

Let's get positive: How foreign language teaching enjoyment can create a positive feedback loop

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Abstract

Research on learners' foreign language emotions has revealed the existence of a positive feedback loop where increased enjoyment leads to better performance which, in turn, strengthens learners' enjoyment and boosts overall happiness. The current study follows this avenue focusing on teachers' foreign language teaching enjoyment (FLTE) and its relationships with engagement, mindfulness, and burnout. The participants, who were 496 English as a foreign language (EFL) teachers from Iran, completed four electronic surveys. The proposed mediation model based on data collected from EFL teachers indicated

that FLTE partially mediated the relationship between mindfulness and engagement as well as their burnout. The results revealed that mindful EFL teachers who enjoy the profession are more likely to experience higher levels of work engagement and job satisfaction, thus creating a positive feedback loop. In addition, the findings suggest the importance of positive emotions in EFL teachers' psychological flourishing based on the tenets of positive psychology. Finally, implications and suggestions for further research are offered.

Keywords: foreign language teaching enjoyment (FLTE); mindfulness; engagement; burnout; EFL teachers

1. Introduction

Since the introduction of positive psychology into applied linguistics in the early 2010s, the field has witnessed an explosion of interest in the effects of positive and negative emotions on both language learners and their teachers (Dewaele et al., 2019). Negative emotions such as anxiety have a dampening effect on learners' motivation, performance and progress in learning a foreign language (FL; Botes, Dewaele et al., 2020). On the other hand, positive emotions like enjoyment have a positive effect on learners' willingness to communicate in the FL and on their achievement in FL learning (Botes et al., 2022). Overall, previous research has found that emotions tend to affect behavior and performance, which in turn tend to affect emotions. In other words, causality has tended to be bi-directional (Botes, Greiff et al., 2020). Interestingly, emotions have been linked to both learner-internal and learner-external variables which, depending on the context, were both affected by and actively affecting learner emotions (Li, 2020). As a result, feedback loops have emerged which could be negative, where boredom and anxiety silenced students and led to poor performance, which further exacerbated boredom and anxiety and could lead to disengagement, demotivation and even poorer performance over time. The feedback loop has also been to run the other way, with enjoyment neutralizing the deleterious effects of negative emotions, leading to better performance, which in turn triggers higher enjoyment, increased engagement, stronger motivation and even better performance over time (Dewaele et al., 2022; Dewaele & Li, 2021; Dewaele & Proietti Ergün, 2020; Yang, Azari Noughabi et al., 2022). FL teachers are also in the grip of positive and negative emotions standing in front of their students. The difference between teachers' emotions and those of students is that teacher emotions can affect the whole class through a process of emotional contagion: happy and enthusiastic teachers will have students who enjoy themselves, are happier, more engaged and more motivated, while unhappy, disengaged teachers

will have to resort to emotional labor strategies which are effortful, not necessarily successful and will lead to teacher burnout (Dewaele & Li, 2021; Dewaele & Wu, 2021; Gkonou et al., 2020; Moskowitz & Dewaele, 2021). It is thus crucial for teachers to initiate a positive feedback loop, in which we expect teacher enjoyment to be a potential trigger. We also know that positive emotions predict and reinforce prosocial behavior (which would be beneficial for FL learners), which in turn leads to more positive emotions (Aknin et al., 2018). It could be argued that teachers' positive emotions are linked with positive personality traits coupled with working in positive institutions (Budzińska & Majchrzak, 2021) and ultimately shape their well-being and flourishing (Budzińska & Majchrzak, 2021; Seligman & Csikszentmihalyi, 2014). Therefore, it is of vital importance to boost teachers' positive emotions at work to develop their psychological health and the ability to radiate positivity in the classroom.

Mindfulness, conceptualized as the dynamic process of regulating emotions to help concentrate on the present while ignoring the past or future concerns (Li, 2021), can support teachers' psychological flourishing and professional engagement (Moyano et al., 2021; Ramasubramanian, 2017). Previous research has indicated that teachers' mindfulness buffers against the negative stressors such as burnout (Skinner & Beers, 2016). Additionally, mindfulness has been shown to protect teachers against the negative influence of stress on their classroom supportiveness (Molloy Elreda et al., 2019). Mindful teachers can cope with professional hurdles resiliently and achieve higher levels of well-being, satisfaction, and engagement (Skinner & Beers, 2016). Moreover, mindfulness increases teachers' emotional competence (Garner et al., 2018), suggesting that mindful teachers are more likely to experience positive emotions. Concurrently, teachers with high levels of foreign language teaching enjoyment (FLTE), conceptualized as an important positive emotion including social and personal enjoyment coupled with students' appreciation, are associated with more resilience and well-being (Proietti Ergün & Dewaele, 2021). A recent study by Derakhshan et al. (2022) also showed that gritty, resilient, and happy Iranian EFL teachers were more likely to report high levels of FLTE. Therefore, two possible outcomes of mindfulness can be higher work engagement and lower burnout (Moyano et al., 2021; Skinner & Beers, 2016). In addition, it is hypothesized that the influence of mindfulness on engagement and satisfaction might be mediated by positive emotions (Garland et al., 2015).

Despite the significance of mindfulness in the positive psychology of teachers, it has been studied to a lesser extent within the domain of FL education compared to other positive psychological variables (Li, 2021). It remains unclear, to the best knowledge of the researchers, whether mindfulness might be connected with FLTE. Therefore, the present study aims to investigate the role

of FLTE in mediating the associations between mindfulness, engagement, and burnout among EFL teachers.

2. Literature review

2.1. Teacher mindfulness

Interest in mindfulness and possible pedagogical interventions to boost it has grown exponentially in recent years (Brown et al., 2007; Zeilhofer, 2020). Mindfulness, commonly defined as the ability to pay attention to the present moment intentionally without judging experiences (Kabat-Zinn, 1994), represents a promising avenue for human flourishing (Seligman, 2011). According to Taylor et al. (2021), attentive awareness, receptive attitude, and intentionality are the primary tenets of mindfulness. However, such domain-general measurement of mindfulness has notable limitations with respect to the study of teacher mindfulness because the act of teaching inherently involves interactions with students (Rickert et al., 2020). In response, Frank et al. (2016) proposed that, in addition to intrapersonal mindfulness, teacher mindfulness should also include interpersonal mindfulness, referring to an open inclination and attitude with acceptance and receptiveness in teacher-student interactions (Moyano et al., 2021). Morgan and Katz (2021) distinguished between *trait mindfulness* and *state mindfulness*. While the former stands for “what a person carries with them throughout their life, regardless of knowing about mindfulness or not,” the latter is “the feeling of mindfulness in the moment” (p. 4). In this study, teacher mindfulness is operationalized as EFL teachers’ trait of regulating emotions with respect to both intrapersonal and interpersonal dimensions to concentrate on the present while ignoring the past or future concerns (Frank et al., 2016; Li, 2021).

Several studies have demonstrated the role of mindfulness in reducing negative functioning and enhancing positive outcomes in several important life domains (e.g., Brown et al., 2007). In FL education, empirical evidence has linked mindfulness and its practices to students’ academic achievement (Zeilhofer, 2020) and learning mindset as well as mental health (Morgan & Katz, 2021). Mindfulness-based interventions for teachers have also shown promise in enhancing mindfulness skills to decrease teacher stress and burnout (Taylor et al., 2021), promoting teachers’ social-emotional competencies (de Carvalho et al., 2021), and enhancing teacher well-being and performance (Hwang et al., 2017). However, existing research on mindfulness in educational settings has focused on students, leaving teacher mindfulness, particularly FL teachers’ mindfulness underrepresented (Moyano et al., 2021). Overall, the evidence for the presumed positive contributions of mindfulness in pedagogical contexts is limited

(Malinowski & Lim, 2015). To address this gap in the literature, the current study investigated the relationship between trait mindfulness, teacher burnout, and work engagement as well as the potential mediating effect of the positive emotion of FLTE on this relationship.

2.2. Linking to burnout and work engagement

Teacher burnout, which refers to teachers' experiences of emotional exhaustion, depersonalization, and reduced personal accomplishment, is an issue of global concern. As teaching requires immense personal and emotional investment, the prevalence of teacher burnout is high in the profession (Moyano et al., 2021). Burnout usually is accompanied by a diminution of one's emotional resources to cope with stressors, cynical, irritable feelings, negative attitudes toward work, and decreased self-efficacy and/or productivity (Maslach & Jackson, 1981; Taylor et al., 2021). Therefore, teacher burnout might not only adversely affect teacher well-being and teaching effectiveness but also student engagement and learning (Roeser et al., 2013). In this context, research on malleable factors that can reduce teacher burnout is desirable and much needed. In tune with positive psychology, recent years have witnessed a shift of research focus from what is wrong to what goes right in life. Hence, attention has been extended beyond teacher burnout to include the more desirable dimensions of work-related health outcomes, that is, work engagement (Seligman & Csikszentmihalyi, 2014). Work engagement refers to teachers' cognitive, emotional, and social involvement in teaching and students' learning processes (Klassen et al., 2013). High levels of work engagement potentially bring about varied favorable outcomes for both individuals and organizations (Azari Noughabi, Amirian et al., 2022; Azari Noughabi, Ghonsooly et al., 2022; Yang, Shu et al., 2022). The burnout-engagement continuum has been extensively studied in organizational psychology (Maslach & Leiter, 1997), and the negative connection between burnout and engagement also extends to FL education (Faskhodi & Siyyari, 2018). It is hence vital to understand what leads to an increase in work engagement and a decrease in teacher burnout in FL education.

Recent research examining individual differences in trait mindfulness suggests that mindfulness is associated with lower levels of emotional burnout (Skinner & Beers, 2016) and higher levels of engagement (Moyano et al., 2021; Roeser et al., 2013). The construct is therefore of immediate relevance to our concern with enhancing engagement and reducing burnout. The role of mindfulness can be explained by the job demands-resources model (Bakker & Demerouti, 2007). When teachers perceive that the quality and quantity of the demands in the workplace exceed the quality and quantity of available resources, teacher

burnout emerges. Job or personal resources are accordingly needed to alleviate teacher burnout in the highly demanding teaching contexts. Mindfulness has been suggested as one of these personal resources (Moyano et al., 2021; Taylor & Millier, 2016). When job and personal resources become more prominent and gain their motivational potential, work engagement is likely to be enhanced as teachers become motivated to actively learn and develop their skills. As high work engagement in itself can have detrimental effects, for example affecting work-life balance or teacher health, we considered it in conjunction with positive emotions, which have been implicated in promoting work engagement and well-being (Azari Noughabi, Yang et al., 2022; Greenier et al., 2021; Malinowski & Lim, 2015; Yang, Shu et al., 2022).

2.3. Positive emotions as a mediator

To elucidate the hypothesized relationship between mindfulness, teacher burnout, and work engagement, it is important to consider other variables that potentially contribute to this relationship. Brown et al. (2007) presented clear evidence that mindfulness related to positive emotional experiences. Likewise, Garland et al. (2015) argued that in taxing contexts mindfulness potentially augments eudaimonic meaning making to elicit positive emotions. Malinowski and Lim (2015) further illustrated that mindfulness wielded its positive effect on work engagement by increasing positive emotions, which on their own and in combination with mindfulness enhanced work engagement. Fredrickson (2009) notes that experiencing positive emotions in a 3-to-1 ratio to negative emotions can help an individual gain higher levels of resilience and well-being. Rusu and Colomeischi (2020) believe that teachers with a higher ratio of positive to negative emotions are more likely to have higher levels of engagement and subjective well-being. According to the broaden-and-build theory (Fredrickson, 2001), the increase in positive emotions would lead to the broadening of one's thought-action repertoire which, in turn, would trigger the application of increased personal resources such as those needed by FL teachers to cope with demands. As such, teachers' mindfulness triggers positive emotions which help them bounce back quickly from and adapt to the challenging contextual demands (Ramasubramanian, 2017), which is likely to protect teachers from burnout. Taken together, positive emotions can be conceptualized as an important construct in mediating the relationship between mindfulness, work engagement and burnout (Gloria & Steinhardt, 2017).

Enjoyment is considered as the most salient positive emotion in the teaching context (Frenzel et al., 2016), which can be reciprocally transmitted among the teacher and students (Dewaele & Li, 2021; Moskowitz & Dewaele, 2021). Learners'

foreign language enjoyment (FLE) has been compared to the fuel of the FL learning process (Botes et al., 2021; Dewaele & Li, 2021; Dewaele & MacIntyre, 2014). FLE has been found to be positively linked to personality traits such as cultural empathy (Dewaele & MacIntyre, 2019), grit (MacIntyre & Khajavy, 2021), and emotional intelligence. Li (2020) found that trait emotional intelligence was partially mediated by FLE to have a positive effect on FL achievement. FL learners with high trait emotional intelligence have been shown to report higher enjoyment both in the L1 class and the FL class (Resnik & Dewaele, 2020, 2021). Trait emotional intelligence of EFL teachers has also been found to be positively linked to more positive attitudes towards students (Dewaele & Mercer, 2018) and to higher levels of self-reported creativity, classroom management, and pedagogical skills and lower levels of predictability (Dewaele et al., 2018).

Teachers' FLTE has only recently begun to draw the attention of researchers (Azari Noughabi, Yang, Shu et al., 2022; Proietti Ergün & Dewaele, 2021). Proietti Ergün & Dewaele (2021) adapted the 9-item short FLE scale by Botes et al. (2021) to reflect teacher enjoyment instead of learner enjoyment. The items in the first two subdimensions, personal and social enjoyment, did not need any change but the word "teacher" was substituted with "students" in the items of the third subdimension, teacher appreciation. The authors found that two positive personality traits, resilience and well-being, were significant positive predictors of FLTE, with small-to-medium effect sizes. Using the newly developed FLTE scale, Derakhshan et al. (2022) focused on the effects of resilience, well-being, and L2 grit on the FLTE of 450 Iranian EFL teachers. Structural equation modeling (SEM) revealed that teachers' L2 grit, resilience and well-being significantly shaped their FLTE. The authors concluded that gritty, resilient, and happy teachers are more likely to enjoy the emotional rollercoaster in the FL classroom.

Given the recent appearance of the concept of FLTE, its relationship with individuals' burnout and engagement has not yet been investigated. According to Slišković et al. (2019), the relations of positive emotions to teacher burnout and engagement need to be further explored. As language teaching is particularly emotionally demanding due to its strong emphasis on interpersonal relations and the integration of identities (Talbot & Mercer, 2018), it is significant to explore whether mindfulness could be linked to enjoyment and -by extension- to work engagement (Azari Noughabi, Yang, Shu et al., 2022) and teacher burnout (Frenzel et al., 2016).

Based on the studies discussed above and theoretical considerations, we hypothesize that trait mindfulness will be negatively related to teacher burnout and positively linked to work engagement. Furthermore, we predict that this relationship is mediated by FLTE and fits in a positive feedback loop. Higher mindfulness would be related to more enjoyment, a broadened thought-action repertoire, and

consequently more personal resources for enhanced work engagement and reduced burnout. Using SEM, we explored the following two research questions:

1. To what extent, if any, does FLTE mediate the relationship between mindfulness and teacher engagement?
2. To what extent, if any, does FLTE mediate the relationship between mindfulness and teacher burnout?

3. Method

3.1. Participants

A total of 496 EFL teachers in Iran were recruited using snowball sampling and authors' contacts. Teachers were asked to complete an online questionnaire in December 2021, with a total of $N = 496$ teachers completing the survey. A total of $N = 321$ female and $N = 175$ male teachers participated. The average age of participants was 26.94 years ($SD = 7.18$) with an average of 5.06 years ($SD = 5.07$) of teaching experience. The majority of participants were teaching high school students ($N = 163$), followed by secondary school students ($N = 112$), elementary school students ($N = 95$), higher education students ($N = 73$), and other students ($N = 53$). All teachers were Iranian citizens and were teaching English as a foreign language. The majority of participants were employed by private language institutes ($N = 351$), followed by public schools ($N = 97$), and universities ($N = 48$). All teachers had a tertiary degree, with the majority holding a Bachelor of Arts ($N = 260$), followed by a graduate-level degree ($N = 190$).¹

3.2. Instruments

3.2.1. Mindfulness

Mindfulness of EFL teachers was measured by the *Mindfulness in Teaching Scale* (Frank et al., 2016), a two-dimensional measure examining intrapersonal mindfulness ("When I am teaching, I find myself doing things without paying attention" – reverse scored; $\alpha = .89$; $\omega = .89$) and interpersonal mindfulness ("I am aware of how my moods affect the way I treat my students;" $\alpha = .78$; $\omega = .78$). Fourteen items were measured on a 5-point Likert scale ranging from "strongly disagree" to "strongly agree." The total scale demonstrated an acceptable internal consistency of Cronbach's $\alpha = .88$ and McDonald's $\omega = .88$.

¹ $N = 46$ teachers indicated that they had an additional 'other' qualification beyond a Bachelor's Degree.

3.2.2. Foreign language teaching enjoyment

The *Foreign Language Teaching Enjoyment Scale* (Proietti Ergün & Dewaele, 2021), which was adapted from the student-oriented short-form foreign language enjoyment scale (Botes et al., 2021), was used. The nine-item scale measured FLTE through three factors, namely personal enjoyment ("I enjoy it;" $\alpha = .74$; $\omega = .74$), student appreciation in the FL classroom ("The students in the EFL class are stimulating;" $\alpha = .75$; $\omega = .75$), and social enjoyment ("We form a tight group in the EFL class;" $\alpha = .74$; $\omega = .74$). Items were measured on a five-point Likert scale from "strongly disagree" to "strongly agree." The total scale had an acceptable internal consistency ($\alpha = .88$; $\omega = .87$).

3.2.3. Teacher engagement

Teaching engagement was measured by the multidimensional *Engaged Teacher Scale* (Klassen et al., 2013). The scale measures teacher engagement through four subscales, namely cognitive engagement ($\alpha = .83$; $\omega = .83$), emotional engagement ($\alpha = .88$; $\omega = .87$), social engagement with students ($\alpha = .81$; $\omega = .81$), and social engagement with colleagues ($\alpha = .86$; $\omega = .86$). A total of 16 items were measured on a seven-point Likert scale from "never" to "always." Internal consistency of the total scale was high ($\alpha = .85$; $\omega = .85$).

3.2.4. Teacher burnout

The *Teacher Burnout* subscale of the greater *Teacher Immunity Scale* (Hiver, 2017) was used. The five items were responded to on a 6-point Likert scale ranging from "strongly disagree" to "strongly agree," with items such as "At school, I feel burned out from my work." The scale had an acceptable internal consistency ($\alpha = .85$; $\omega = .85$).

3.3. Data analysis

Descriptive analysis, Pearson's correlation coefficients, and scale internal consistencies (Cronbach's alpha and McDonald's omega) were calculated in JASP version 0.16 (JASP Team, 2022). Average scores were calculated for each measurement instrument in order to create a single observed score per variable.² As

² Therefore, even though some of the variables utilized in this study are designed as having subscales (e.g., FLTE, which has three subscales), we utilized a single average score representing the variable. In doing so, we assume a higher-order factor overarching the subscales (see Botes et al., 2021), which we then capture as an observed variable. As such, no subscales are individually included in the analyses, but only an average score of the total measure.

mediation can be considered part of the structural equation modeling family (Kline, 2015), the mediation model was analyzed in R as a path analysis model via the Lavaan package (Rosseel, 2012). A mediation model was fitted with mindfulness as the predictor variable, FLTE as the mediator, and both teacher engagement and teacher burnout as outcome variables. The mediation model was estimated with a maximum likelihood estimator and a bias-corrected bootstrap (Biesanz et al., 2010). The theoretical mediation model is depicted in Figure 1. For mediation to occur, the following requirements needed to be met:

1. The predictor (mindfulness) had a statistically significant effect on the outcome variables of teacher engagement and teacher burnout.
2. The predictor (mindfulness) had a statistically significant effect on the mediator (FLTE) – thus path a is not zero.
3. The mediator (FLTE) had a statistically significant effect on the outcome variables of teacher engagement and teacher burnout – thus paths b_1 and b_2 are not zero.
4. Full mediation occurs if the mediator (FLTE) is completely responsible for the relationships between the predictor (mindfulness) and outcome variables (teacher engagement and burnout) – thus paths c_1 and c_2 are zero.

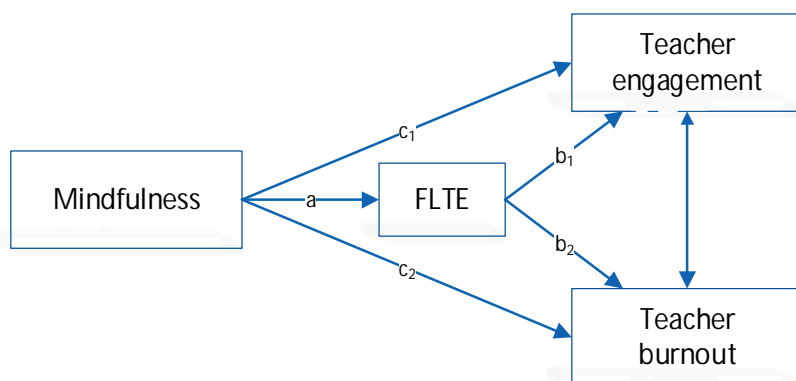


Figure 1 Theoretical mediation model

The direct ($c_1; c_2$), indirect ($a + b_1; a + b_2$), and total effects were examined. Mediation occurred if the indirect effect estimate was statistically significant. In addition, the 95% confidence interval of the indirect effect estimate needed to not contain zero (Baron & Kenny, 1986). The additional threshold regarding the confidence interval was added as small coefficients can be statistically significant in small samples (Kline, 2015). Furthermore, if the direct effects ($c_1; c_2$) were reduced to zero when the mediator was taken into account, the model was

determined to be fully mediated by the mediator (FLTE). If both the direct and indirect effects were statistically significant, a partial mediation was declared.³

4. Results

4.1. Descriptive statistics and correlation coefficients

The descriptive statistics of each of the four variables can be found in Table 1, along with the skewness and kurtosis of each variable. Teacher engagement was found to be skewed left, with a heavy-tailed distribution (Field, 2013). The distribution of the data of teacher engagement may hint at possible ceiling effects in the measure.

Table 1 Descriptive statistics and normality distribution

Variable	<i>M</i>	<i>SD</i>	min	max	skewness	kurtosis
FLTE	4.14	.61	1.56	5.00	-1.105	1.001
Burnout	2.60	1.03	1.00	5.80	.676	.370
Engagement	5.89	.84	1.88	7.00	-1.44	2.527
Mindfulness	3.95	.61	2.09	5.00	-.702	-.425

The Pearson correlation coefficients between all variables are presented in correlation matrix in Table 2. All correlations were moderate to large; however, no correlation was large enough to generate multicollinearity concerns ($r > .80$; Field, 2013). This was an especially encouraging finding, as collinearity between variables in the mediation model can reduce the power of the coefficient tests (Kline, 2015).

Table 2 Correlation matrix

variable	1	2	3	4
1. FLTE	-	-.451**	.608**	.488**
2. Burnout		-	-.328**	-.621**
3. Engagement			-	.542**
4. Mindfulness				-

Note. ** $p < .001$

4.2. Mediation model

Due to the non-normal distribution of teacher engagement, a bias-corrected bootstrap was applied to the mediation model (Biesanz et al., 2010).

³ It should be noted that even though the mediation was examined through a path analysis, no model fit was analyzed or reported. The partial mediation model tested is saturated ($df = 0$), and as such model fit cannot be interpreted (Kline, 2015). As such, only the path coefficients, direct effects, indirect effects, and total effects are interpreted in order to determine if a partial mediation has occurred.

The indirect effects of the mediation model were found to be statistically significant (see Table 3). FLTE therefore mediated the relationship between mindfulness and teacher engagement ($\beta = .304$; $p < .001$) and teacher burnout ($\beta = -.161$; $p < .001$). As shown in Table 3, the 95% confidence interval of the indirect effects did not contain zero for both teacher engagement ($CI [.214; .403]$) and teacher burnout ($CI [-.254; -.082]$), further confirming the presence of a mediation effect.

Table 3 Mediation model results

	estimate	SE	z-value	p-value	95% confidence interval	
					lower	higher
<u>Direct effects</u>						
Mindfulness → Burnout	-.893	.067	-13.39	<.001	-1.060	-.726
Mindfulness → Engagement	.446	.053	8.43	<.001	.324	.581
<u>Indirect effects</u>						
Mindfulness → FLTE → Burnout	-.161	.035	-4.6	<.001	-.254	-.082
Mindfulness → FLTE → Engagement	.304	.036	8.56	<.001	.214	.403
<u>Total effects</u>						
Mindfulness → Burnout	-1.054	.060	-17.67	<.001	-1.171	-.932
Mindfulness → Engagement	.750	.052	14.36	<.001	.605	.882

Note. SE = standard error

Furthermore, large direct effects were found between mindfulness and teacher engagement ($\beta = .446$; $p < .001$) and between mindfulness and teacher burnout ($\beta = -.893$; $p < .001$). As direct effects were still statistically significant, FLTE only partially mediated the relationship between mindfulness and teacher engagement and burnout. The full mediation model is visually depicted in Figure 2.

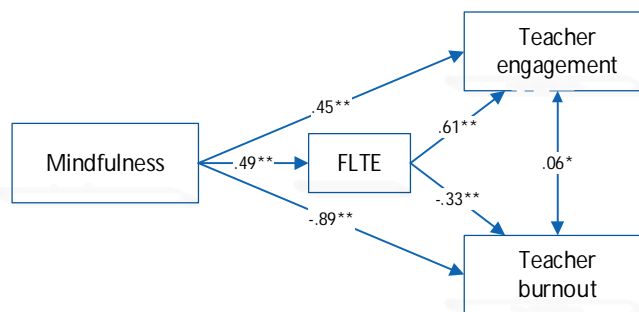


Figure 2 Mediation model (** $p < .001$ * $p < .01$)

5. Discussion

We started the introduction by pointing out that there was every reason to believe that FLTE fitted in the positive feedback loop for teachers just as FLE is

prominent in positive feedback loops for FL learners (Botes, Dewaele et al., 2020). Assuming that FLTE would be influenced by positive personality traits (in this case trait mindfulness) and ultimately directly or indirectly shape FL teachers' well-being and flourishing (in this case teacher burnout and work engagement), we adopted a mediation model, using SEM to find out if FLTE mediated the relationship between mindfulness and teacher engagement, and if FLTE mediated the relationship between mindfulness and teacher burnout. Both hypotheses were confirmed. FLTE emerged as the central element in the positive feedback loop. In line with previous studies (e.g., de Carvalho et al., 2021), the findings revealed that teachers with higher levels of mindfulness, in other words, those who regulated their emotions on both intrapersonal and interpersonal dimensions really well, were more likely to focus on the moment and enjoy their time in the classroom. Their open inclination, accepting attitudes and receptiveness towards students allowed them to deal efficiently with challenges (Frank et al., 2016; Li, 2021; Moyano et al., 2021). King et al. (2020) explained that the ability to control one's emotions and read the emotions of others is one of the requirements for obtaining a black belt in martial arts. Similarly, mindful teachers can read the emotional temperature of the classroom and intervene without hesitation if the temperature drops too far or goes too high. Being mindful also means having the emotional resources to engage in decisive prosocial behavior, such as spotting students in distress and coming to their rescue, or countering students trying to sabotage the class and undermine the teacher's authority (Aknin et al., 2018). Mindful teachers can also suppress occasional feelings of anger and frustration but stand their ground with calm authority and a straight face. This feeling of being in emotional control is required to actually enjoy the experience of teaching. It also has beneficial longer-term consequences as the repeated enjoyment in the classroom is likely to lead to increased work engagement (Klassen et al., 2013; Azari Noughabi, Amirian et al., 2022). This could include reading up on teaching methods, attendance of training seminars or professional conferences, interactions with colleagues about best classroom practices, and attempts to introduce novel methods and tasks in the classroom. This investment is likely to bear fruit with higher quality teaching delivered with an authentic smile, resulting in happier and higher-performing students (Dewaele & Li, 2021; Moskowitz & Dewaele, 2021; Roeser et al., 2013; Zeilhofer, 2020). This could have a positive ripple effect across the institution allowing everybody to flourish (Budzińska & Majchrzak, 2021; Azari Noughabi, Amirian et al., 2022; Seligman, 2011). Moreover, higher levels of both mindfulness and FLTE are likely to broaden teachers' thought-action repertoire, enriching their personal resources to cope with multiple professional demands (Fredrickson, 2001; Ramasubramanian, 2017). This is in line with previous studies which indicated the ties between FLTE and EFL teachers'

resilience (Derakhshan et al., 2022). Mindfulness, combined with high FLTE and increased engagement, boosts teachers' social-emotional competencies, resilience, grit, well-being and performance and is the best antidote against burnout (de Carvalho et al., 2021; Derakhshan et al., 2022; Hwang et al., 2017; Kazemkhah Hasankiadeh & Azari Noughabi, 2022; Proietti Ergün & Dewaele, 2021; Taylor et al., 2016, 2021). Rather than engaging in draining emotional labor strategies to keep smiling despite not feeling happy (Gkonou et al., 2020), mindful teachers can be bold, playful, humorous and supportive: the very things that boost FL learners' FLE (Dewaele & MacIntyre, 2019) and by extension their performance (Botes et al., 2022).

This study is not without limitations. Mediation rests on the assumption that all directionality stipulated in the model is correct (Kline, 2015). As such, the present mediation model does not preclude the possibility of some relationships being reciprocal amongst the variables. For example, it is entirely possible that feedback loops or bidirectionality exist between FLTE and burnout. Accordingly, there is a need for longitudinal studies to establish this. Also, the present study is cross-sectional and as such no temporal design elements required for true causal results were included in the study (Kline, 2015). Therefore, despite the theoretical literature on positive psychology, engagement, and burnout, this study does not provide definitive evidence regarding the causality between the predictor and outcome variables.

6. Conclusion

The current study provided much needed evidence for the positive effect of mindfulness in pedagogical contexts and more specifically in FL contexts. It showed that mindfulness, like emotional intelligence, is a desirable personality trait for teachers. Mindful teachers experience more enjoyment in their FL classroom because of their ability to regulate their own emotions and, by extension, those of their students. It means that mindful teachers are probably also more relaxed, alert and positive, which allows them to initiate a positive feedback loop in themselves and their students. Teachers who feel good about their own performance will radiate positivity which students will pick up, boosting their own enjoyment and motivation, resulting in better performance which will further increase their enjoyment. Our analyses also revealed that teachers' FLTE has longer-term consequences for their behavior and well-being. Teachers who notice students' positive mood, increased effort and quick progress increase the engagement in their work. They may reflect on ways to raise the challenge in the classroom while keeping it in balance with the students' increasing skills. Finally, awareness of their professional success can act as a shield against the inevitable stressors and thus stave off the dreaded burnout. To conclude, research suggests that teacher training can boost both mindfulness and emotional intelligence

(e.g., de Carvalho et al., 2021; Garner et al., 2018; Taylor et al., 2021; Vesely et al., 2014). We argue that such investment in training programs is vital to create positive institutions where everybody can thrive.

References

- Aknin, L. B., Van de Vondervoort, J. W., & Kiley Hamlin, J. (2018). Positive feelings reward and promote prosocial behavior. *Current Opinion in Psychology*, 20, 55-59. <https://doi.org/10.1016/j.copsyc.2017.08.017>
- Azari Noughabi, M., Amirian, S. M. R., Adel, S. M. R., & Zareian, G. (2022). The association of experienced in-service EFL teachers' immunity with engagement, emotions, and autonomy. *Current Psychology*, 41, 5562-5571. <https://doi.org/10.1007/s12144-020-01066-8>
- 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*. Advance online publication. <https://doi.org/10.1080/01434632.2022.2088766>
- Azari Noughabi, M., Yang, S., Botes, E., & Dewaele, J.-M. (2022). The effect of positive emotion on foreign language teacher engagement and well-being: A cross-cultural comparison. *PsyArXiv*. Epub ahead of print. <https://doi.org/10.31234/osf.io/axy9h>
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328. <https://doi.org/10.1108/02683940710733115>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Biesanz, J. C., Falk, C. F., & Savalei, V. (2010). Assessing mediational models: Testing and interval estimation for indirect effects. *Multivariate Behavioral Research*, 45(4), 661-701. <https://doi.org/10.1080/00273171.2010.498292>
- Botes, E., Dewaele, J.-M., & Greiff, S. (2020). The power to improve: Effects of multilingualism and perceived proficiency on enjoyment and anxiety in foreign language learning. *European Journal of Applied Linguistics*, 8(2), 1-28. <https://doi.org/10.1515/eujal-2020-0003>
- Botes, E., Greiff, S., & Dewaele, J.-M. (2020). The foreign language classroom anxiety scale and academic achievement: An overview of the prevailing literature and a meta-analysis. *The Journal for the Psychology of Language Learning*, 2, 26-56. Retrieved from <https://www.jppl.org/index.php/journal/article/view/botesetal>
- Botes, E., Dewaele, J.-M., & Greiff, S. (2021). The development and validation of the Short Form of the Foreign Language Enjoyment Scale. *Modern Language Journal*, 105(4), 858-876. <https://doi.org/10.1111/modl.12741>

- Botes, E., Dewaele, J.-M., & Greiff, S. (2022). Taking stock: A meta-analysis of the effects of Foreign Language Enjoyment. *Studies in Second Language Learning and Teaching*, 12(2), 205-232. [10.14746/ssl1t.2022.12.2.3](https://doi.org/10.14746/ssl1t.2022.12.2.3)
- Brown, K. W., Ryan, R. M., & Creswell, J. D. (2007). Mindfulness: Theoretical foundation and evidence for its salutary effects. *Psychological Inquiry*, 18, 211-237. <https://doi.org/10.1080/10478400701598298>
- Budzińska, K., & Majchrzak, O. (Eds.). (2021). *Positive psychology in second and foreign language education*. Springer.
- de Carvalho, J. S., Oliveira, S., Roberto, M. S., Gonçalves, C., Bárbara, J. M., de Castro, A. F., Pereira, R., Franco, M., Cadima, J., Leal, T., Lemos, M. S., & Marques-Pinto, A. (2021). Effects of a mindfulness-based intervention for teachers: A study on teacher and student outcomes. *Mindfulness*, 12(7), 1719-1732. <https://doi.org/10.1007/s12671-021-01635-3>
- Derakhshan, A., Dewaele, J.-M., & Azari Noughabi, M. (2022). Modeling the contribution of resilience, well-being, and L2 grit to foreign language teaching enjoyment among Iranian English language teachers. *System*, 109, 102890. <https://doi.org/10.1016/j.system.2022.102890>
- 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, 2128. <https://doi.org/10.3389/fpsyg.2019.02128>
- Dewaele, J.-M., Gkonou, C., & Mercer, S. (2018). Do ESL/EFL teachers' emotional intelligence, teaching experience, proficiency and gender affect their classroom practice? In J. de Dios Martínez Agudo (Ed.), *Emotions in second language teaching: Theory, research and teacher education* (pp. 125-141). Springer. https://doi.org/10.1007/978-3-319-75438-3_8
- Dewaele, J.-M., & Li, C. (2021). Teacher enthusiasm and students' social-behavioral learning engagement: The mediating role of student enjoyment and boredom in Chinese EFL classes. *Language Teaching Research*, 25(6), 922-945. <https://doi.org/10.1177/13621688211014538>
- Dewaele, J.-M., & MacIntyre, P. D. (2014). The two faces of Janus? Anxiety and enjoyment in the foreign language classroom. *Studies in Second Language Learning and Teaching*, 4(2), 237-274. <https://doi.org/10.14746/ssl1t.2014.4.2.5>
- Dewaele, J.-M., & MacIntyre, P. (2019). The predictive power of multicultural personality traits, learner and teacher variables on foreign language enjoyment and anxiety. In M. Sato & S. Loewen (Eds.), *Evidence-based second language pedagogy: A collection of instructed second language acquisition studies* (pp. 263-286). Routledge.
- Dewaele, J.-M., & Mercer, S. (2018) Variation in ESL/EFL teachers' attitudes towards their students. In S. Mercer & A. Kostoulas (Eds.), *Language teacher psychology* (pp. 178-195). Multilingual Matters. <https://doi.org/10.21832/9781783099467>

- Dewaele, J.-M., & Proietti Ergün, A. L. (2020). How different are the relations between enjoyment, anxiety, attitudes/motivation and course marks in pupils' Italian and English as foreign languages? *Journal of the European Second Language Association*, 4(1), 45-57. <https://doi.org/10.22599/jesla.65>
- Dewaele, J.-M., Saito, K., & Halimi, F. (2022). How teacher behaviour shapes foreign language learners' enjoyment, anxiety and motivation: A mixed modelling longitudinal investigation. *Language Teaching Research*. Advance online publication. <https://doi.org/10.1177/13621688221089601>
- Dewaele, J.-M., & Wu, A. (2021). Predicting the emotional labor strategies of Chinese English foreign language teachers. *System*, 103, 102660. <https://doi.org/10.1016/j.system.2021.102660>
- Faskhodi, A. A., & Siyyari, M. (2018). Dimensions of work engagement and teacher burnout: A study of relations among Iranian EFL teachers. *Australian Journal of Teacher Education (Online)*, 43(1), 78-93. <https://doi.org/10.14221/ajte.2018v43n1.5>
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.
- Frank, J. L., Jennings, P. A., & Greenberg, M. T. (2016). Validation of the mindfulness in teaching scale. *Mindfulness*, 7(1), 155-163. <https://doi.org/10.1007/s12671-015-0461-0>
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218-226. <https://doi.org/10.1037/0003-066X.56.3.218>
- Fredrickson, B. (2009). *Positivity: Top-notch research reveals the 3-to-1 ratio that will change your life*. Harmony.
- Frenzel, A. C., Pekrun, R., Goetz, T., Daniels, L. M., Durksen, T. L., Becker-Kurz, B., & Klassen, R. M. (2016). Measuring teachers' enjoyment, anger, and anxiety: The Teacher Emotions Scales (TES). *Contemporary Educational Psychology*, 46, 148-163. <https://doi.org/10.1016/j.cedpsych.2016.05.003>
- Garland, E. L., Farb, N. A., R. Goldin, P., & Fredrickson, B. L. (2015). Mindfulness broadens awareness and builds eudaimonic meaning: A process model of mindful positive emotion regulation. *Psychological Inquiry*, 26(4), 293-314. <https://doi.org/10.1080/1047840X.2015.1064294>
- Garner, P. W., Bender, S. L., & Fedor, M. (2018). Mindfulness-based SEL programming to increase preservice teachers' mindfulness and emotional competence. *Psychology in the Schools*, 55(4), 377-390. <https://doi.org/10.1002/pits.22114>
- Gkonou, C., Dewaele, J.-M., & King, J. (2020). *The emotional rollercoaster of language teaching*. Multilingual Matters.
- Gloria, C. T., & Steinhart, M. A. (2017). The direct and mediating roles of positive emotions on work engagement among postdoctoral fellows. *Studies in Higher Education*, 42(12), 2216-2228. <https://doi.org/10.1080/03075079.2016.1138938>

- 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.2020.102446>
- Hiver, P. (2017). Tracing the signature dynamics of language teacher immunity: A retrodictive qualitative modeling study. *Modern Language Journal, 101*(4), 669-690. <https://doi.org/10.1111/modl.12433>
- Hwang, Y. S., Bartlett, B., Greben, M., & Hand, K. (2017). A systematic review of mindfulness interventions for in-service teachers: A tool to enhance teacher wellbeing and performance. *Teaching and Teacher Education, 64*, 26-42. <https://doi.org/10.1016/j.tate.2017.01.015>
- JASP Team. (2022). JASP (Version 0.16.0) [Computer software]. JASP.
- Kabat-Zinn, J. (1994). *Wherever you go, there you are: Mindfulness meditation in everyday life*. Hyperion.
- Kazemkhah Hasankiadeh, F., & Azari Noughabi, M. (2022). Investigating the interplay among EFL teachers' L2 grit, self-efficacy, and self-regulation: A structural equation modeling analysis. *Asia-Pacific Education Researcher*. Advance online publication. <https://doi.org/10.1007/s40299-022-00688-9>
- King, J., Dewaele, J.-M., & Gkonou, C. (2020). Concluding thoughts on the emotional rollercoaster of language teaching. In C. Gkonou, C., J.-M. Dewaele & J. King (Eds.), *The emotional rollercoaster of language teaching* (pp. 288-295). Multilingual Matters. <https://doi.org/10.21832/9781788928342>
- Klassen, R. M., Yerdelen, S., & Durksen, T. L. (2013). Measuring teacher engagement: Development of the Engaged Teachers Scale (ETS). *Frontline Learning Research, 1*(2), 33-52. <https://doi.org/10.14786/flr.v1i2.44>
- Kline, R. B. (2015). The mediation myth. *Basic and Applied Social Psychology, 37*(4), 202-213. <https://doi.org/10.1080/01973533.2015.1049349>
- Li, C. (2020). A positive psychology perspective on Chinese EFL students' trait emotional intelligence, foreign language enjoyment and EFL learning achievement. *Journal of Multilingual and Multicultural Development, 41*(3), 246-263. <https://doi.org/10.1080/01434632.2019.1614187>
- Li, S. (2021). Psychological wellbeing, mindfulness, and immunity of teachers in second or foreign language education: A theoretical review. *Frontiers in Psychology, 12*, 720340. <https://doi.org/10.3389/fpsyg.2021.720340>
- MacIntyre, P., & Khajavy, G. H. (2021). Grit in second language learning and teaching: Introduction to the special issue. *Journal for the Psychology of Language Learning, 3*(2), 1-6. <https://doi.org/10.52598/jpll/3/2/1>
- Malinowski, P., & Lim, H. J. (2015). Mindfulness at work: Positive affect, hope, and optimism mediate the relationship between dispositional mindfulness, work

- engagement, and well-being. *Mindfulness*, 6(6), 1250-1262. <https://doi.org/10.1007/s12671-015-0388-5>
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior*, 2(2), 99-113. <https://doi.org/10.1002/job.4030020205>
- Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it*. Jossey-Bass.
- Molloy Elreda, L., Jennings, P. A., DeMauro, A. A., Mischenko, P. P., & Brown, J. L. (2019). Protective effects of interpersonal mindfulness for teachers' emotional supportiveness in the classroom. *Mindfulness*, 10(3), 537-546. <https://doi.org/10.1007/s12671-018-0996-y>
- Morgan, W. J., & Katz, J. (2021). Mindfulness meditation and foreign language classroom anxiety: Findings from a randomized control trial. *Foreign Language Annals*, 54(2), 389-409. <https://doi.org/10.1111/flan.12525>
- Moskowitz, S., & Dewaele, J.-M. (2021). Is teacher happiness contagious? A study of the link between perceptions of language teacher happiness and student self-reported attitudes and motivation. *Innovation in Language Learning and Teaching*, 15(2), 117-130. <https://doi.org/10.1080/17501229.2019.1707205>
- Moyano, N., Perez-Yus, M.C., Herrera-Mercadal, P., Navarro-Gil, M., Valle, S., & Montero-Marin, J. (2021). Burned or engaged teachers? The role of mindfulness, self-efficacy, teacher and students' relationships, and the mediating role of intrapersonal and interpersonal mindfulness. *Current Psychology*, Advance online publication. <https://doi.org/10.1007/s12144-021-02433-9>
- Proietti Ergün, A. L., & 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>
- Ramasubramanian, S. (2017). Mindfulness, stress coping and everyday resilience among emerging youth in a university setting: A mixed methods approach. *International Journal of Adolescence and Youth*, 22(3), 308-321. <https://doi.org/10.1080/02673843.2016.1175361>
- Resnik, P., & Dewaele, J.-M. (2020). Trait emotional intelligence, anxiety and enjoyment in first and foreign language classes. *System*, 94, 102324. <https://doi.org/10.1016/j.system.2020.102324>
- Resnik, P., & Dewaele, J.-M. (2021). Learner emotions, autonomy and trait emotional intelligence in 'in-person' versus emergency remote English foreign language teaching in Europe. *Applied Linguistics Review*. Advance online publication. <https://doi.org/10.1515/applirev-2020-0096>
- Rickert, N. P., Skinner, E. A., & Roeser, R. W. (2020). Development of a multidimensional, multi-informant measure of teacher mindfulness as experienced and

- expressed in the middle school classroom. *International Journal of Behavioral Development*, 44(1), 5-19. <https://doi.org/10.1177/0165025419881724>
- Roeser, R. W., Schonert-Reichl, K. A., Jha, A., Cullen, M., Wallace, L., Wilensky, R., Oberle, E., Thomson, K., Taylor, C., & Harrison, J. (2013). Mindfulness training and reductions in teacher stress and burnout: Results from two randomized, waitlist-control field trials. *Journal of Educational Psychology*, 105(3), 787-804. <https://doi.org/10.1037/a0032093>.
- Rosseel, Y. (2012). Lavaan: An R package for structural equation modeling and more, (Version 0.5-12). *Journal of Statistical Software*, 48(2), 1-36. <https://doi.org/10.18637/jss.v048.i02>
- Rusu, P. P., & Colomeischi, A. A. (2020). Positivity ratio and well-being among teachers. The mediating role of work engagement. *Frontiers in Psychology*, 11, 1608 <https://doi.org/10.3389/fpsyg.2020.01608>
- Seligman, M. E. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Free Press.
- Seligman, M. E., & Csikszentmihályi, M. (2014). Positive psychology: An introduction. In M. Csikszentmihalyi (Ed.), *Flow and the foundations of positive psychology* (pp. 279-298). Springer. https://doi.org/10.1007/978-94-017-9088-8_18
- Skinner, E., & Beers, J. (2016). Mindfulness and teachers' coping in the classroom: A developmental model of teacher stress, coping, and everyday resilience. In K. Schonert-Reichl & R. Roeser (Eds.), *The handbook of mindfulness in education: Emerging theory, research, and programs* (pp. 133-148). Springer. https://doi.org/10.1007/978-1-4939-3506-2_7
- Slišković, A., Burić, I., & Sorić, I. (2019). The relations between Principal support and work engagement and burnout: Testing the role of teachers' emotions and educational level. *Work*, 64(2), 203-215. <https://doi.org/10.3233/WOR-192987>
- Talbot, K., & Mercer, S. (2018). Exploring university ESL/EFL teachers' emotional well-being and emotional regulation in the United States, Japan and Austria. *Chinese Journal of Applied Linguistics*, 41(4), 410-432. <https://doi.org/10.1515/cjal-2018-0031>
- Taylor, C., Harrison, J., Haimovitz, K., Oberle, E., Thomson, K., Schonert-Reichl, K., & Roeser, R. W. (2016). Examining ways that a mindfulness-based intervention reduces stress in public school teachers: A mixed-methods study. *Mindfulness*, 7(1), 115-129. <https://doi.org/10.1007/s12671-015-0425-4>
- Taylor, N. Z., & Milllear, P. M. R. (2016). The contribution of mindfulness to predicting burnout in the workplace. *Personality and Individual Differences*, 89, 123-128. <https://doi.org/10.1016/j.paid.2015.10.005>
- Taylor, S. G., Roberts, A. M., & Zarrett, N. (2021). A brief mindfulness-based intervention (bMBI) to reduce teacher stress and burnout. *Teaching and Teacher Education*, 100, 103284. <https://doi.org/10.1016/j.tate.2021.103284>

- Vesely, A. K., Saklofske, D. H., & Nordstokk, D. W. (2014). EI training and pre-service teacher wellbeing. *Personality and Individual Differences, 65*, 81-85. <https://doi.org/10.1016/j.paid.2014.01.052>
- Yang, S., Azari Noughabi, M., & Jahedizadeh, S. (2022). Modeling the contribution of English language learners' academic buoyancy and self-efficacy to L2 grit: Evidence from Iran and China. *Journal of Multilingual and Multicultural Development*. Advance online publication. <https://doi.org/10.1080/01434632.2022.2062368>
- Yang, S., Shu, D., & Yin, H. (2022). The bright side of dark emotions: Exploring EFL teachers' emotions, emotional capital, and engagement in curriculum implementation. *Teaching and Teacher Education, 117*, 103811. <https://doi.org/10.1016/j.tate.2022.103811>
- Zeilhofer, L. (2020). Mindfulness in the foreign language classroom: Influence on academic achievement and awareness. *Language Teaching Research, 27*(1), 96-114. <https://doi.org/10.1177/1362168820934624>