufeli et al.'s (2002) model of work engagement and its three dimensions (i.e., vigor, dedication, and absorption) in that a professionally developed EFL teacher basically needs to be willing, committed, and immersed in the teaching career. These qualities match the three dimensions proposed for work engagement. Empirically, this prediction and correlation between work engagement and TPD are consistent with the results of Gu et al. (2022), who ran a study in China and found teachers' psycho-emotional factors influential in their sustainable professional development. Moreover, this result is partially in line with Dong and Xu (2022), who argued that the work engagement of EFL teachers plays a significant role in their emotional responses to the job and its degree of commitment. A justification for this interaction might be EFL teachers' high psycho-pedagogical knowledge regarding the nature and elements of a successful TPD. For the participants, it seems that TPD is driven by emotions and work engagement is one of such positive, work-related emotions. This can be attributed to their university and professional training courses as well as their actual experience that professionalism is not detached from teachers' emotional world. The connection between emotions and professionalism in L2 education field could also justify the results. This field is an amalgamation of various factors linked together. Teachers' pedagogical content knowledge, emotional literacy, and expertise may be the reason behind this interaction.

Another finding of this study was that EFL teachers' perceived academic buoyancy could also predict their professional development. This is in line with PP perspectives that highlights the power of positive emotions like buoyancy in developing EFL teachers' professional practice and effectiveness. In addition, this result provides further support to previous studies that underscored the idea that L2 teaching is surrounded by emotions (e.g., Day & Lee, 2011; Gkonou & Miller, 2021; Saunders, 2013). A potential reason for this finding could be the complicated nature of L2 teaching, which demands EFL teachers to be tough and resilient in the face of a multiplex of challenges of the job. Therefore, the participants regarded their instruction and professional growth as the function of their capacity to overcome and recover from setbacks. The teaching experience of the participants may have also played a role in this interplay. It is conceivable that EFL teachers had a high emotional literacy level considering L2 pedagogy and development in a way that their inner states and emotions were considered the driving force behind their pedagogical growth. This augmented knowledge might have been gained through attending professional development practices like workshops and conferences, per se. The results support the interpretation that positive emotions can stimulate and engender several other positive outcomes for EFL teachers (Derakhshan, 2022; Mercer, 2020). When an EFL teacher is willingly engaged in his/her job, invests time and energy in it, and remains strong and resilient in spite of adversities and troubles, professional development emerges much easier than a situation in which he/she is bored, burned out, fragile, and hopeless. In sum, it can be noted that TPD is not solely about pedagogical issues, but there are many psycho-emotional factors and idiosyncrasies that are critical in the growth of EFL teachers. In other words, emotions are tied to teachers' development. It is not possible for professional growth without awareness of emotions and the ability to regulate them in a positive way. The present study confirmed the buoyancy and engagement in/with work to be two indispensable tools to assure professional growth. Furthermore, the study provided deep insights into the interaction among buoyancy, work engagement, and TPD. On the other hand, in light of the results, it cannot be drastically claimed that the teachers' experience and knowledge of PP and L2 pedagogy had made the three constructs interrelated without any intervening force. It is possible that the demographics and educational backgrounds of the participants facilitated the interaction among work engagement, buoyancy, and TPD. Yet, the present study did not take such factors into account.

6. CONCLUSION AND IMPLICATIONS

The present study revealed that EFL teachers' TPD is predicted by their perceived work engagement and buoyancy. Based on that, it can be asserted that TPD in L2 education is highly emotion-based and emotion-driven thanks to the nature of the field and its affective demands. Work engagement was regarded as facilitative of TPD because without being immersed in teaching, professional growth is not possible. Hence, one needs to passionately engage in/with the task of teaching and constant self-improvement. Additionally, it can be concluded that because of the overwhelming challenges of teaching an L2 in EFL contexts, teachers require to be buoyant and strong against the setbacks so that their professional growth is fostered. In other words, being buoyant and deeply engaged in the teaching career are two characteristics of professional teachers. TPD is no longer a passive and emotion-free practice, but one situated in teachers' psycho-affective and socio-cultural bases. Overall, this investigation can add new insights into the literature considering the intersection of PP in TPD. Theoretical frameworks and models of L2 TPD should pay due attention to the emotional aspects of L2 teaching in their dimensions. In practice, this study can be enlightening to EFL teachers in that their understanding of the psychology of language teaching increases meaningfully. Moreover, they can use practices proposed by the followers of PP so that their positive emotions multiply in L2 instruction and their professional growth is facilitated. Professional development program designers/developers may be another cam that may find the study valuable. They can revise their programs by integrating an emotional element into them. The current TPDs are mostly pedagogy-oriented and there is no trace of emotion enhancement and regulation strategies in the training courses. The designers can offer practical techniques by which EFL teachers are engaged in their job and become tough in the face of troubles. These, in turn, lead to TPD.

Despite these applications, this study has some limitations in the research design and instruments. More precisely, a pure quantitative research design was used in this study, which has its own drawbacks. The data were collected only through three questionnaires in which it is possible to have self-flattery and unreal responses on the part of the participants. A single research context was the source of data (i.e., China), which may limit the generalizability

of results to other contexts. Moreover, the study was one-shot and afforded no information about the dynamics of the interplay of the three variables. Furthermore, the developmental mechanism of the claimed interaction was not examined due to the study's short period. Against these shortcomings, future researchers can benefit from mixed-methods studies using interviews, observations, and diaries to gain deep insight. Future studies are recommended to apply innovative approaches to PP research including time series analysis, retroductive modeling, idiodynamic method, and latent profile analysis to capture the complexities involved in the interaction of work engagement, buoyancy, and TPD (Derakhshan, 2022; Derakhshan, Wang, Wang, et al., 2023). Finally, longitudinal and cross-sectional studies can be carried out to identify the variations of each construct across different time periods.

7. References

- Anderson, R. C., Bousselot, T., Katz-Buoincontro, J., & Todd, J. (2021). Generating buoyancy in a sea of uncertainty: Teachers creativity and well-being during the COVID-19 pandemic. Frontiers in Psychology, 11. https://doi.org/10.3389/fpsyg.2020.614774
- Atmojo, A. E. P. (2021). EFL teachers' online teacher professional development experiences amidst the COVID-19 pandemic: Practices and perceptions. *Englisia: Journal of Language, Education, and Humanities*, 9(1), 1–18. https://doi.org/10.22373/ej.v9i1.9127
- Azari Noughabi, M., Ghonsooly, B., & Jahedizadeh, S. (2022). Modeling the associations between EFL teachers' immunity, L2 grit, and work engagement. *Journal of Multilingual and Multicultural Development*, 1–16. https://doi.org/10.1080/01434632.2022.2088766
- Barrera-Pedemonte, F. (2016). *High-quality teacher professional development and classroom teachingapractices: Evidence from TALIS 2013*. OECD Publishing. http://dx.doi.org/10.1787/5jlpszw26rvd-en
- Bhatt, S. P. (2021). Self-directed professional development: EFL teachers' understanding. *International Journal of Language and Literary Studies*, *3*(4), 196–208. http://doi.org/10.36892/ijlls.v3i4.737
- Borg, S. (2018). Evaluating the impact of professional development. *RELC Journal*, 49(2), 195–216. http://dx.doi.org/10.1177/0033688218784371
- Borst, R. T., Kruyen, P. M., Lako, C. J., & de Vries, M. S. (2020). The attitudinal, behavioral, and performance outcomes of work engagement: A comparative meta-analysis across the public, semipublic, and private sector. *Review of Public Personnel Administration*, 40(4), 613–640. https://doi.org/10.1177/0734371X19840399
- Cardwell, M. E. (2011). Patterns of relationships between teacher engagement and student engagement. (Doctoral dissertation) John Fisher College.
- Collie, R., Guay, F., Martin, A. J., Caldecott-Davis, K., & Granziera, H. (2020). Examining the unique roles of adaptability and buoyancy in teachers' work-related outcomes. *Teachers and Teaching*, 26(4), 350–364. https://doi.org/10.1080/13540602.2020.1832063
- Comerford, J., Batteson, T., & Tormey, R. (2015). Academic buoyancy in second level schools: insights from Ireland. *Procedia-Social and Behavioral Sciences*, 197, 98–103. https://doi.org/10.1016/j.sbspro.2015.07.061
- Cosgun, G. E., & Savaş, P. (2019). Use of information and communication technology by in-service English teachers for self-directed professional development. *Electronic Journal of Foreign Language Teaching*, 16(2), 230–249. https://doi.org/10.56040/gecp1624

- Dai, K., & Wang, Y. (2023). Investigating the interplay of Chinese EFL teachers' proactive personality, flow, and work engagement. *Journal of Multilingual and Multicultural Development*, 1–15. https://doi.org/10.1080/01434632.2023.2174128
- Day, C., & Lee, J. C. K. (2011). New understandings of teacher's work: Emotions and educational change. Springer.
- Derakhshan, A. (2022). Revisiting research on positive psychology in second and foreign language education: Trends and directions. *Language Related Research*, *13*(5), 1–43. https://doi.org/10.52547/LRR.13.5.1
- Derakhshan, A., Coombe, C., Zhaleh, K., & Tabatabaeian, M. (2020). Examining the roles of continuing professional development needs and views of research in English language teachers' success. *TESL-EJ*, 24(3), 1–27.
- Derakhshan, A., Greenier, V., & Fathi, J. (2022). Exploring the interplay between a loving pedagogy, creativity, and work engagement among EFL/ESL teachers: A multinational study. *Current Psychology*, https://doi.org/10.1007/s12144-022-03371-w
- Derakhshan, A., Karimpour, S., & Nazari, M. (2023a). Making sense of emotion and identity construction through metaphors: a prompt-based. *Journal of Multilingual and Multicultural Development*. https://doi.org/10.1080/01434632.2023.2270951
- Derakhshan, A., Karimpour, S., & Nazari, M. (2023b). "Most of us are not feeling well": Exploring Iranian EAP practitioners' emotions and identities. *Ibérica*, 45(1), 7-34. https://doi.org/10.17398/2340-2784.4
- Derakhshan, A., & Nazari, M. (2022). "I am fed up with the criticisms": Examining the role of emotional critical incidents in a novice teacher's identity construction. *The Asia Pacific Education Researcher*. https://doi.org/10.1007/s40299-022-00666-1
- Derakhshan, A., Solhi, M., & Azari Noughabi, M. (2023). An investigation into the association between student-perceived affective teacher variables and students' L2-grit. *Journal of Multilingual and Multicultural Development*. https://doi.org/10.1080/01434632.2023.2212644
- Derakhshan, A., Wang, Y., Ghiasvand, F. (2023). "I never make a permanent decision based on a temporary emotion": Unveiling EFL teachers' perspectives about emotions in assessment. *Applied Linguistics Review*. http://dx.doi.org/10.1515/applirev-2023-0089
- Derakhshan, A., Wang, Y.L, Wang, Y.X, & Ortega-Martín, J. L. (2023). Towards innovative research approaches to investigating the role of emotional variables in promoting language teachers' and learners' mental health. *International Journal of Mental Health Promotion*, 25(7), 1–10. https://doi.org/10.32604/ijmhp.2023.029877
- Derakhshan, A., & Zare, J. (2023). The impact of altruistic teaching on English as a foreign language (EFL) learners' emotion regulation: An intervention study. *Brain Sciences*, *13*, 458. https://doi.org/10.3390/brainsci13030458
- Dewaele, J.-M., Chen, X., Padilla, A. M., & Lake, J. (2019). The flowering of positive psychology in foreign language teaching and acquisition research. *Frontiers in Psychology*, 10. https://doi.org/10.3389/fpsyg.2019.02128
- Ding, J., & He, L. (2022). On the association between Chinese EFL teachers' academic buoyancy, self-efficacy, and burnout. *Frontiers in Psychology*, 13. 947434. https://doi.org/10.3389/fpsyg.2022.947434
- Dong, Y., & Xu, J. (2022). The role of EFL teachers' optimism and commitment in their work engagement: A theoretical review. *Frontiers in Psychology*, 12, 830402. https://doi.org/10.3389/fpsyg.2021.830402

- Ergün, A. L. P., & Dewaele, J. M. (2021). Do well-being and resilience predict the foreign language teaching enjoyment of teachers of Italian?. *System, 99*, 102506. https://doi.org/10.1016/j. system.2021.102506
- Estaji, M., & Ghiasvand, F. (2023). Tracing the developmental trajectories of EFL Teacher Assessment Identity (TAI) through web-based audio diaries. *The Qualitative Report, 28*(9), 2681-2715. https://doi.org/10.46743/2160-3715/2023.5903
- Estaji, M., & Molkizadeh, A. P. (2022). Developing and validating a professional development inventory: Novice and experienced teachers' perceptions in focus. *Journal of Language and Education*, 8(1), 50-68. https://doi.org/10.17323/jle.2022.11115
- Fan, J., & Wang, Y. (2022). English as a foreign language teachers' professional success in the Chinese context: The effects of well-being and emotion regulation. *Frontiers in Psychology*. https://doi.org/10.3389/fpsyg.2022.952503
- Farid, A., & Ashrafzade, T. (2021). Causal explanation of academic buoyancy based on teacher-student interaction, self-efficacy and academic hope. *The Journal of New Thoughts on Education*, 17(2), 203–227. https://doi.org/10.22051/jontoe.2021.31522.3052
- Fitri, I. A., Miftakh, F., & Sumarta, S. (2021). Teachers' individual perspective towards teacher professional development: A narrative inquiry of EFL teachers in Indonesia context. *Project (Professional Journal of English Education)*, 4(6), 1094–1108.
- Ghiasvand, F., & Banitalebi, Z. (2023). Undergraduate EFL students' perceived emotions in assessment: Disclosing the antecedents and outcomes. *International Journal of Language Testing*, 13(2), 111-129. 10.22034/IJLT.2023.390950.1243
- Ghiasvand, F., Kogani, M., & Nemati, F. (2023). "Teachers as conflict managers": Mapping novice and experienced Iranian EFL teachers' professional identity conflicts and confrontation strategies. *Asian-Pacific Journal of Second and Foreign Language Education*, 8(44), 1-22. https://doi.org/10.1186/s40862-023-00219-z
- Gkonou, C., & Miller, E. R. (2021). An exploration of language teacher reflection, emotion labor, and emotional capital. *TESOL Quarterly*, 55(1), 134–155. https://doi.org/10.1002/tesq.580
- Gore, J. M., Miller, A., Fray, L., Harris, J., & Prieto, E. (2021). Improving student achievement through professional development: Results from a randomized controlled trial of Quality Teaching Rounds. *Teaching and Teacher Education*, 101, 103297. https://doi.org/10.1016/j. tate.2021.103297
- Greenier, V., Derakhshan, A., & Fathi, J. (2021). Emotion regulation and psychological well-being in teacher work engagement: A case of British and Iranian English language teachers. System, 97, 102446. https://doi.org/10.1016/j.system
- Gu, H., Mao, Y., & Wang, Q. (2022). Exploring EFL teachers' emotions and the impact on their sustainable professional development in livestream teaching: A Chinese case study. *Sustainability*, *14*(14), 8264. https://doi.org/10.3390/su14148264
- Hadar, L., & Brody, D. (2010). From isolation to symphonic harmony: Building a professional development community among teacher educators. *Teaching and Teacher Education*, 26(8), 1641–1651.
- Han, Y., & Wang, Y. (2021). Investigating the correlation among Chinese EFL teachers' self-efficacy, work engagement, and reflection. Frontiers in Psychology, 12, 763234. https://doi. org/10.3389/fpsyg.2021.763234
- Haug, B. S., & Mork, S. M. (2021). Taking 21st century skills from vision to classroom: What teachers highlight as supportive professional development in the light of new demands from educational reforms. *Teaching and Teacher Education*, 100, 1–12. http://dx.doi.org/10.1016/j.tate.2021.103286

- Hiew, W., & Murray, J. (2021). Enhancing Huber's evaluation framework for teacher professional development program. *Professional Development in Education*. http://dx.doi.org/10.1080 /19415257.2021.1901236
- Hiver, P. (2017). Tracing the signature dynamics of language teacher immunity: A retrodictive qualitative modeling study. *The Modern Language Journal*, 101(4), 669–690. https://doi.org/10.1111/modl.12433
- Hiver, P., & Dörnyei, Z. (2017). Language teacher immunity: A double-edged sword. *Applied Linguistics*, 38(3), 405–423. https://doi.org/10.1093/applin/amv034
- Johnson, J. L. (2022). Teacher self-efficacy and teacher work engagement for expats at international K12 schools in China: A correlation analysis. *International Journal of Educational Research Open*, 3, 100176. https://doi.org/10.1016/j.ijedro.2022.100176
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academic Management Journal*, 33, 692–724. http://dx.doi.org/10.5465/256287
- Karagianni, E., & Papaefthymiou-Lytra, S. (2018). EFL teachers' emotions: The driving force of sustainable professional development. *Emotions in Second Language Teaching: Theory,* Research and Teacher Education, 385–401. https://doi.org/10.1007/978-3-319-75438-3
- MacIntyre, P. D., Gregersen, T., & Mercer, S. (2019). Setting an agenda for positive psychology in SLA: Theory, practice, and research. *The Modern Language Journal*, 103(1), 262–274. https://doi.org/10.1111/modl.12544
- Martin, A. J., & Marsh, H. W. (2008). Academic buoyancy: Towards an understanding of students' everyday academic resilience. *Journal of School Psychology*, 46(1), 53-83. https://doi.org/10.1016/j.jsp.2007.01.002
- Martin, A. J., & Marsh, H. W. (2019). Investigating the reciprocal relations between academic buoyancy and academic adversity: Evidence for the protective role of academic buoyancy in reducing academic adversity over time. *International Journal of Behavioral Development*, 44(4), 301–312. https://doi.org/10.1177/0165025419885027
- Maslach, C., Leiter, M. P., & Schaufeli, W. B. (2008). Measuring burnout. In C. L. Cooper & S. Cartwright (Eds.), *The Oxford handbook of organizational well-being* (pp. 86–108). Oxford University Press.
- Mercer, S. (2020). The wellbeing of language teachers in the private sector: An ecological perspective. *Language Teaching Research*, 1, 1–24. http://dx.doi.org/10.1177/1362168820973510
- Parker, P. D., & Martin, A. J. (2009). Coping and buoyancy in the workplace: Understanding their effects on teachers' work-related well-being and engagement. *Teaching and Teacher Education*, 25(1), 68–75. https://doi.org/10.1016/j.tate.2008.06.009
- Porter, B. D., & Freeman, M. K. (2020). Experienced outcomes of a self-directed professional development program. *Professional Educator*, 43(1), 36–47.
- Putwain, D. W., Connors, L., Symes, W., & Douglas-Osborn, E. (2012). Is academic buoyancy anything more than adaptive coping? *Anxiety, Stress & Coping, 25*(3), 349–358. https://doi.org/10.1080/10615806.2011.582459
- Sancar, R., Atal, D., & Deryakulu, D. (2021). A new framework for teachers' professional development. *Teaching and Teacher Education*, 101, 103305. https://doi.org/10.1016/j. tate.2021.103305
- Saunders, R. (2013). The role of teacher emotions in change: Experiences, patterns and implications for professional development. *Journal of Educational Change*, 14(3), 303–333. https://doi.org/10.1007/s10833-012-9195-0

- Schaufeli, W. (2012). Work engagement: What do we know and where do we go?. *Romanian Journal of Applied Psychology*, 14(1), 3–10.
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker (Ed.) & M. P. Leiter, *Work engagement: A hand-book of essential theory and research* (pp. 10–24). Psychology Press.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71–92.
- Sokel, F. (2019). The effectiveness of a professional development course: Teachers' perceptions. *ELT Journal*, 73(4), 409–418. https://doi.org/10.1093/ELT%2FCCZ022
- Somerfield, M. R., & McCrae, R. R. (2000). Stress and coping research: Methodological challenges, theoretical advances, and clinical applications. *American Psychologist*, *55*(6), 620–625. https://doi.org/10.1037/0003-066x.55.6.620
- Tang, S. Y., Wong, A. K., Li, D. D., & Cheng, M. M. (2022). Teacher buoyancy: Harnessing personal and contextual resources in the face of everyday challenges in early career teachers' work. *European Journal of Teacher Education*, 1-19. https://doi.org/10.1080/02 619768.2022.2097064
- Vonk, J. H. S. (1991). Becoming a teacher: Brace yourself. Institute of Education.
- Wang, Y., Derakhshan, A., & Azari Noughabi, M. (2022). The interplay of EFL teachers' immunity, work engagement, and psychological well-being: Evidence from four Asian countries. *Journal of Multilingual and Multicultural Development*, 1–17. https://doi.org/10.1080/01 434632.2022.2092625
- Wang, Y., & Derakhshan, A., & Rahimpour, H. (2022). Developing resilience among Chinese and Iranian EFL teachers: A multi-dimensional cross-cultural study. *Journal of Multilingual and Multicultural Development*, 1–18. https://doi.org/10.1080/01434632.2022.2042540
- Xie, F. (2021). A study on Chinese EFL teachers' work engagement: The predictability power of emotion regulation and teacher resilience. *Frontiers in Psychology*, 12. https://doi.org/10.3389/fpsyg.2021.735969
- Yun, S., Hiver, P., & Al-Hoorie, A. H. (2018). Academic buoyancy: exploring learners' everyday resilience in the language classroom. *Studies in Second Language Acquisition*, 40(4), 805–830. http://dx.doi.org/10.1017/S0272263118000037
- Zepeda, S. J. (2013). Professional development: What works? Rutledge.
- Zhang, M. (2021). EFL/ESL teacher's resilience, academic buoyancy, care, and their impact on students' engagement: A theoretical review. *Frontiers in Psychology, 12*. 731859. https://doi.org/10.3389/fpsyg.2021.731859
- Zhang, W. (2022). The role of technology-based education and teacher professional development in English as a foreign language classes. *Frontiers in Psychology*, 13. https://doi.org/10.3389%2Ffpsyg.2022.910315
- Zhou, X., Padron, Y., & Waxman, H. (2022). Exploring the relationship between professional development experience and skills in educational technology integration among primary EFL teacher. *Contemporary Educational Technology*, *14*(1), ep328. https://doi.org/10.30935/cedtech/11365
- Zou, C., Li, P., & Jin, L. (2021). Online college English education in Wuhan against the COV-ID-19 pandemic: Student and teacher readiness, challenges and implications. *PLoS One*, *16*(10), e0258137. https://doi.org/10.1371/journal.pone.0258137