

Relating EFL university students' mindfulness and resilience to self-fulfilment and motivation in learning

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Given the prominence of mindfulness in educational settings and the fact that little attention has been given to this concept in foreign language learning, the present study sets out to explore the influence of mindfulness and L2 resilience on Iranian EFL (English as a foreign language) learners' self-fulfilment, and L2 motivation. To meet this objective, 221 EFL learners were recruited to participate in this study. They were asked to respond to the Langer mindfulness scale (LMS), L2 resilience inventory, measurement of actualisation of potential (MAP), and motivation scale. Afterwards, structural equation modeling (SEM) utilising the LISREL 8.50 statistical package was exploited to shed light on probable relationships. The findings demonstrated that mindfulness is a positive and consistent predictor of self-fulfilment and resilience and also exerts positive influence on L2 motivation both directly and indirectly via its effect on self-fulfilment. Resilience was positively and significantly associated with self-fulfilment. Resilience has a positive relationship with L2 motivation, both directly and indirectly via self-fulfilment. In addition, it was found that L2 motivation was predicted by self-fulfilment positively and significantly. Taken together, the pivotal role of mindfulness in language learning was demonstrated, and according to the findings, some suggestions are put forward regarding the implications of the study.

Introduction

These days a more peaceful life is highly sought throughout the world, reflecting the fact that many people in different societies feel the growing desire for a deeper, more meaningful, and more mindful way of living (Kabat-Zinn, 2003; van Gordon & Shonin, 2017). The concept of mindfulness, having its roots in the Eastern contemplative practices of Buddhism, deals with two basic notions of awareness and neutral or nonjudgmental perspective in every situation (Hayes, Follette & Linehan, 2004). In other words, being in the state of mindfulness equals with flexibility of mind which enables an individual to live in the present moment and to rigorously notice and perceive novel phenomena in a specific context, without showing any biases against them (Langer, 2000). In addition, mindfulness, owing to its varied types, has been applied to a wide range of disciplines. For example, it has been introduced cross-contextually and manoeuvred upon as a meditation technique, a state of mind, a trait, a reaction skill, or a therapeutic method (van Vreeswijk, Broersen & Schurink, 2014). This metacognitive-in-nature construct, which was initially understood as a cognitive style by researchers such as Sternberg (2000), has been proven to exert significant influences on a single individual with regard to his/her creativity, physical health, and psychological health (Brwon & Ryan, 2003; Langer, 2005, 2009).

Additionally, deriving from the state of mindfulness, there is a multifaceted concept known as resilience. In fact, it is pointed out that an individual experiences resilience as an outcome of being mindful (Galante et al., 2017). Resilience is defined as one's capacity to tolerate severe hardship, recover from difficulties, and to undertake the responsibilities of life with perseverance (Kim & Kim, 2017; Schelvisa, Zwetsloot, Bos & Wiezer, 2014; Wolin & Wolin, 1993). To put it simply, resilience is the consequence of perfect harmony with circumstances in the midst of challenges and threats (Howard & Johnson, 2000). With respect to the academic settings, as the process of learning, especially second language (L2) learning, is an arduous process and demands learners to be devoted to it. Resilient students are claimed to perform better than their non-resilient or in a broader sense than their mindless counterparts (Kim & Kim, 2017). That is to say, resilience affects the quality of learning and the general enhancement of people in different fields (Nolan, Taket & Stagnitti, 2014).

Neurobiological research in educational settings indicated that mindfulness, as an umbrella term covering resilience, fosters self-regulation, self-reflection, and metacognitive strategies for both teachers and students (Meiklejohn et al., 2012). Ineffective teaching encourages mindlessness, failing to train learners who are actively involved in the classroom learning tasks at the present moment and are open to adopting new ideas (Langer, 2000). However, due to the significant impacts of mindfulness on performance improvement, some mindfulness training techniques such as *Cultivating Awareness and Resilience in Education* (CARE) have been designed, demonstrating effective outcomes including an increase in teacher and student physical and mental well-being, self-efficacy, motivation, and self-fulfilment (Ludwig & Kabat-Zinn, 2008; Ruff & Mackenzie, 2009). Self-fulfilment as one of the basic being needs of Maslow's hierarchy (1970) is conceptualised as an individual's understanding of his/ her own discovered and undiscovered talents (Rogers, 1961). This concept with its three main conditions – personal involvement, fulfillment of abilities, and social integration – has significantly demonstrated motivational aspects in students (Shutenko, 2015).

Bearing all this information in mind, as earlier mentioned, mindfulness and resilience are two relatively unexplored constructs in the academic setting; therefore, there are gaps in the literature and the concepts are yet to be studied in education, especially in foreign language education. Moreover, some problems are attributed to mindfulness such as lack of clarity and lack of empirical measures (Pirson, Langer, Bodner, & Zilcha, 2012) which have inspired the authors of the present study to conduct the present study for shedding some light on the issue with the specific aim of exploring the role of mindfulness and resilience in predicting L2 motivation and self-fulfilment. To address the objectives of the study, the following research questions were posed and investigated:

1. Does EFL learners' mindfulness play any significant role in their self-fulfilment?
2. Does EFL learners' resilience play any significant role in their self-fulfilment?
3. Does EFL learners' mindfulness play any significant role in their resilience?
4. Does EFL learners' self-fulfilment play any significant role in their L2 motivation?
5. Does EFL learners' mindfulness play any significant role in their L2 motivation?

Review of the related literature

Mindfulness

In the first place, it might serve as an interesting point to know that the term mindfulness has its origins in the Pali word *sati* which means being conscious and attentive (Bodhi, 2000). Throughout the literature, evidence in abundance indicates that the concept of mindfulness has been approached from two distinct, yet relevant perspectives. The primary and dated perspective is meditative in nature; as the name suggests, it is a meditation-based concept driven from Buddhism, the Noble Eightfold Path, and Vipssana practices in the East (Gunaratana, 2002; Kornfeld, 2009), the followers of which have been in search of “objective truth” and/or “veridical perception” (Pirson et al., 2012, p. 3).

A simplified and loose definition for mindfulness in this sense might be “a moment-by-moment awareness” proposed by Germer, Siegel and Fulton (2005, p.6). Nonetheless, about two decades ago, a more comprehensive definition was offered by Martin (1997) who denoted mindfulness as a free psychological state of mind a person experiences while s/he is detached from any perspectives. Subsequently, researchers provided the literature with updated and more scholarly and inclusive definitions. For instance, according to Bishop et al. (2004), mindfulness is a spectrum of mental processes whose task is to understand and boost functional thoughts, emotions and behaviours, and weaken the dysfunctional ones. Besides, Bishop et al. (2004) believed that mindfulness embraced two main components: (a) self-regulation of attention, and (b) orientation to experience. For Kabat-Zinn (2003), mindfulness is the purposeful and non-judgmental alertness over one's current sensory and cognitive experiences by him/herself. A shared consideration across the above-mentioned definitions is that the state of mindfulness takes no conscious effort and endeavour; being spontaneous and living the present time with all senses fully involved is the best way for cultivating mindfulness (van Gordon & Shonin, 2017).

The other approach to mindfulness is basically a socio-cognitive one. Since Ellen Langer (1989) has predominantly expounded mindfulness in the West, this approach was named after her, known as *Langerian mindfulness*. Mindfulness in this sense is the ability of an individual to notice distinctions in a context and come up with novel ideas (Langer, 2000). While meditation-based mindfulness is highly regarded as one of the basics of numerous clinical interventions, socio-cognitive mindfulness is novelty seeking and is used as an instrument for problem solving (Pirson et al., 2012). Arguably, this mindset consists of three main sub-constructs: (a) novelty seeking, (b) novelty producing, and (c) engagement (Bodner & Langer, 2001).

As to the empirical literature, many clinical interventions have been developed for fostering mindfulness through physical and mental meditation techniques. The most prominent therapeutic methods are *Acceptance and Commitment Therapy* (ACT), *Dialectical Behavior Therapy* (DBT), *Mindfulness-Based Cognitive Therapy* (MBCT), *Mindfulness-Based Relapse Prevention* (MBRP), *Mindfulness-Based Stress Reduction* (MBSR), and *Mindfulness-Based Therapeutic Community* (MBTC) (Toneatto, 2013). It is worth noting that the most

frequently-used method is MBSR. A meta-analysis of 39 scientific articles employing MBSR has revealed that mindfulness-based therapy decreases levels of anxiety and depression in individuals (Hoffman, Sawyer, Witt & Oh, 2010; Maxwell & Duff, 2016). Amazingly, this finding is consistent with the results of Shapiro, Schwartz, and Bonner's study (1998) on premedical and medical students. Moreover, research in the clinical domain confirms that mindfulness enhances the immunity system of the body and general physical well-being (Grossman, Niemann, Schmidt & Walach, 2004). Williams (2010) demonstrated that even eight weeks of meditation-based mindfulness makes considerable changes regarding emotional, mental, and behavioral processes. Also, Corcoran, Farb, Anderson and Segal (2010) developed a model which signifies the association of meditation-based mindfulness with increased positive emotions, decreased negative emotions, declined rumination, and active emotion regulation. Subsequent studies also support this finding (Hill & Updegraff, 2012; Hölzel et al., 2011; Tran et al., 2014).

Taking an educational stance on mindfulness, David and Sheth (2009) pointed out that mindful students display better educational performance and attainment due to their enriched attention and awareness. They have also indicated that mindful teachers are more focused on their job, more responsive to students' needs, more emotionally balanced, and generally healthier, in contrast to their mindless co-workers. More specifically, Sheikhzadeh and Khatami (2017) led pioneering research among EFL learners in the context of Iran to understand the correlation between critical thinking, mindfulness, and academic achievement. Their study found no association between critical thinking and reading comprehension improvement. Furthermore, there was not any significant relationship between critical thinking and mindfulness. Nevertheless, it did illustrate that mindfulness plays a pivotal role in reading comprehension and academic achievement. In essence, the literature reveals that mindfulness training augments the amount of resilience and promotes brain function in both learners and instructors (Meiklejohn et al., 2012).

Resilience

Resilience has already been investigated in different fields and at different levels, ranging from biological to personal and to social domains (Reich, Zautra & Hall, 2010). This notion is succinctly defined as one's capability to adapt to changes, adhere, and accomplish objectives, in spite of existing challenges (Howard & Johnson, 2000). In educational contexts, resilience is the capability of an individual, team, or school to adapt, recover, and keep on going after the occurrence of changes and in the face of adversities (Schelvis et al., 2014). There are three basic dimensions to resilience: "(1) The ability to change and adapt when necessary; (2) The ability to be 'elastic' and recover quickly from changes, difficulties, or constraints; (3) The ability to be and remain confident and vigorous after changes have occurred." (Schelvis et al., 2014, p. 623).

In the literature, there are four theories relevant to resilience in different areas, including resilience engineering which deals with the four skills of responding, monitoring, anticipating, and learning (Hollnagel, 2011). The second theory is organisational mindfulness which focuses on possible threats to resilience (Weick & Sutcliffe, 2007). The third theory is human resource management perspectives on resilience, focusing on

constraints and commitment states of employees (Beer, 2009), and finally resilience as a social system which considers resilience as an interpersonal asset (van Breda, 2011). It is worth noting that handling variation and changing demands is the first priority in all the theoretical models above (Schelvis et al., 2014).

In terms of empirical research, psychology, psychopathology, and business researchers have developed resilience models and conducted numerous studies on this topic in their fields (Goldstein & Brooks, 2006; Wright & Masten, 2006). However, except for a handful of studies (Kamali & Fahim, 2011; Kim & Kim, 2017; Najafzadeh, Ghanizadeh & Jahedizadeh, 2018; Nguyen, Stanley, Stanley & Wang, 2015), this variable has been little studied in education, especially in L2 learning. These studies reported that academically-resilient students maintain high levels of motivation and deliver good performance, even in the face of stressful and adverse conditions. As to the importance of resilience, only recently, academic resilience has been explored in teacher-related issues (Ebersöhn, 2014; Gibbs & Miller, 2014; Johnson et al., 2014; Nolan et al., 2014). Kim and Kim's (2017) study demonstrated that resilience and its sub-constructs play a central role in L2 learning and contribute substantially to the learners' motivation behaviour. It can be concluded from their findings that due to their motivated behaviour, resilient learners become more proficient in the course of L2 learning, compared to non-resilient students. In other words, their instinctual drives stimulate them to more perfectly actualise their potentials. Najafzadeh, Ghanizadeh and Jahedizadeh (2018) reported personal best goals as a positive and significant predictor of resilience in L2 learning. They also indicated that language achievement can be predicted by both personal best goals and resilience.

Self-fulfilment

To have a better understanding of self-actualisation or self-fulfilment, Maslow's hierarchy of needs should be taken into account. His hierarchy fundamentally falls into two categories, deficiency needs, including physiological, safety, friendship, and self-esteem, and being needs, comprising cognitive, aesthetic, and self-fulfilment. It considers cognitive needs as the tendency to discover, learn, and live a more meaningful life. In his view, aesthetic needs are related to the beauty-seeking nature of mankind, being in search of beauty in everything. Self-fulfilment is indeed the uppermost layer of all the values, superordinate to many tenets (Gewirth, 1998). As Maslow (1954) posited, self-fulfilment is the propensity for thoroughly developing one's potentialities. Rogers (1961) also saw this construct as one's conception of their known and unknown capabilities.

It seems that, from the mid-19th century onwards, the notion of self-fulfilment has been the intriguing question upon which many studies have been conducted. Having a vast territory, self-fulfilment embraces a host of concepts from creativity to prosperity-seeking and also to acceptance of realities, and has been extensively exploited in a variety of areas such as psychology, sociology, and education (Baigy, Ghonsooly & Ghanizadeh, 2017). According to the literature, in the 1970s, applying self-fulfilment to the educational methods and approaches reached an unprecedented boom. It has been proven that, educational approaches revolving around self-fulfilment encompass learner autonomy, learners' sensitivities, internal and individualistic factors, self-experience, motivation,

compassion, and whole-person learning (Baigy, Ghonsooly & Ghanizadeh, 2017). Empirical evidence has confirmed the correlation between self-fulfilment and motivation based on the theory that self-actualisation of potentialities is embedded in inner drives. For instance, Baigy, Ghonsooly and Ghanizadeh (2017) carried out a study among 253 Iranian college students and determined that there is a significant relationship between self-fulfilment and intrinsic motivation. In addition, in Shutenko's (2015) study, a relationship has been found between the university students' self-fulfilment, their learning passion and motivation, and their goal-oriented lifestyle. It goes without saying that productive higher education should ensure the development of learners' self-fulfilment in the educational system, and provide students with some opportunities to enhance their abilities and flourish their talents for the present and future time.

Motivation

Motivation can be regarded as one of the most abundantly-researched variables in the field of psychology and language studies. Dornyei and Otto (1998) defined motivation as "... the dynamically changing cumulative arousal in a person that initiates, directs, coordinates, amplifies, terminates, and evaluates the cognitive and motor processes whereby initial wishes and desires are selected, prioritized, operationalized and (successfully or unsuccessfully) acted out." (p. 65). Undeniably, motivation studies have been influenced by the pioneering model of Gardner and Lambert (1972), whose framework was a social-psychological one which divided motivation into two types of integrative and instrumental motivations. Their work spurred the growth of research with the same approach and paved the way for the subsequent motivation models such as self-determination theory (SDT) proposed by Deci and Ryan (1985). Based on SDT, motivation moves across a spectrum on which intrinsic motivation is at one extreme, amotivation lies at the other opposite extreme, and extrinsic motivation resides between these two extremes (Agawa & Takeuchi, 2016).

Intrinsic motivation is an inner drive springing from within the individual; however, extrinsic motivation is an outside reward stimulating an individual to follow his/her goals (Noels, Pelletier, Clement & Vallerand, 2000). For intrinsically-motivated students, the process of learning itself is a goal and reward and they have a higher tendency to accomplish their aims (Vansteenkiste, Lens & Deci, 2006) whereas extrinsically-motivated learners demand rewards such as grades and verbal stimulation from external sources (Rostami, Ghanizadeh & Ghonsooly, 2015). Research has shown that intrinsic motivation should be prioritised over extrinsic motivation since intrinsically-motivated students gain more noticeable achievements than extrinsically-motivated ones (Ghanizadeh & Rostami, 2015; Oraif, 2018).

Method

Participants

The sample employed in the current study comprised 221 English language learners studying at different universities in Mashhad, a city in the northeastern part of Iran. The

sample consisted of 174 females and 47 males with a mean age of 26.98 years ($SD=7.75$), ranging from 18 to 46. Eleven participants held PhD degrees or were PhD students; 70 participants had MA degrees, and 140 participants had BA degrees in English. The learners willingly participated in this study based on convenience sampling and they all spoke Persian as their mother tongue. The reason beyond selecting the learners from varied universities was to increase the scope for generalisation. In addition, it is worthy to mention that the participants voluntarily took part in the study and they were they were ensured that their responses were fully anonymous since the scales did not require their names.

Instruments

Langer Mindfulness Scale (LMS)

To measure the respondents' level of mindfulness, the LMS developed by Pirson, Laner, Bodner and Zilcha (2012) was employed. This scale, which is in English, comprises 14 items evaluating the three components of novelty seeking, novelty producing, and engagement (see Appendix A for some sample items). These items are presented on a seven-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). In addition, the scale enjoys viable internal consistency with Cronbach alphas ranging from .8 to .9.

L2 Resilience Scale

The English version of L2 resilience scale constructed by Shin, Kim and Kim (2009) was used to obtain information about L2 learners' resilience. Participants responded to 26 items scored on a five-point Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Also, it is worthy to mention that perceived happiness (Cronbach alpha = .85), empathy (alpha = .81), sociability (alpha = .77), persistence (alpha = .65), and self-regulation (alpha = .65) are the five sub-constructs of this scale (see Appendix B for some sample items).

Measurement of Actualization of Potential (MAP)

To assess the participants' self-fulfilment, the MAP inventory developed by Leclerc, Lefrancois, Dube, Hébert and Gaulin (1999) was used. This scale comprises 27 items examining the two major sub-scales of openness to experience and self-reference and also five minor sub-scales of openness to self, openness to others, openness to life, adaptation, and autonomy (see Appendix C for some sample items). The participants answered the items on a multiple-choice format (e.g., A-with great difficulty, B-with difficulty, C-somewhat easily, D-easily, E-very easily). Also, the whole scale showed reliability of 0.62.

L2 Motivation Scale

To measure learner motivation, the foreign language motivation scale developed by Schmidt, Boraie and Kassagby (1996) was adapted for this study. The original version included 100 items investigating learners' motivation, preferences for classroom instructional activities, and also learning strategies on a six-point Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). Owing to the fact that motivation is one of the major concerns of this study, only the first nineteen items were used. The first five

items measured intrinsic motivation and the remaining items dealt with extrinsic motivation and indicated different reasons for learning English (see Appendix D for some sample items). Alpha reliability coefficients of 0.54 and 0.75 were reported for intrinsic and extrinsic motivation, respectively.

Procedure

To collect data, all four scales, namely, LMS, L2 resilience, MAP, and motivation scale were administered to EFL learners in different universities in Mashhad, Iran. It took around 20 minutes for the participants to fill in the scales. The original English versions of the scales were utilised. Given that the study was conducted among university students whose major was English and for whom the medium of instruction and communication in classes was English, they welcomed the scale administration in English. Prior to the administration of the questionnaires, all participants were assured that their responses would remain anonymous and their participation was not mandatory. Also, they could withdraw from the study at any time they intended. It is important to mention that in order to avoid ambiguities in items and to ensure participant understanding of the scales, adequate explanations were given in their first language. Subsequently, the data gathered from the scales were analysed using *Statistical Package for Social Sciences* (SPSS). A Kolmogorov-Smirnov (K-S) test was used to substantiate the normality of data distribution. Finally, to examine structural relations, the proposed model was tested via SEM using the *LISREL 8.50* statistical package.

Results

The Kolmogorov-Smirnov test was used to check whether the distribution deviates from a comparable normal distribution. If the p -value is non-significant ($p > .05$), we can say that the distribution of a sample is not significantly different from a normal distribution, therefore it is normal. If the p -value is significant ($p < .05$) it implies that the distribution is not normal. Table 1 presents the results of the Kolmogorov-Smirnov test, showing that sig values for all variables were higher than .05. Therefore, it can safely be concluded that the data is normally distributed across all the variables.

Table 1: The results of K-S test for mindfulness, self-fulfilment, resilience and motivation

	Kolmogorov-Smirnov (a)		
	Statistic	df	Sig.
Mindfulness	.099	221	.081
Self-fulfilment	.156	221	.200 *
Resilience	.121	221	.091
Motivation	.051	221	.200 *

* Lilliefors significance correction

Table 2 presents descriptive statistics of the mindfulness and its comprising factors.

Table 2: Descriptive statistics of mindfulness and its comprising factors (N=221)

	Minimum	Maximum	Mean	SD
Novelty seeking	13.00	35.00	28.22	4.11
Novelty production	12.00	35.00	23.13	4.23
Engagement	4.00	28.00	12.94	4.57
Mindfulness	37.00	98.00	64.30	8.04

Descriptive statistics of resilience and its five sub-scales are presented in Table 3. Among the subscales, perceived happiness ($M= 27.03$, $SD= 3.61$), received the highest mean followed by persistence ($M= 13.39$, $SD= 1.93$).

Table 3: Descriptive statistics of resilience and its comprising factors (N=221)

	Minimum	Maximum	Mean	SD
Perceived happiness	17.00	39.00	27.03	3.61
Empathy	4.00	28.00	12.94	4.57
Sociability	3.00	15.00	9.17	2.47
Persistence	4.00	20.00	13.39	1.93
Self-regulation	4.00	15.00	10.58	2.10
Resilience	54.00	110.00	74.99	10.89

Table 4 exhibits the descriptive statistics of self-fulfilment and its five factors. Openness to others obtains the highest mean score ($M= 20.91$, $SD= 3.64$) and adaptability receives the lowest mean ($M= 13.44$, $SD= 2.23$).

Table 4: Descriptive statistics of self-fulfilment and its comprising factors (N=221)

	Minimum	Maximum	Mean	SD
Openness to self	9.00	30.00	20.91	3.64
Openness to others	15.00	30.00	22.29	2.70
Openness to life	7.00	25.00	17.89	3.23
Adaptability	8.00	20.00	13.44	2.23
Autonomy	13.00	28.00	19.77	2.52
Self-fulfilment	63.00	127.00	94.46	12.09

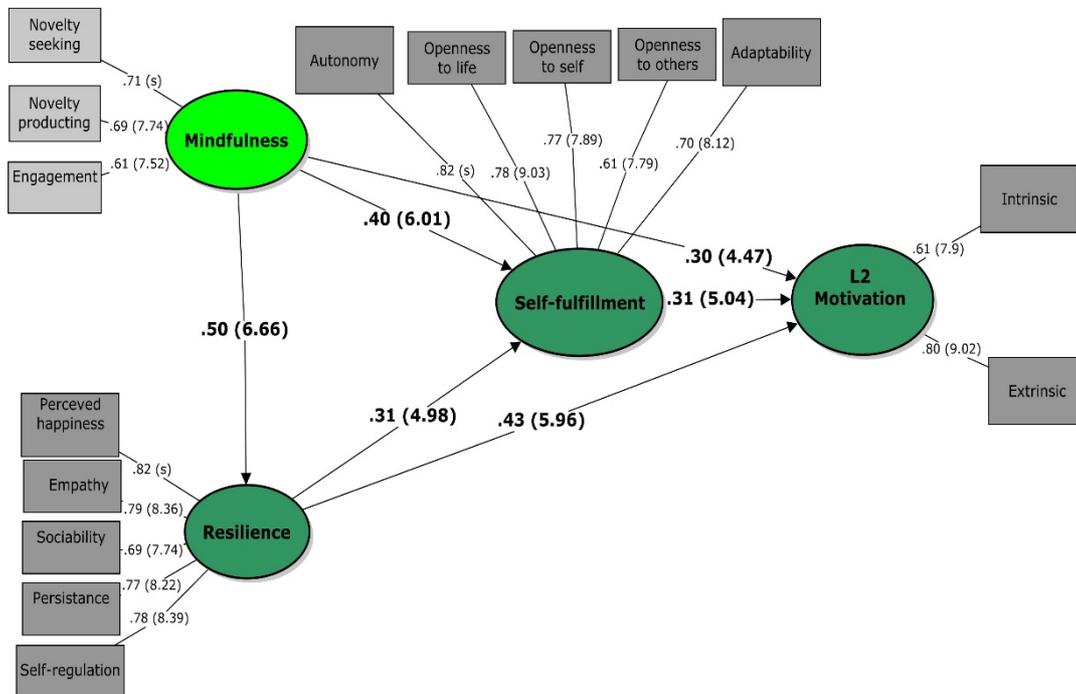
In this study, L2 motivation comprises two sub-scales: intrinsic and extrinsic. The descriptive statistics of these two sub-scales as well as total motivation are shown in Table 5.

Table 5: Descriptive statistics of L2 motivation and its comprising factors (N=221)

	Minimum	Maximum	Mean	SD
Intrinsic	5.00	30.00	21.40	2.95
Extrinsic	36.00	84.00	62.29	8.83
Motivation	50.00	111.00	83.70	10.23

The reliability estimates of each variable computed via Cronbach's alpha are mindfulness .79, resilience .81), self-fulfilment .82, and motivation .77.

To examine the structural relations, the proposed model was tested using the LISREL 8.50 statistical package. A number of fit indices were examined to evaluate the model fit: the chi-square magnitude which shouldn't be significant, chi-square/*df* ratio which should be lower than 2 or 3, the normed fit index (NFI), the good fit index (GFI), and the comparative fit index (CFI) with the cut value greater than .90, and the root mean square error of approximation (RMSEA) of about .06 or .07 (Schreiber, Nora, Stage, Barlow & King, 2006).



$\chi^2 = 113.4; df = 28; RMSEA = .095, GFI = .90$

Figure 1: The schematic representation of the relationships among the variables in questions (Use 'zoom in' function on your PDF reader to resolve numbers and letters)

As demonstrated by Figure 1, the GFI (.90) reached the acceptable fit threshold. The RMSEA (.095) and the chi-square/*df* ratio (4.05), however, were slightly below those thresholds. This implies that the model had a moderate fit with the empirical data.

To reach a better model fit, a post-hoc modification was then conducted. In so doing, a direct path coefficient from mindfulness to L2 motivation and a direct path from resilience to L2 motivation deep and surface learning were inserted in the model. This resulted in an overall fit improvement: chi-square = 54.81; chi-square/*df* ratio = 2.03; RMSEA = .077; GFI = .91; NFI = .90; and CFI = .90. Figure 2 represents the model.

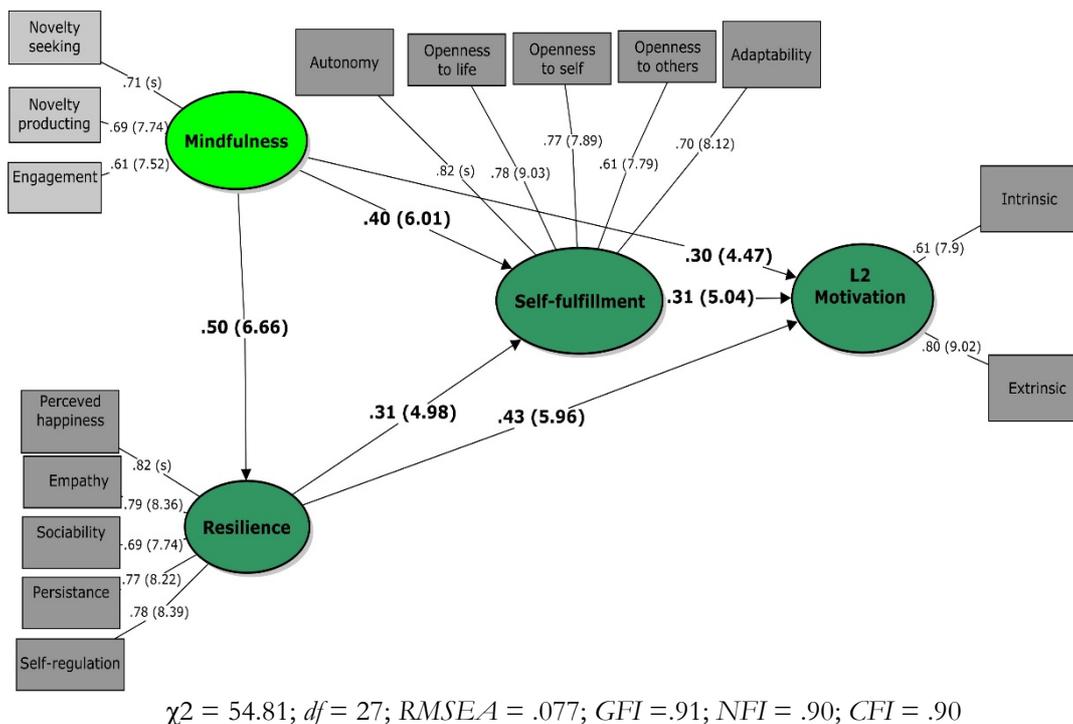


Figure 2: The final model representing the relationships among the variables in questions. (Use 'zoom in' function on your PDF reader to resolve numbers and letters)

To check the strengths of the causal relationships among the variables, the *t*-values and standardised estimates were examined. As indicated in Figure 2, two estimates were displayed on the paths. The first one is the standardised coefficient (β) which explains the predictive power of the independent variable and presents an easily grasped picture of effect size. The closer the magnitude to 1.0, the higher the correlation and the greater is the predictive power of the variable. The second measure is the *t*-value (*t*); if $t > 2$ or $t < -2$, we call the result statistically significant.

The results demonstrated that mindfulness is a positive and significant predictor of both self-fulfillment ($\beta = .40; t = 6.01$) and resilience ($\beta = .50; t = 5.66$). It also positively

influenced L2 motivation both directly ($\beta = .30$; $t = 4.47$) and indirectly via its impact on self-fulfilment. Resilience exerted a positive and significant impact on self-fulfilment ($\beta = .31$; $t = 4.98$). L2 motivation was predicted by resilience both directly ($\beta = .43$; $t = 5.96$) and indirectly via self-fulfilment. Ultimately, self-fulfilment predicted L2 motivation positively and significantly ($\beta = .31$; $t = 5.04$).

Taken together, it appears all designated paths in our hypothesised model demonstrated significant causal relations. To summarise this finding, causal paths are tabulated in Table 6.

Table 6: Casual paths designated in structural model

No.	Path	Direct effect
1	Mindfulness → Self-fulfilment	0.40
2	Mindfulness → Resilience	0.50
3	Mindfulness → L2 Motivation	0.31
4	Resilience → Self-fulfilment	0.31
5	Resilience → L2 Motivation	0.43
6	Self-fulfilment → L2 Motivation	0.31

As can be seen, among the six direct paths, the causal relationship between mindfulness and resilience is the most robust one.

The correlation coefficients among EFL learners' mindfulness, resilience, self-fulfilment, and L2 motivation are presented in Table 7. The highest correlation is observed between mindfulness and resilience ($r = 0.64$, $p < 0.05$). The second higher correlation was found between self-fulfilment and mindfulness ($r = 0.51$, $p < 0.05$).

Table 7: Correlation coefficients among mindfulness, resilience, self-fulfilment, and L2 motivation

	1	2	3	4
1 Mindfulness	1.00			
2 Resilience	.64*	1.00		
3 Self-fulfilment	.51*	.42*	1.00	
4 L2 Motivation	.41*	.43*	.38*	1.00

* Correlation is significant at the level of 0.05

Discussion

The present study has been conducted among 221 EFL learners with the purpose of probing the role of mindfulness and resilience in anticipating self-fulfilment, and L2 motivation. To explore the structural relations, the suggested model was tested via SEM employing *LISREL 8.50*. As the results of this study revealed, mindfulness is a positive and significant predictor of self-fulfilment and resilience. It also positively influenced L2 motivation both directly and indirectly via its impact on self-fulfilment. Resilience exerted a positive and significant impact on self-fulfilment. L2 motivation was predicted by

resilience both directly and indirectly via self-fulfilment. Finally, it was found that self-fulfilment predicted L2 motivation positively and significantly.

The finding that mindfulness positively and significantly predicts both resilience and self-fulfilment is in accord with Meiklejohn et al. (2012), who argued that mindfulness training notably raises the level of resilience. It implies that being mindful necessitates being resilient, and when one is mindful, s/he is open to changes, adaptable to the new conditions, and persistent to pursue the tasks. More recently, Keye and Pidgeon (2013) also indicated that mindfulness can positively enhance university students' resilience.

As to the influence of mindfulness on self-fulfilment, several studies have reported results similar to those from this study (Langer, 2009). They have claimed that mindfulness is a positive predictor of one's overall health, which facilitates gaining self-fulfilment for individuals through their creativity and discovery of their talents. Since mindfulness predicts resilience and being mindful suggests being self-fulfilled, it sounds plausible to regard resilience as a reliable predictor of self-fulfilment. A truly resilient individual is truly self-fulfilled owing to the fact that his/ her self-actualisation does not hinge on outside support or others' acceptance, and is not rattled in the face of newly-emerged, unpromising conditions. One line of justification for this finding could be the findings by Nolan, Taket and Stagnitti (2014), who found that resilience causes talent reorganisation and general enhancement of individuals, leading to an elevated level of self-fulfilment.

Besides, the results displayed that mindfulness and resilience positively influenced motivation both directly and indirectly through exerting some effects on self-fulfilment. That is to say, mindful individuals are confirmedly resilient and motivated in their behaviour, and make efforts to gain self-fulfilment. This finding brings the results of Bishop et al. (2004) and Corcoran et al. (2010) to light. Both of these studies demonstrated the impact of mindfulness on emotions. Although neither of them have drawn further conclusions with regard to motivation, as triggering emotions stimulate motivated behaviour (Pekrun, Goetz, Frenzel, Barchfeld & Perry 2011), the logical interpretation is the indirect influence of mindfulness on motivation. Moreover, previous findings in the field of education correspond to those of this study; for instance, it has been proven that mindfulness training techniques boost overall well-being, motivation, and self-fulfilment in teachers and students (Ludwig & Kabat-Zinn, 2008; Ruff & Mackenzie, 2009). By the same token, Najafzadeh, Ghanizadeh and Jahedizadeh (2018) found that academically resilient learners show motivation in their performance throughout the learning process and set more realistic goals in their academic endeavours. The results of this paper are also in agreement with those of Kim and Kim (2017)'s study, who came to this conclusion that resilient students are more motivated than their non-resilient counterparts.

In essence, the results of the causal associations entail that the dynamic interplay between resilience, mindfulness, and self-fulfilment would stimulate motivation to learn English. This in turn is expected to yield higher language attainment. This finding corroborates Kim and Kim's (2017) demonstration of the facilitative role of resilience in learners' language attainment and success. These results also accord with those of Sheikhzadeh and

Khatami (2017), who found a positive and meaningful relationship between mindfulness and L2 reading comprehension and then with academic achievement. Likewise, Baygi, Ghonsooly and Ghanizadeh (2017) demonstrated a significant relationship between self-fulfilment and intrinsic motivation. Shutenko (2015) also contended that a meaningful relationship exists between university students' self-fulfilment and their motivation to learn and achieve their goals. Thus, it can be concluded that mindfulness fosters resilience, which encourages motivation in different tasks such as L2 learning, and develops self-actualisation of personal talents.

Conclusions and pedagogical implications

Taken together, the findings of the present study highlight the significance of cultivating mindfulness in learning and teaching processes. Since an effective educational system is supposed to guarantee the development of learners' self-fulfilment during learning and provide students with more accomplishments, mindfulness should be practised in educational contexts. Undeniably, the lack of mindfulness and mindful professionals and learners is felt in the educational systems. The implications of the current paper might be considered twofold. First of all, EFL curriculum developers are highly recommended to incorporate content materials which motivate mindfulness and resilience followed by self-fulfilment and motivation. Furthermore, ELT instructors can apply the results of mindfulness-related studies in their classrooms and train mindful students. Second, the outcomes might be of great benefit to EFL learners since being mindful and resilient motivates and enables them to be more goal-oriented and successful in learning and/or acquiring an L2. These findings in turn necessitate utilising mindfulness-enhancing techniques such as CARE to boost teachers' and learners' physical and mental health, self-efficacy, motivation, and self-actualization (Ludwig & Kabat-Zinn, 2008). These techniques encompass direct skills instruction, opportunities to practise skills, individual reflective writing activities, large and small group discussions, and additional activities to be completed at work or home (Ludwig & Kabat-Zinn, 2008).

Suggestions for further research

The present paper targeted only English language university students. Notwithstanding the scarcity of research in other domains, further research in education is needed to be investigate the nexus among a number of factors conducive to learning at different levels of EFL learning, and at private institutes and even among English school teachers. Future study is recommended to explore the concordance among the variables studied in this paper in accounting for language achievement both directly and indirectly. In addition, in this study, the researchers scrutinised the association among the variables quantitatively. To conduct more precise research, both qualitative and quantitative methods could be applied. As the participants of the present study numbered 221 English language students, future research could involve larger and more diverse samples in order to gain more widely generalisable results.

References

- Agawa, T. & Takeuchi, O. (2016). A new questionnaire to assess Japanese EFL learners' motivation: Development and validation. *ARELE: Annual Review of English Language Education in Japan*, 27, 1-16. https://doi.org/10.20581/arele.27.0_1
- Baygi, A. H., Ghonsooly, B. & Ghanizadeh, A. (2017). Self-fulfillment in higher education: Contributions from mastery goal, intrinsic motivation, and assertions. *The Asia-Pacific Education Researcher*, 26(3-4), 171-182. <https://doi.org/10.1007/s40299-017-0338-1>
- Beer, M. (2009). *High commitment, high performance: How to build a resilient organization for sustained advantage*. San Francisco, CA: Jossey-Bass.
- Bishop, S. R., Lau, M., Shapiro, S., Carlson, L., Anderson, N. D., Carmody, J., Segal, Z. V., Abbey, S., Speca, M., Velting, D. & Devins, G. (2004). Mindfulness: A proposed operational definition. *Clinical Psychology: Science and Practice*, 11(3), 230-241. <https://doi.org/10.1093/clipsy.bph077>
- Bodhi, B. (2000). *A comprehensive manual of Adbidhamma*. Seattle: BPS Pariyatti.
- Bodner, T. & Langer, E. (2001). Individual differences in mindfulness: The mindfulness/mindlessness scale. Paper presented at the 13th APA Annual Meeting, Toronto.
- Corcoran, K. M., Farb, N., Anderson, A. & Segal, Z. V. (2010). Mindfulness and emotion regulation: Outcomes and possible mediating mechanisms. In A. M. Kring & D. M. Sloan (Eds.), *Emotion regulation and psychopathology: A transdiagnostic approach to etiology and treatment* (pp. 339–355). New York: Guilford Press.
- David, D. S. & Sheth, S. (2009). *Mindful teaching and teaching mindfulness: A guide for anyone who teaches anything*. Simon and Schuster.
- Deci, L. & Ryan, M. (1985). *Intrinsic motivation and self-determination in human behavior*. Plenum, New York.
- Dörnyei, Z. & Otto, I. (1998). Motivation in action: A process model of L2 motivation. *Working Papers in Applied Linguistics*, 4, 43-69. <http://eprints.nottingham.ac.uk/39/>
- Ebersöhn, L. (2014). Teacher resilience: Theorizing resilience and poverty. *Teachers and Teaching*, 20(5), 568-594. <https://doi.org/10.1080/13540602.2014.937960>
- Galante, J., Dufour, G., Vainre, M., Wagner, A. P., Stochl, J., Benton, A., Lathia, N., Howarth, E. & Jones, P. B. (2017). A mindfulness-based intervention to increase resilience to stress in university students (the Mindful Student Study): A pragmatic randomised controlled trial. *The Lancet Public Health*, 3(3), PE72-E81. [https://doi.org/10.1016/S2468-2667\(17\)30231-1](https://doi.org/10.1016/S2468-2667(17)30231-1)
- Gardner, R. C. & Lambert, W. E. (1972). *Attitudes and motivation in second language learning*. Rowley, MA: Newbury House.
- Germer, C. K., Siegel, R. D. & Fulton, P. R. (2005). *Mindfulness and psychotherapy*. New York: Guilford Press.
- Gewirth, A. (1998). *Self-fulfillment*. New Jersey: Princeton University Press. <https://press.princeton.edu/titles/6413.html>
- Ghanizadeh, A. & Rostami, S. (2015). A Dörnyei-inspired study on second language motivation: A cross-comparison analysis in public and private contexts. *Psychological Studies*, 60(3), 292-301, <https://doi.org/10.1007/s12646-015-0328-4>

- Gibbs, S. & Miller, A. (2014). Teachers' resilience and well-being: A role for educational psychology. *Teachers and Teaching*, 20(5), 609-621.
<https://doi.org/10.1080/13540602.2013.844408>
- Goldstein, S. & Brooks, R. (2006). Why study resilience? In S. Goldstein & R. Brooks (Eds.), *The handbook of resilience in children* (pp. 3-15). New York, NY: Kluwer.
- Grossman, P., Niemann, L., Schmidt, S. & Walach, H. (2004). Mindfulness-based stress reduction and health benefits: A meta-analysis. *Journal of Psychosomatic Research*, 57(1), 35-43.
- Gunaratana, H. (2002). *Mindfulness in plain English*. Somerville, MA: Wisdom Publications.
http://misc.equanimity.info/downloads/mindfulness_in_plain_english.pdf
- Hayes, S. C., Follette, V. M. & Linehan, M. (Eds.) (2004). *Mindfulness and acceptance: Expanding the cognitive-behavioral tradition*. Guilford Press.
- Hill, C. L. M. & Updegraff, J. A. (2012). Mindfulness and its relationship to emotional regulation. *Emotion*, 12(1), 81-90. <https://psycnet.apa.org/doi/10.1037/a0026355>
- Hoffman, S. G., Sawyer, A. T., Witt, A. A. & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 78(2), 169-183. <https://psycnet.apa.org/doi/10.1037/a0018555>
- Hollnagel, E. (2011). *Resilience engineering in practice: A guidebook*. Farnham: Ashgate Studies in Resilience Engineering.
- Hölzel, B. K., Lazar, S. W., Gard, T., Schuman-Olivier, Z., Vago, D. R. & Ott, U. (2011). How does mindfulness meditation work? Proposing mechanisms of action from a conceptual and neural perspective. *Perspectives on Psychological Science*, 6(6), 537-559.
<https://doi.org/10.1177%2F1745691611419671>
- Howard, S. & Johnson, B. (2000). What makes the difference? Children and teachers talk about resilient outcomes for children 'at risk'. *Educational Studies*, 26(3), 321-337.
<https://doi.org/10.1080/03055690050137132>
- Johnson, B., Down, B., Le Cornu, R., Peters, J., Sullivan, A., Pearce, J. & Hunter, J. (2014). Promoting early career teacher resilience: A framework for understanding and acting. *Teachers and Teaching*, 20(5), 530-546.
<https://doi.org/10.1080/13540602.2014.937957>
- Kabat-Zinn, J. (2003). Mindfulness-based interventions in context: Past, present, and future. *Clinical Psychology: Science and Practice*, 10(2), 144-156.
<https://doi.org/10.1093/clipsy/bpg016>
- Kamali, Z. & Fahim, M. (2011). The relationship between critical thinking ability of Iranian EFL learners and their resilience level facing unfamiliar vocabulary items in reading. *Journal of Language Teaching and Research* 2(1), 104-111.
<https://doi.org/10.4304/jltr.2.1.104-111>
- Keye, D. M. & Pidgeon, A. M. (2013). Investigation of the relationship between resilience, mindfulness, and academic self-efficacy. *Open Journal of Social Sciences*, 1(6), 1-4.
<https://doi.org/10.4236/jss.2013.16001>
- Kim, T. Y. & Kim, Y. K. (2017). The impact of resilience on L2 learners' motivated behaviour and proficiency in L2 learning. *Educational Studies*, 43(1), 1-15.
<https://doi.org/10.1080/03055698.2016.1237866>
- Kornfeld, J. (2009). *The wise heart: A guide to the universal teachings of Buddhist psychology*. New York: Bantam Books.

- Langer, E. J. (2005). *On becoming an artist: Reinventing yourself through mindful creativity*. Ballantine Books.
- Langer, E. J. (2009). *Counter clockwise: Mindful health and the power of possibility*. New York: Ballantine Books.
- Langer, E. J. (2000). Mindful learning. *Current Directions in Psychological Science*, 9(6), 220-223. <https://doi.org/10.1111/1467-8721.00099>
- Leclerc, G., Lefrançois, R., Dubé, M., Hébert, R. & Gaulin, P. (1999). Criterion validity of a new measure of self-actualization. *Psychological Reports*, 85(3), 1167-1176. <https://doi.org/10.2466%2Fpr0.1999.85.3f.1167>
- Ludwig, D. S. & Kabat-Zinn, J. (2008). Mindfulness in medicine. *Journal of the American Medical Association*, 300(11), 1350-1352. <https://doi.org/10.1001/jama.300.11.1350>
- Martin, J. R. (1997). Mindfulness: A proposed common factor. *Journal of Psychotherapy Integration*, 7(4), 291-312. <https://doi.org/10.1023/B:JOPI.0000010885.18025.bc>
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper and Row.
- Maxwell, L. & Duff, E. (2016). Mindfulness: An effective prescription for depression and anxiety. *The Journal for Nurse Practitioners*, 12(6), 403-409. <https://doi.org/10.1016/j.nurpra.2016.02.009>
- Meiklejohn, J., Phillips, C., Freedman, M. L., Griffin, M. L., Biegel, G., Roach, A., Frank, J., Burke, C., Pinger, L., Soloway, G., Isberg, R., Sibinga, E., Grossman, L. & Saltzman, A. (2012). Integrating mindfulness training into K-12 education: Fostering the resilience of teachers and students. *Mindfulness*, 3(4), 291-307. <https://psycnet.apa.org/doi/10.1007/s12671-012-0094-5>
- Najafzadeh, M., Ghanizadeh, A. & Jahedizadeh, S. (2018). A dynamic model of EFL learners' personal best goals, resilience, and language achievement. *International and Multidisciplinary Journal of Social Sciences*, 7(3), 267-296. <https://doi.org/10.17583/rimcis.2018.3011>
- Nguyen, K., Stanley, N., Stanley, L. & Wang, Y. (2015). Resilience in language learners and the relationship to storytelling. *Cogent Education* 2(1), 1-16. <https://doi.org/10.1080/2331186X.2014.991160>
- Noels, K. A., Pelletier, L. G., Clement, R. & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*, 50(1), 57-85. <https://doi.org/10.1111/0023-8333.00111>
- Nolan, A., Taket, A. & Stagnitti, K. (2014). Supporting resilience in early years classrooms: The role of the teacher. *Teachers and Teaching*, 20(5), 595-608. <https://doi.org/10.1080/13540602.2014.937955>
- Oraif, I. M. K. (2018). *An investigation into the impact of the flipped classroom on intrinsic motivation (IM) and learning outcomes on an EFL writing course at a university in Saudi Arabia Based on self-determination theory (SDT)*. Doctoral dissertation, School of Education, University of Leicester, UK. <http://hdl.handle.net/2381/42165>
- Pekrun, R., Goetz, T., Frenzel, A. C., Barchfeld, P. & Perry, R. P. (2011). Measuring emotions in students' learning and performance: The achievement emotions questionnaire (AEQ). *Contemporary Educational Psychology*, 36(1), 36-48. <https://doi.org/10.1016/j.cedpsych.2010.10.002>

- Pirson, M., Langer, E. J., Bodner, T. & Zilcha-Mano, S. (2012). *The development and validation of the Langer mindfulness scale - enabling a socio-cognitive perspective of mindfulness in organizational contexts*. Fordham University Schools of Business Research Paper. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2158921
- Reich, J. W., Zautra, A. J. & Hall, J. S. (Eds.) (2010). *Handbook of adult resilience*. New York, NY: Guilford Press.
- Rogers, C. (1961). *On becoming a person*. Cambridge: Cambridge University Press.
- Rostami, S., Ghanizadeh, A. & Ghonsooly, B. (2015). External factors affecting second language motivation: The role of teacher burnout and family influence. *Iranian Journal of Applied Linguistics*, 18(2), 165-187. <https://profdoc.um.ac.ir/paper-abstract-1057186.html>
- Ruff, K. M. & Mackenzie, E. R. (2009). The role of mindfulness in healthcare reform: A policy paper. *Explore*, 5(6), 313-323. <https://doi.org/10.1016/j.explore.2009.10.002>
- Schelvis, R. M., Zwetsloot, G. I., Bos, E. H. & Wiezer, N. M. (2014). Exploring teacher and school resilience as a new perspective to solve persistent problems in the educational sector. *Teachers and Teaching*, 20(5), 622-637. <https://doi.org/10.1080/13540602.2014.937962>
- Schmidt, R., Boraie, D. & Kassabgy, O. (1996). Foreign language motivation: Internal structure and external connections. In R. L. Oxford (Ed.), *Language learning motivation: Pathways to the new century* (pp. 14-87). Honolulu, HI: The University of Honolulu Press. <https://nflrc.hawaii.edu/publications/view/TR11/>
- Shapiro, S. L., Schwartz, G. E. & Bonner, G. (1998). Effects of mindfulness-based stress reduction on medical and premedical students. *Journal of Behavioral Medicine*, 21(6), 581-599. <https://doi.org/10.1023/A:1018700829825>
- Sheikhzadeh, E. & Khatami, M. (2017). Critical thinking, mindfulness and academic achievement among Iranian EFL learners. *Modern Journal of Language Teaching Methods*, 7(3), 281. <https://doi.org/10.26655/mjltm.2017.3.1>
- Shin, W. Y., Kim, M. G. & Kim, J. H. (2009). Developing measures of resilience for Korean adolescents and testing cross, convergent, and discriminant validity. *Studies on Korean Youth*, 20(4), 105-131.
- Shutenko, E. (2015). Motivational and conceptual aspects of students' self-fulfillment in university education. *Procedia - Social and Behavioral Sciences*, 214, 325-331. <https://doi.org/10.1016/j.sbspro.2015.11.652>
- Sternberg, R. J. (2000). Images of mindfulness. *Journal of Social Issues*, 56(1), 11-26. <https://doi.org/10.1111/0022-4537.00149>
- Toneatto, T. (2013). Mindfulness. In P. M. Miller (Ed.), *Interventions for addiction: Comprehensive addictive behaviors and disorders*, volume 3, 219-226.
- Tran, U. S., Cebolla, A., Glück, T. M., Soler, J., Garcia-Campayo, J. & von Moy, T. (2014). The serenity of the meditating mind: A cross-cultural psychometric study on a two-factor higher order structure of mindfulness, its effects, and mechanisms related to mental health among experienced meditators. *PloS One*, 9(10), e110192. <https://doi.org/10.1371/journal.pone.0110192>
- Van Breda, A. (2011). Resilient workplaces: An initial conceptualization. *Families in Society: The Journal of Contemporary Social Services*, 92(1), 33-40. <https://doi.org/10.1606/2F1044-3894.4059>

- Van Gordon, W. & Shonin, E. (2017). Mindfulness: The art of being human. *Mindfulness*, 9:664. <https://doi.org/10.1007/s12671-017-0819-6>
- Van Vreeswijk, M., Broersen, J. & Schurink, G. (2014). *Mindfulness and schema therapy: A practical guide*, 6-13. <https://www.wiley.com/en-au/Mindfulness+and+Schema+Therapy%3A+A+Practical+Guide-p-9781118753170>
- Vansteenkiste, M., Lens, W. & Deci, E. L. (2006). Intrinsic versus extrinsic goal contents in self-determination theory: Another look at the quality of academic motivation. *Educational Psychologist*, 41(1), 19-31. https://doi.org/10.1207/s15326985ep4101_4
- Weick, K. E. & Sutcliffe, K. M. (2007). *Managing the unexpected: Resilient performance in an age of uncertainty* (2nd ed.). San Francisco, CA: Wiley.
- Williams, J. M. G. (2010). Mindfulness and psychological process. *Emotion*, 10, 1-7. <https://doi.org/10.1037/a0018360>
- Wolin, S. J. & Wolin, S. (1993). *The resilient self: How survivors of troubled families arise above adversity*. New York: Villard.
- Wright, M. O. & Masten, A. (2006). Resilience process in development. In S. Goldstein & R. Brooks (Eds.), *The handbook of resilience in children* (pp. 17-37). New York, NY: Kluwer.

Appendix A: Sample items, Langer Mindfulness Scale (LMS)

1. I like to investigate things.
7. I make many novel contributions.
10. I like to be challenged intellectually.
11. I find it easy to create new and effective ideas.
14. I am rarely alert to new developments. (-)

Appendix B: Sample items, L2 Resilience Scale

1. I am satisfied with my life.
9. I have few things to feel grateful for.
14. When I have a problem, I try to solve it after reflecting on the cause of the problem.
24. I believe that I am able to control my emotions when having difficulties.
25. I can lead conversations well in accordance with a specific atmosphere or interlocutor.

Appendix C: Sample items, Measurement of Actualization of Potential (MAP) Scale

1. I am a person who values him/herself.
11. I am inclined to follow other people's example.
18. When thinking about my past life, I suddenly understand why certain things happened.
23. I am inclined to get involved in important causes.
27. I can be interested in other people's problems without thinking about my own.

Appendix D: Sample items, L2 Motivation Scale

1. I enjoy learning English.
8. I want to do well in this class because it is important to show my ability to my family/ friends/ teachers/ others.
19. If I can speak English, I will have a marvellous life.

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