

The Effect of Positive Emotion on Foreign Language Teacher Engagement and Well-Being: A Cross-Cultural Comparison

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Abstract

Foreign language teaching enjoyment (FLTE) has recently been introduced as a broad positive emotion experienced by foreign language (FL) teachers, despite obstacles embedded in FL teaching. However, identifying its psychological outcomes - and the cultural specificity of these outcomes - has received scant research attention across different contexts. The present cross-cultural study aims to investigate whether teachers' FLTE can predict and influence engagement and well-being in the English as a foreign language (EFL) context of Iran and China. A series of structural equation models (SEM) indicated that EFL teachers' FLTE affected their work engagement and well-being in both Iranian and Chinese samples, with structural invariance tests confirming the group-level differences between Iranian and Chinese EFL teachers in the light of FLTE outcomes. The study provides insight into the positive outcomes of positive emotions in FL teaching as framed by the lens of Positive Psychology. In addition, a rare non-Western cross-cultural comparison contributes to the ongoing discussions in literature regarding the influence of cultural contexts on the experience and outcome manifestation of positive emotions.

Keywords: foreign language teaching enjoyment (FLTE); work engagement; well-being; EFL teachers; positive psychology (PP); structural equation modelling (SEM)

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Introduction

With the advent of Positive Psychology in language teaching research, researchers began to shift their attention from teachers' negative experiences and weaknesses to their strengths and positive emotions (Dewaele et al., 2019). Given that emotions play a significant role in language teachers' professional lives and psychological growth (King et al., 2020; MacIntyre et al., 2020), increasing foreign language (FL) teachers' awareness of their emotions can help them employ appropriate regulatory strategies to experience more enjoyment in the classroom context. Accordingly, Proietti Ergün and Dewaele (2021) introduced the notion of foreign language teaching enjoyment (FLTE) as a positive emotion FL teachers can experience in their classes despite facing regular difficulties. The authors found that teachers with high FLTE are passionate about their profession and are highly committed.

Two possible outcomes of language teachers' FLTE can be their work engagement and mental well-being. The former, referring to teachers' commitment characterized by a sense of vigour, energy, and dedication, has been shown to increase their job satisfaction (Hakanen et al., 2006). Previous research indicates that English as a foreign language (EFL) teachers' work engagement is also associated with their emotions and well-being (Gkonou et al., 2020; Greenier et al., 2021; Azari Noughabiet al., 2020). The latter, conceptualized as the psychological state of having positive feelings despite professional challenges, has been regarded to enhance language teachers' success and happiness (Talbot & Mercer, 2018). Moreover, well-being has been shown to be linked to high FLTE (Proietti Ergün & Dewaele, 2021). According to Mercer (2020), high

well-being plays a key role in language teachers' emotional state and helps them sustain their happiness and enjoyment during their careers.

Despite the importance of FLTE as an inseparable component of language teachers' professional lives which consists of their personal and social enjoyment, scant research attention has been given to its beneficial consequences across various cultures, particularly in Asian contexts. This lack of cross-cultural evidence on its psychological outcomes can be attributed to the novelty of the concept of FLTE. The present study thus answers the call issued by Proietti Ergün and Dewaele (2021) to gain a better understanding of FLTE through identifying the psychological factors closely relevant to EFL teachers' FLTE. Additionally, as noted by Li (2021), there is a need to conduct further cross-cultural studies within the domain of positive psychology of language teachers.

In sum, there is an urgent need for cross-cultural studies on FLTE among Asian countries because instructional contexts have been shown to have unique cultural orientations (Lotfi et al., 2019; Saif et al., 2021; Wang et al., 2022). Therefore, the present study is one of the first cross-cultural inquiries into the outcomes of FLTE among Iranian and Chinese EFL teachers via structural equation modelling (SEM) and structural invariance testing. By widening the cross-cultural research on FLTE via modeling the associations among positive psychological variables, this study could offer useful implications on how to help EFL teachers capitalize on their strengths and positive emotions to be peace builders in their classes (Gkonou et al., 2021) so as to experience high levels of well-being and job satisfaction across various contexts (Mercer et al., 2016).

Literature Review

Foreign Language Teaching Enjoyment

There has been increasing interest in learners' and teachers' positive emotions since the introduction of Positive Psychology into the field of Second Language Acquisition (SLA) (Li & Li, 2022; Li et al., 2021). Emotions such as enjoyment, happiness, and enthusiasm have come to the foreground because positive emotions have been shown to broaden people's thought-action repertoires, which further contributes to building their social resources (Fredrickson, 2003). Notably, a growing number of studies reveal that foreign language enjoyment (FLE) has a positive impact on learners' academic achievement, second language comprehensibility, and motivation, to name just a couple (Botes et al., 2022; Saito et al., 2018). The enjoyment of foreign language teachers, however, has only just started to attract attention (Proietti Ergün & Dewaele, 2021). Given that teachers' positive emotions can be contagious and transmitted to learners (Dewaele & Li, 2021; Moskowitz & Dewaele, 2021; Talebzadeh et al., 2020), it is of vital importance to explore the concept of foreign language teaching enjoyment (FLTE), to shed light into both teachers' functioning and learners' language learning outcomes.

A significant contribution to the literature has been the development of the FLTE scale by Proietti Ergün and Dewaele (2021). The authors conceptualized FLTE as a new positive emotion construct that turned out to be significantly predicted by resilience and well-being. FLTE could be argued to have desirable outcomes for learners such as heightened motivation, engagement, well-being, and attitudes towards the FL (Dewaele & Li, 2021; Moskowitz & Dewaele, 2021). As Mierzwa (2019) rightly argued, the experience of enjoyment is critical for both students' learning and for teachers' effective teaching. However, the unique positive outcomes associated with FLTE are still yet to be determined. Since positive psychology in SLA also addresses language teachers' flourishing in their professional undertakings (Dewaele et al., 2019), it is then essential to explore how FLTE contributes to teachers' work engagement and well-being. Moreover, current accounts

regarding FLTE were conducted in two Western contexts, e.g., among Italian FL teachers in Italy (Proietti Ergün & Dewaele, 2021) and Polish EFL teachers in Poland (Mierzwa, 2019). FLTE in non-Western contexts remains to be investigated.

Work engagement and its link with emotions

Work engagement can be understood as teachers' cognitive, emotional, and social involvement in teaching and students' learning processes (Klassen et al., 2013). Engaged language teachers are likely to be vigorous, devoted to, passionate about teaching, persistent in times of difficulty, and focusing on their work (Greenier et al., 2021). Hence, high levels of work engagement tend to result in desirable outcomes for teachers, students, and organizations (Greenier et al., 2021; Perera et al., 2018). Given its potentially important outcomes, it is significant to focus on work engagement in language education and more specifically on its possible causes and potential consequences (Azari Noughabiet al., 2020). To this end, this study examines the relationship among teachers' positive emotions, well-being, and work engagement.

Accumulating evidence demonstrates that teacher emotion is closely related to work engagement (Azari Noughabiet al., 2020). First, emotional engagement, i.e., teachers' positive emotional responses to their work, constitutes a key dimension of work engagement (Perera et al., 2018). Second, social engagement with students and peers involves emotions because the interactions among people inevitably have an emotional dimension (Yin & Lee, 2012). Teacher emotions tend to be more prominent in FL teaching, which strongly affects interpersonal relations and teachers' emotional understanding (Talbot & Mercer, 2018). As such, it can be argued that emotions play a critical role in emotional and social engagement of FL teachers. Consistent with the broad-and-build theory (Fredrickson, 2001), positive emotions can potentially promote work engagement (Burić & Macuka, 2018). Arguably, particular positive emotions can broaden teachers'

thought action ranges and build personal resources, which in turn promotes adaptive functioning and work engagement. Adopting a cross-cultural perspective can lead to a better understanding of how exactly FLTE affects work engagement around the world. Based on the above observations, this study proposes following hypothesis:

Hypothesis 1: FLTE will have a positive effect on work engagement for both Chinese and Iranian EFL teachers.

Language teacher well-being and its link with emotions

Well-being has been found to be essential for the effective functioning of language teachers (Talbot & Mercer, 2018). Happy teachers are more creative, build better rapport with students, and boost students' learning outcomes (Jin et al., 2021). The importance of understanding language teacher well-being lies partly in the emotionally demanding nature of the subject (Greenier et al., 2021). Language teachers face significant linguistic and intercultural demands, which can lead to exhaustion and negatively affect their well-being (e.g., Mercer, 2020; Talbot & Mercer, 2019). Therefore, there is an urgent need to gain a more comprehensive understanding of the range of factors that affect teacher well-being.

As Seligman (2011) suggested, engagement and emotions pave the path for enhancement of teachers' well-being. Dewaele et al. (2018) observed that teacher well-being was positively correlated with language teachers' positive feelings and positive attitudes toward students. Optimistic teachers experiencing more positive emotions tend to experience higher well-being overall and better resilience (Jin et al., 2021). Moreover, teacher enthusiasm, as a key factor of effective teaching, strengthens teachers' well-being (Burić & Moè, 2020). Proietti Ergün and Dewaele (2021) also pointed out that FLTE in language classrooms may be contagious. This means

that a happy and committed teacher could start a positive feedback loop benefiting everybody's well-being (Fredrickson & Joiner, 2002). Thus, this study proposes the following hypothesis:

Hypothesis 2: FLTE will have a positive effect on mental well-being for both Chinese and Iranian EFL teachers.

Besides, researchers have found a significant relationship between language teachers' well-being and work engagement (Greenier et al., 2021; Talbot & Mercer, 2018), consistent with findings of previous studies conducted in other domains (e.g., Huber et al., 2020; Shimazu et al., 2015). On this basis, this study proposes the following hypothesis:

Hypothesis 3: A bidirectional relationship will be found between teacher engagement and mental well-being of both Chinese and Iranian EFL teachers.

Cross-cultural approach

It is important to acknowledge social and cultural factors in addition to personal factors when researching FL teaching (Dewaele et al., 2019). However, cross-cultural studies tend to group Asian or non-Western participants and compare them to their Western counterparts. Although these studies shed light on the cultural factors that influence teacher motivational or psychological variables, Kim et al. (2021) cautioned against generalization to all Asian populations. Taking a cross-cultural approach (Li, 2021), the present study focuses on EFL teachers in China and Iran. Both share many commonalities as Asian countries, but each has unique cultural characteristics (Wang et al., 2022).

Based on Hofstede's (2011) cultural model, both China and Iran are collectivist cultures with high power distance. Power distance is the extent to which the less powerful members of organizations and institutions accept and expect that power is distributed unequally, and

collectivism refers to the degree to which people in a society are integrated into groups. Whereas the Chinese culture tends to be more masculine, the Iranian society is comparatively more feminine (Wang et al., 2022). Masculinity and femininity refer to the distribution of values between the genders. Regarding uncertainty avoidance, which designates to what extent a culture programs its members to feel either uncomfortable or comfortable in unstructured situations, the Iranians hold more static beliefs and norms, while the Chinese tend to be more flexible in accepting uncertainty. In China, people highly value achieving long-term goals, yet their Iranian counterparts prefer to reach short-term goals and immediate gratification. As cultural factors might play an essential role in (re)constructing psycho-emotional variables in L2 education (Wang et al., 2022), and cross-cultural differences between China and Iran have been established in previous studies examining the two cultures on Hofstede's (2011) dimensions, we therefore extend our inquiry in this study to run empirical inquiries to explore FLTE, well-being, and engagement differences among Chinese and Iranian EFL teachers. Accordingly, this study proposes the following hypothesis:

Hypothesis 4: Due to cross-cultural differences, it is expected that the relationships within the structural equation model (see Figure 1) will differ across Chinese and Iranian samples.

Overall, to follow a cross-cultural approach, the present study aims to determine whether work engagement and language teacher wellbeing might be potential outcomes of teachers' FLTE. The research framework is shown in Figure 1.

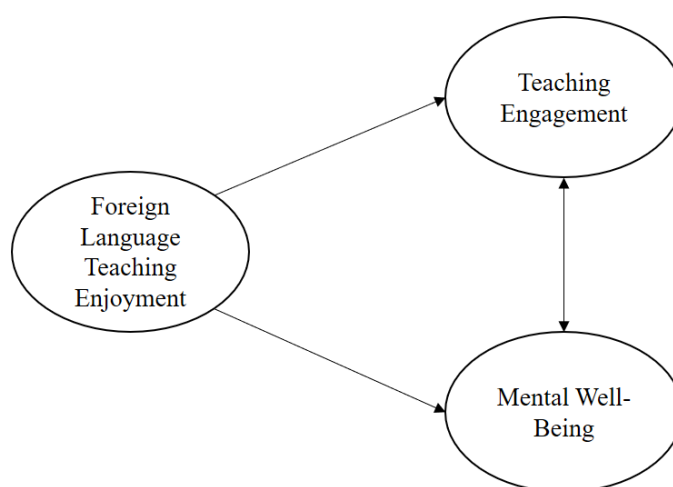


Figure 1. Theoretical Structural Equation Model

Method

Participants

Data were collected through snowball sampling utilising the authors' contacts in EFL teaching and through social media (specifically WeChat in China and WhatsApp in Iran). Data were collected in December 2021 in Iran and China. A total of 1078 EFL teachers participated in the study, of which $n = 581$ were from China and $n = 497$ were from Iran. The average age was 32.51 years ($SD = 9.16$). The average participant had been teaching for 9.71 years ($SD = 8.87$). The sample was predominantly female ($n = 834$), with a bachelor's degree ($n = 539$) and currently teaching English at a Secondary School ($n = 282$). Further demographic characteristics of the dataset in terms of education, years of service, and current level of teaching is presented in categories specific to each country and can be found in the Supplementary Materials (see Tables S1 - S8).

Instruments

Foreign Language Teaching Enjoyment Scale: ($\alpha = .90$; $\omega = .90$)

The multi-dimensional scale measures enjoyment of FL teaching through three subscales (Personal Enjoyment of FL Teaching; Student Appreciation in the FL Classroom; and Social Enjoyment of FL Teaching) with three items indicating each subscale. Items included are “In class, I feel proud of my accomplishments.”, “the students in the EFL class are stimulating”, and “we form a tight group in the EFL class”. Items were measured on a five-point Likert scale from “strongly disagree” to “strongly agree”. The scale was adapted from the Short-Form Language Enjoyment Scale (Botes et al., 2022) by Proietti Ergün and Dewaele (2021).

Warwick-Edinburgh Mental Well-Being Scale: ($\alpha = .924$; $\omega = .926$)

The unidimensional Warwick-Edinburgh Mental Well-Being Scale (Tennant et al., 2007) was used to capture the Well-Being of EFL teachers. Participants were asked to respond to a list of 14 statements and indicate how often they experienced the state described on a five-point Likert scale ranging from “none of the time” to “all of the time”. Statements included were “I’ve been feeling optimistic about the future” and “I’ve been feeling good about myself”.

Engaged Teacher Scale: ($\alpha = .940$; $\omega = .941$)

The multidimensional Engaged Teacher Scale (Klassen et al., 2013) was used to capture the four factors of Teacher Engagement, namely Cognitive Engagement (“I try my hardest to perform well while teaching”), Emotional Engagement (“I find teaching fun”), Social Engagement with Students (“In class, I am aware of my students’ feelings”), and Social Engagement with Colleagues (“At school, I value the relationships I build with my colleagues”). Each factor was measured with four items on a seven-point Likert-scale from ‘never’ to ‘always’.

Hofstede's Cultural Dimensions:

The five cultural dimensions identified by Hofstede (2011) was measured in order to examine and confirm broader cross-cultural differences across EFL teachers in China and Iran. The five cultural dimensions include: power distance, uncertainty avoidance, collectivism, long-term orientation, and masculinity. Items were adapted from Yoo et al. (2011). Two items were used to measure each of the five cultural dimensions and can be found in the Supplementary Materials (see p. *iii* in Supplementary Materials).

Data Analysis

Descriptive statistics, correlations, and reliabilities were calculated using JASP 0.16 (JASP Team, 2022). Hypothesis 1-3 were tested by fitting the SEM (see Figure 2) in R using the Lavaan package (Rosseel, 2012) to the Chinese and Iranian datasets separately. The model fit and item loadings were interpreted separately for each dataset. The SEM was analysed using weighted least squares estimation with robust error as all data in the model were ordinal (Li, 2016). Model fit was analysed through the Comparative Fit Index (CFI) and Tucker Lewis Index (TLI), with a close fit indicated if $CFI/TLI \geq .90$ (Kenny, 2020). In addition, fit was further indicated by the Root Mean Square Error of Approximation (RMSEA) and the Standardised Root Mean Square Residual (SRMR). Reasonable fit was indicated by $RMSEA \leq .08$ and $SRMR \leq .12$, whereas close fit was indicated by $RMSEA \leq .05$ and $SRMR \leq .08$ (Kline, 2013). Lastly, the chi-square (χ^2) and chi-square/degrees of freedom ratio (χ^2/df) were interpreted, with a non-significant chi-square and a $\chi^2/df \leq 2$ indicating close fit (Byrne, 1998).

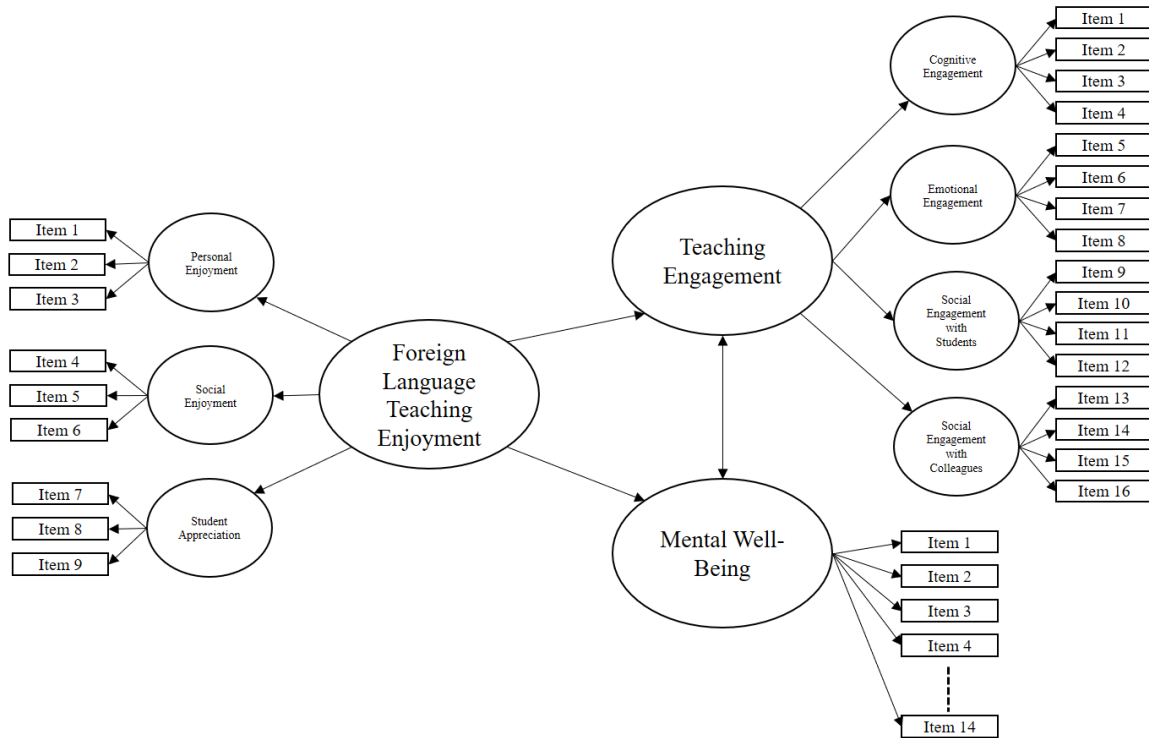


Figure 2. Expanded SEM Model

In order to determine whether significant differences existed between the two groups of Chinese and Iranian EFL teachers, difference tests in the form of both t-tests and invariance testing were performed. T-tests were used to provide an initial indication of mean group-level difference and were tested in JASP 0.16 (JASP Team, 2022). In turn, invariance testing on the SEM (see Figure 2) was carried out in order to determine whether the model fits across the two groups of Chinese and Iranian EFL teachers when no equality constraints are placed on its parameters. A series of increasingly restrictive invariance models were tested to examine whether the SEM was consistent across groups (Meredith, 1993). These invariance tests were carried out in R using Lavaan (Rosseel, 2012), with a weighted least squares estimator with robust error. Invariance was accepted for each new model tested if the change in fit statistics met the thresholds proposed by Cheung and Rensvold (2002) and Chen (2007): $\Delta\text{RMSEA} \leq .015$, $\Delta\text{SRMR} \leq .030$, and $\Delta\text{CFI} \geq -$

.010. Configural invariance was examined first, whereby the freely estimated parameters across the two groups were assumed to be equal. Next, metric and scalar invariance were examined, where the factor loadings and item intercepts were constrained to be equal. The first three models examined, namely configural, metric, and scalar invariance are often referred to as measurement invariance, as these tests indicate whether individuals with a specific standing on the latent construct received the same observed score on the measure (Meredith, 1993). In other words, the first three invariance models examined the equality of the measurement of the latent variables. Invariance of the structural model followed by constraining the means, regression, latent variances, and latent covariances in turn. If at any time, the change in fit statistics exceeded the thresholds (Cheng & Rensvold, 2002), the invariance checks were halted and a significant difference between the two groups of EFL teachers was accepted.

Results

Descriptive Statistics and Correlation Matrix

The descriptive statistics for both the Chinese and Iranian participants can be found Table 1. A series of t-tests revealed significant differences between Chinese and Iranian participants in FLTE, Well-Being, and Teacher Engagement. Iranian teachers reported higher average levels of FLTE ($t(1076) = -3.33; p < .001$) and Well-Being ($t(1076) = -12.63; p < .001$). In turn, Chinese EFL teachers reported higher mean levels of Teacher Engagement ($t(1076) = 3.72; p < .001$).

Table 1. *Descriptive Statistics and T-test Results*

Variable	n	Mean	SD	t-value	p-value
<u>FLTE</u>				-3.33	< .001

Chinese	581	4.02	.55		
Iranian	497	4.14	.61		
<u>Well-Being</u>				-12.63	<.001
Chinese	581	3.58	.57		
Iranian	497	4.04	.63		
<u>Engagement</u>				3.72	<.001
Chinese	581	6.06	.66		
Iranian	497	5.89	.84		
<u>Power Distance</u>				9.998	<.001
Chinese	581	3.275	1.39		
Iranian	497	2.451	1.30		
<u>Uncertainty Avoidance</u>				-4.680	<.001
Chinese	581	5.057	1.22		
Iranian	497	5.392	1.12		
<u>Collectivism</u>				3.572	<.001
Chinese	581	4.731	1.24		
Iranian	497	4.476	1.09		
<u>Long-Term Orientation</u>				-5.145	<.001
Chinese	581	5.207	1.06		
Iranian	497	5.554	1.16		
<u>Masculinity</u>				6.973	<.001
Chinese	581	3.626	1.64		
Iranian	497	2.919	1.69		

The t-tests further indicated statistically significant mean differences in the Hofstede cultural dimensions across the Chinese and Iranian EFL teachers. EFL teachers from China reported higher levels of Power Distance ($t(1076) = 9.998; p < .001$), implying a greater acceptance of hierarchy and unequal power distributions (Hofstede, 2011). Chinese EFL teachers further had higher mean levels of Collectivism ($t(1076) = 3.572; p < .001$) and Masculinity ($t(1076) = 6.973; p < .001$), indicating a greater importance placed on integration and togetherness, as well as on acceptance of traditional gender roles in society (Hofstede, 2011). In turn, the Iranian EFL teachers had significantly higher mean levels of Uncertainty Avoidance ($t(1076) = -4.680; p < .001$) and Long-Term Orientation ($t(1076) = -5.145; p < .001$), thus implying that the EFL teachers from Iran tended to avoid risk and were more likely to engage in long-term planning and goal orientation (Hofstede, 2011). The statistically significant differences found in the five cultural dimensions confirmed cross-cultural differences between the Iranian and Chinese EFL teachers on a broader level. Whether these broader cultural differences translate into differences in the proposed theoretical model (see Figure 2), is yet to be confirmed. However, the finding of broader cultural differences does provide an impetus to examine the cross-cultural differences in the proposed structural equation model.

The Pearson correlation matrix of the total scores of both the Chinese and Iranian groups can be found in Table 2. A further correlation matrix on individual country level can be found in the Supplementary Materials (see Tables S9 and S10). As expected, Teacher Engagement, FLTE, and Well-Being correlated positively ($.426 < r < .661$) but did not correlate highly enough to indicate multicollinearity concerns ($r > .80$; Field, 2013).

Table 2. *Pearson Correlation Matrix*

Variable	1	2	3	4	5	6	7	8
1. FLTE	-	.661**	.624**	-.060	.292**	.181**	.387**	-.106**
2. Well-Being		-	.426**	-.092*	.297**	.133**	.337**	-.086*
3. Engagement			-	-.045	.320**	.215**	.349**	-.041
4. Power Distance				-	.083*	.328**	-.035	.335**
5. Uncertainty Avoidance					-	.251**	.431**	-.082
6. Collectivism						-	.359**	.218**
7. Long-Term Orientation							-	.002
8. Masculinity								-

Note: ** $p < .001$; * $p < .01$

Interestingly, several broad cultural dimensions were linked to the Positive Psychology variables of FLTE, Well-Being, and Teacher Engagement in the correlation matrix. FLTE was positively associated with Uncertainty Avoidance ($r = .292$; $p < .001$), Collectivism ($r = .181$; $p < .001$), Long-Term Orientation ($r = .387$; $p < .001$), and negatively associated with Masculinity ($r = -.106$; $p < .001$). However, Well-Being and Teacher Engagement were positively associated with Uncertainty Avoidance ($r = .297$; $p < .001$; $r = .320$; $p < .001$), Collectivism ($r = .133$; $p < .001$; $r = .215$; $p < .001$), and Long-Term Orientation ($r = .337$; $p < .001$; $r = .349$; $p < .001$). Although the broad cultural dimensions are not included in the theoretical SEM (see Figure 2), the significant correlations between the positive psychology variables and the cultural dimensions do seem to support the current literature in that those cross-cultural differences in the SEM may be linked to broader cultural differences present in the societies of China and Iran.

Structural Equation Models

The proposed theoretical model (see Figure 2) was fitted to the Chinese and Iranian datasets separately in order to test the first three hypotheses.

SEM with Chinese EFL Teachers Dataset

The SEM with the Chinese dataset achieved reasonable to close fit. The CFI ($CFI = .907$) and TLI ($TLI = .900$) were both $\geq .90$, indicating close fit (Kline, 2013). Similarly, the SRMR ($SRMR = .061$) was $\leq .08$, indicating close fit (Kenny, 2020). The RMSEA ($RMSEA = .065$), in turn, indicated reasonable fit as the indicator was $\leq .08$ (Kenny, 2020). Lastly, a significant chi-square was found ($\chi^2 (655) = 2289.04; p < .001$) with a χ^2/df ratio of 3.49, hinting at poor fit. However, the chi-square has been found to be particularly prone to Type II errors in larger samples ($n > 200$), with samples of more than 400 participants typically returning a statistically significant result (Kenny, 2020). As such, the SEM of the Chinese dataset was determined to have close fit and is visually displayed in Figure 3.

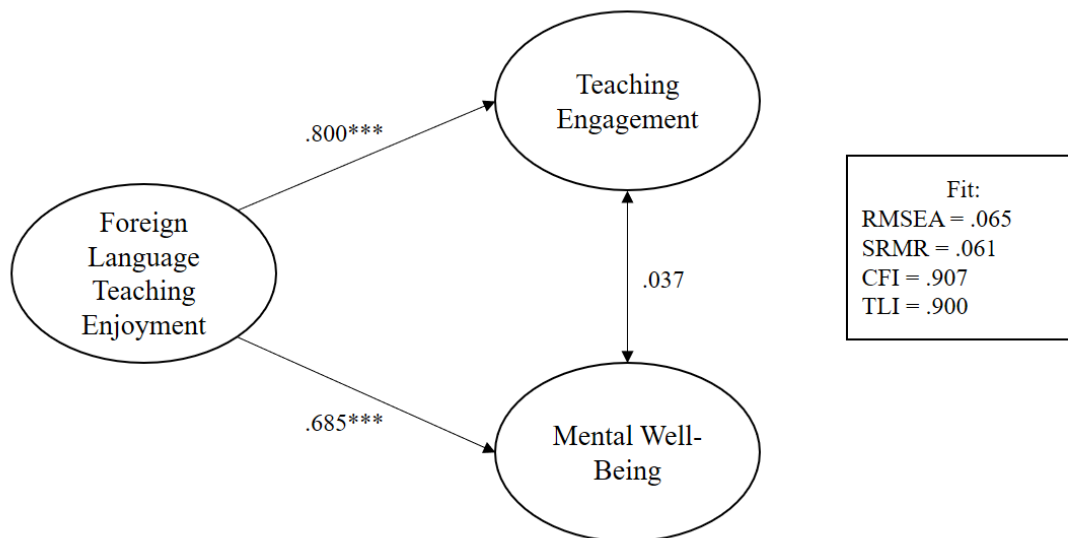


Figure 3. SEM of Chinese EFL Teachers

Hypothesis 1, regarding the proposed relationship between FLTE and Teacher Engagement was not rejected ($\beta = .800$; $p < .001$), with FLTE found to be a very strong predictor of Teacher Engagement. Similarly, Hypothesis 2 was not rejected ($\beta = .685$; $p < .001$) and FLTE was found to strongly predict the well-being of EFL teachers in China. However, Hypothesis 3 was rejected, as an insignificant latent correlation was found between well-being and Teacher Engagement ($r = .037$; $p = .552$). The insignificant latent correlation was a somewhat surprising finding, given the support in literature linking well-being and workplace engagement (see Huber et al., 2020; Shimazu et al., 2015) and the significant Pearson correlation coefficient found ($r = .426$; $p < .001$). The rejection of Hypothesis 3 in the Chinese dataset emphasises the importance of examining variables and relationships on a latent level.

SEM with Iranian Dataset

In turn, the SEM with Iranian data achieved close fit (see Figure 4). The CFI ($CFI = .925$) and TLI ($TLI = .920$) both indicated close fit (Kline, 2013). Additionally, the RMSEA ($RMSEA = .047$) and SRMR ($SRMR = .053$) both confirmed the close fit of the model (Kenny, 2020). Similar to the Chinese dataset, the chi-square was found to be significant ($\chi^2 (655) = 1382.91$; $p < .001$) with a χ^2/df ratio of 2.11, indicating poor fit. However, as the sample size has been found to affect the chi-square (Kenny, 2020), the model was regarded as achieving close fit.

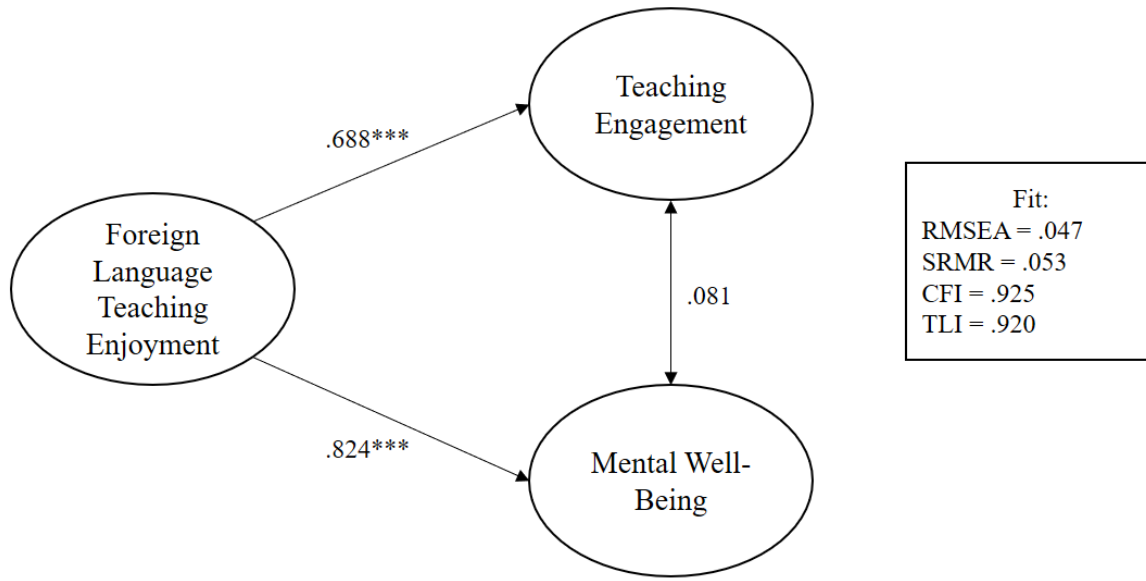


Figure 4. SEM of Iranian EFL Teachers

Similar to the Chinese dataset, support was found for Hypothesis 1 and 2. FLTE strongly predicted Teacher Engagement ($\beta = .688$; $p < .001$) and Well-Being ($\beta = .824$; $p < .001$). Again, Hypothesis 3 was not supported in the SEM, with Well-Being and Teacher Engagement being unrelated ($r = .037$; $p = .245$).

The SEMs of the Chinese and Iranian EFL teachers did display some subtle differences, echoing previous t-test results. FLTE was found to predict Teacher Engagement more strongly for the Chinese EFL teachers ($\beta = .800$; $p < .001$) than for Iranian EFL teachers ($\beta = .688$; $p < .001$). In addition, FLTE predicted Well-Being more strongly for Iranian EFL teachers ($\beta = .824$; $p < .001$) than for Chinese EFL teachers ($\beta = .685$; $p < .001$). In order to have full confidence in the group-level differences observed in the t-tests and SEM's, a structural invariance test was carried out.

Structural Invariance Tests

The series of invariance tests examined whether the group level differences found in the t-tests could be confirmed on a latent level. The first model tested, that of configural invariance, achieved a close fit of the data, implying that the overall factor structure of the SEM was consistent across the two groups of Chinese and Iranian EFL teachers (see Table 3). The second model, that of metric invariance, assumed the factor loadings to be equal across groups and its fit indices were compared to the configural invariance model. The ΔCFI , $\Delta RMSEA$, and $\Delta SRMR$ were all below the proposed thresholds (Chen, 2007; Cheung & Rensvold, 2002). As such, metric invariance was achieved, and factor loadings of the latent variables can be assumed to be equal across Chinese and Iranian EFL teachers. Next, we compared the scalar invariance model – where item intercepts were assumed to be equal – with the less restrictive metric invariance model. Again, all changes in fit indices were below the proposed thresholds (see Table 3) and scalar invariance was achieved. Item intercepts are therefore assumed to be invariant across the two groups. As configural, metric, and scalar invariance were confirmed, measurement invariance in general can be assumed for the measures used in this study.

Table 3. *Invariance Model Results*

Models	χ^2	df	p-value	CFI	RMSEA	SRMR	ΔCFI	$\Delta RMSEA$	$\Delta SRMR$
Configural	1447.58	1310	.005	.998	.014	.051			
Metric	1675.60	1345	<.001	.994	.021	.061	-.008	.007	.010
Scalar	2214.97	1373	<.001	.986	.034	.065	-.008	.013	.004
Means	3559.02	1383	<.001	.964	.054	.076	-.022	.020	.011

We therefore proceeded with structural invariance testing and examined the next invariance model, where means were assumed to be equal across groups. The fit of the more restrictive means invariance model was compared to the fit if the less restrictive scalar invariance model. Unfortunately, the $\Delta RMSEA = .020$, which was well above the recommend $\Delta RMSEA \leq .015$ (Chen, 2007; Cheung & Rensvold, 2002). Similarly, the $\Delta CFI = -.022$ was considerably below the proposed threshold of $\Delta CFI \geq -.010$ (Chen, 2007; Cheung & Rensvold, 2002). As such, mean invariance across groups was not found. The invariance test therefore confirmed a significant difference in the latent means between Chinese and Iranian EFL teachers. This finding gives considerable credence to the statistically significant t-tests results and further confirms that equality cannot be assumed across the structure of the proposed model.

Discussion

The study aimed to examine the effect of positive emotions on positive outcomes within the context of FL teaching. FLTE was found to significantly predict engagement and well-being for FL teachers, confirming the theoretical stance of Frederickson (2001) and Frederickson and Joiner (2002) in the context of FL teaching, that positive emotions can broaden-and-build resources, which in turn leads to positive outcomes. In addition, the study aimed to contribute to the discussion in literature regarding the effect of cultural differences in positive psychology and positive outcomes (Hardin et al., 2014), by comparing the Chinese and Iranian FL teachers' FLTE, engagement, and well-being on a latent level. Positive psychology theories and studies are often criticised for its Western-centric view and framing (Hardin et al., 2014; Macfarlane, 2021), however, with this study we have heeded the call for broader and more diverse cultural comparison studies (Hardin et al., 2014).

Overall, both SEM of Chinese and Iranian EFL teachers indicated close fit. The first hypothesis stipulated a positive effect of FLTE on workplace engagement in EFL teachers in Iran and China. Statistically significant latent effects were found for both the Chinese ($\beta = .800$; $p < .001$) and Iranian ($\beta = .688$; $p < .001$) EFL teachers. The second hypothesis was also not rejected, in that FLTE was found to have a statistically significant effect on well-being for both the Chinese ($\beta = .685$; $p < .001$) and Iranian ($\beta = .824$; $p < .001$) samples. This confirmed the finding in Proietti Ergün and Dewaele (2021) of a strong relationship between both variables.

The third hypothesis examined the possibility of a positive correlational relationship between workplace engagement and well-being for EFL teachers. Surprisingly, non-significant latent correlations were found for both Chinese and Iranian EFL teachers, contradicting previous findings regarding the bidirectional relationship between engagement and well-being (see Huber et al., 2020; Shimazu et al., 2015). One possible reason could be that workplace engagement and well-being differ both in nature and in scope. The joy of teaching a group of students is an intrinsically rewarding activity but it is only a relatively small part of the job of being a teacher, which also involves many other duties, including lesson preparations, correcting assignments, thinking about the curriculum and performing administrative duties. Workplace engagement also implies smooth interactions with colleagues and directors, which could be occasionally effortful and completely different from interactions with students.

The fourth hypothesis explicitly examined the possibility of differences between the structural models of the Chinese and Iranian datasets. Invariance testing confirmed statistically significant differences between the two groups, with invariance rejected based on latent factor means ($\Delta CFI = -.022$; $\Delta RMSEA = .020$). Thus, the structural models indicated close fit for both the Chinese and Iranian EFL teachers, however the make-up of the models (latent means,

regressions etc.) differed. Tolstoy famously wrote: “Happy families are all alike; every unhappy family is unhappy in its own way”. However, when it comes to FL teaching, it would seem that even happy families - or in this case, happy EFL teachers - are not alike. Iranian EFL teachers reported higher mean levels of FLTE and well-being with Chinese EFL teachers reporting higher levels of workplace engagement. In the two structural models, Chinese EFL teachers indicated a stronger relationship between FLTE and engagement than Iranian EFL teachers, with Iranian EFL teachers in turn reporting a stronger predictive relationship between FLTE and well-being. Thus, statistically significant differences were found in the positive outcome model tested. We realise that we must resist a simplistic explanation, namely that the difference we observed is caused by a difference between the Chinese and Iranian culture, more specifically differences in Power Distance, Collectivism, Masculinity, Uncertainty Avoidance and Long-Term Orientation. While these cultural factors may play a role, it is likely that the very organisation of the education system could explain part of the differences. Teachers in both countries may face different amounts of institutional pressure, autonomy, power, workloads, training, remuneration, which all together result in more or less emotional and physical exhaustion which could affect their FLTE (Benesch, 2020; De Costa et al., 2020; Talbot & Mercer, 2018).

The pedagogical implications of the present study are not so much directed at FL teachers, who know instinctively that a high FLTE will boost their engagement and well-being, but rather at those who organise FL teaching, namely head teachers, school directors, politicians in charge of education. The message is clear: in creating the conditions in which FL teachers can enjoy themselves and thrive, these teachers will be both happier and more engaged which will protect them from burn-out and allow them to be more effective in the classroom. Happy teachers will have happy students who will work harder and perform better.

Limitations and Suggestions for Future Research

The study is not without limitations. The sample was predominantly female and consisted of only EFL teachers. Given the unique context of English as a global language (Crystal, 2003), the extrapolation of the results to teachers of other FLs cannot be a certainty. In addition, the socio-economic situation as well as context of the schools (private or public) were not taken into account in this study. Lastly, even though cross-cultural differences in terms of Hofstede's (2011) cultural dimensions were confirmed between the Iranian and Chinese EFL teachers and differences in the SEM were found, the study did not attempt to explain the differences in the SEM by directly linking cultural differences to latent mean differences. We believe that such a leap would need a significant theoretical basis and given the scarcity of research examining cross-cultural differences between China and Iran, such arguments were beyond the scope of this paper. However, we do strongly recommend future research examining cultural differences in non-Western settings in the context of positive emotions in teaching.

Conclusion

Proietti Ergün and Dewaele (2021) called for more research on FLTE, arguing that teachers who enjoy themselves in the classroom are both happier and resilient, which means they are more likely to be good teachers and have happy and motivated students who work hard and perform well. Therefore, the current study aimed to investigate the influence of FLTE on positive outcomes within the context of FL teaching. The present study has demonstrated that FLTE predicts work engagement and well-being in the EFL context of Iran and China. In introducing this cross-cultural perspective within the domain of positive psychology of FL teachers, the present study heeds the call issued by Li (2021) for a more granular view of Asian countries with their own unique cultural orientations. Structural equation modelling (SEM) and structural invariance testing revealed both

communalities and differences in the relationships between the independent and the dependent variables for the Chinese and the Iranian EFL teachers. While Chinese EFL teachers indicated a stronger relationship between FLTE and work engagement, Iranian EFL teachers reported a stronger predictive relationship between FLTE and mental well-being.

To conclude, there is no doubt that a positive workplace where FL teachers can enjoy themselves is the foundation of their engagement and well-being which will, by extension, be reflected in the happiness and the linguistic progress of their students. In other words, happiness is not a luxury, it is a cold necessity.

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