

Testing a Burnout Model Based on Affective-motivational Factors among EFL Teachers

Gholam Hassan Khajavy, Behzad Ghonsooly & Azar Hosseini Fatemi

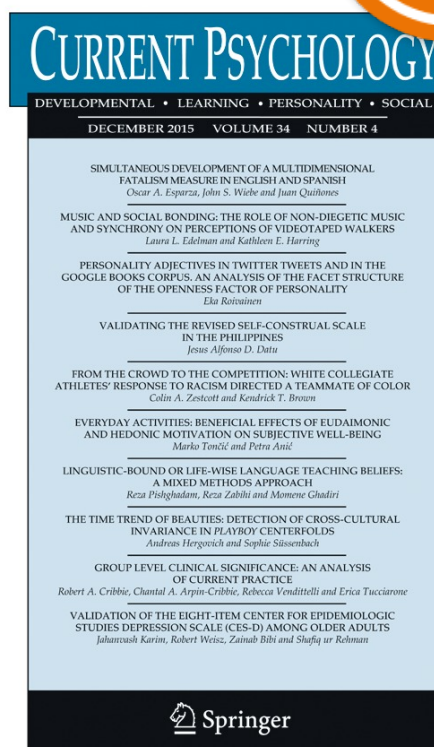
Current Psychology

A Journal for Diverse Perspectives on Diverse Psychological Issues

ISSN 1046-1310

Curr Psychol

DOI 10.1007/s12144-016-9423-5



Your article is protected by copyright and all rights are held exclusively by Springer Science +Business Media New York. This e-offprint is for personal use only and shall not be self-archived in electronic repositories. If you wish to self-archive your article, please use the accepted manuscript version for posting on your own website. You may further deposit the accepted manuscript version in any repository, provided it is only made publicly available 12 months after official publication or later and provided acknowledgement is given to the original source of publication and a link is inserted to the published article on Springer's website. The link must be accompanied by the following text: "The final publication is available at link.springer.com".

Testing a Burnout Model Based on Affective-motivational Factors among EFL Teachers

Gholam Hassan Khajavy¹ · Behzad Ghonsooly¹ · Azar Hosseini Fatemi¹

© Springer Science+Business Media New York 2016

Abstract The purpose of the present study was to explore English as a Foreign Language (EFL) teacher's motivations for teaching and testing a model of burnout based on motivations and emotions using structural equation modeling (SEM). For this purpose, a total number of 326 Iranian EFL teachers in different language institutes completed the related scales. Results of the study showed that altruistic and intrinsic factors are the main motivations of EFL teachers. Results of SEM indicated that both motivations and emotions predicted different dimensions of burnout. However, emotions had a stronger effect on burnout dimensions than motivational factors. Finally, the pedagogical implications were discussed based on the results of the study.

Keywords Motivation · Emotion · Burnout · Teacher education

Burnout is a psychological syndrome which results from chronic stressors on the workplace (Maslach et al. 2001). Burnout is a universal phenomenon (Aloe et al. 2014) and many studies have found that teachers have the highest levels of burnout among human service workers (Maslach et al. 1996; Pietarinen et al. 2013; Schaufeli & Enzmann 1998).

A line of research has been done to find the different causes of teacher burnout. The main causes of teacher burnout have been identified as work overload and student disruptive behavior (see Chang 2009; Fernet et al. 2004; Fernet et al. 2012). However, less is known about the affective-motivational factors underlying burnout (Chang 2009; Fernet et al. 2012; Frenzel 2014). Previous research has called for further research to understand emotional experiences and also motivational mechanisms of burnout (Chang 2009; Fernet et al. 2012). Some studies have found an inverse relationship between positive emotions and burnout and a direct relationship between negative emotions and burnout (Carson 2006; 2007; Keller, Chang, Becker, Goetz, and Frenzel, 2014a). Other studies have revealed a negative relationship between autonomous motivation and burnout (Fernet et al. 2012, 2008). Therefore, the single role of emotions and motivations has been examined previously. However, to the best of our knowledge, no study has examined the simultaneous role of emotions and motivations in teacher burnout. In the present study, an affective-motivational model of burnout is proposed and tested using Structural Equation Modeling (SEM).

Literature Review

Teacher Burnout

Burnout is defined as “an erosion of engagement that what started out as important, meaningful, and challenging work becomes unpleasant, unfulfilling, and meaningless” (Maslach et al. 2001, p. 416). Burnout occurs in professions that deal with human services, and teaching has been considered as a profession that high levels of burnout have been reported (Maslach et al. 1996; Richardson and Watt 2006). There are three main dimensions in burnout, emotional

✉ Gholam Hassan Khajavy
hkhajavy@gmail.com

Behzad Ghonsooly
ghonsooly@um.ac.ir

Azar Hosseini Fatemi
hfatemi@um.ac.ir

¹ Ferdowsi University of Mashhad, Mashhad, Iran

exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion refers to feelings of being emotionally overextended (Maslach et al. 2001). Depersonalization refers to a negative and indifferent attitude towards work and people one works with. Finally, reduced personal accomplishment refers to one's feelings of lack of satisfaction from their performance and having low levels of competence to successfully do an action (Schaufeli et al. 1993). Based on these dimensions, emotional exhaustion results from excessive job demands and subsequently, individuals will begin to feel cynical and will develop a cold, distant, depersonalized attitude towards their profession, and eventually these feelings of ineffectiveness are accompanied by a growing sense of inadequacy (Friedman 2000).

Chang (2009) categorized the sources of burnout into three main factors, individual, organizational, and transactional. Individual factors are related to demographical data such as age, gender, and teaching experience. Organizational factors are related to characteristics of the job and workplace such as inadequate salary, class size, and socioeconomic status of the institution. Finally, transactional factors refer to interaction of individual and organizational factors such as teacher's judgment of student misbehavior and norms of student-teacher interaction (see Chang 2009). Previous empirical studies demonstrated that individual factors do not have a large explanatory power in burnout (Maslach et al. 2001) and there has been a shift from examining only individual and organizational factors to transactional factors (Chang 2009, 2013). Although student misbehavior in the classroom has been considered the main source of burnout (Chang 2009), examining teachers' emotional experiences and motivations in the classroom may help to have a deeper understanding of the concept of burnout.

Teaching Motivation

Teacher motivation has a considerable role in students' motivation and achievement (De Jesus and Lens 2005). Moreover, the type of motivation teachers have may affect their satisfaction and achievement in their profession. Motivation has been defined as a driving force to start an action (Dornyei 2005). There are many studies devoted to learner motivation and different theories have also been suggested (e.g. Deci and Ryan 1985; Weiner 1985). However, one cannot deny the influential role of teachers as sources of motivation in the classroom. The reasons teachers choose to enter the profession are different. A large body of research has been done to explore the factors for teaching motivations (Wong et al. 2014; Watt et al. 2012). Grounded in Self-determination theory (SDT, Deci and Ryan 1985), three main reasons have been identified that teachers choose to teach. These reasons are altruistic, intrinsic, and extrinsic factors.

Altruistic motivation or social utility value refers to the kind of motivation that teachers want to make a social contribution, for example by willingness to help children and adolescents to succeed, and enhancing social equity (Watt et al. 2012). Intrinsic motivation is related to teachers who enjoy the teaching itself and the challenging and creative nature of teaching motivates them to teach (Wong et al. 2014). Extrinsic factors refer to outcomes which are separate from teaching activity such as salary, social status, and prestige (Williams and Forgasz 2009). Previous studies found that the main reasons for choosing teaching as a career are altruistic and intrinsic motivations (Watt et al. 2012, 2014; Thomson et al. 2012).

The reasons teachers choose to teach can bring about different outcomes such as experiencing different emotions and burnout (Wong et al. 2014). One of the main findings is that intrinsic and altruistic motivations generally produce more positive outcomes than extrinsic motivation (Wong et al. 2014). Studies consistently showed that motivation hinders burnout and amotivation leads to burnout (Fernet et al. 2008, 2012). Moreover, the extent which intrinsic and altruistic factors reduce burnout is higher than extrinsic factors. However, most of these studies were done in the field of physical education or management (e.g. Cresswell and Eklund 2005).

Teacher Emotions

Like motivation, research in the field of emotion has mostly focused on student emotions. However, a growing body of research recently has examined teacher emotions (Keller et al. 2014a; Taxer and Frenzel 2015). Emotions are considered to be the heart of teaching (Hargreaves 1998). Emotions that teachers experience are not only important for their performance and satisfaction in the classroom, but they also affect their interaction with students and students' achievement (Keller, Frenzel, Goetz, Pekrun, and Hensley 2014b).

While teaching, teachers may experience a range of different emotions. These emotions can be positive or negative. There are different negative emotions such as anxiety, anger, and boredom. Positive emotions also include feelings such as enjoyment and pride (Frenzel 2014). Enjoyment is considered as the most dominant positive emotion teachers experience in the classroom (Keller et al. 2014a). Among the negative emotions, anger has been reported as the main negative feeling (Sutton and Wheatley 2003). Moreover, previous studies showed that positive emotions are more dominant than negative ones (see Chang 2009; Keller et al. 2014b). Emotions teachers feel in the classroom also influence other affective variables. Keller et al. (2014a) found that positive emotions are inversely related to burnout and negative emotions are directly related to burnout. The same results were reported in Carson study (Carson 2006). According to Frenzel's (2014) reciprocal model of cause and effects of emotions, motivations

and emotions affect one another. Therefore, it can be inferred that teachers who are motivated with different reasons may feel different emotions in the classrooms. However, these relations are not clear and previous studies have not examined it before. A deeper understanding of the possible relations can shed more light on the nature of this relation.

Present Study

We aimed to examine the role of teachers' emotions and motivations as predictors of teachers' burnout. The proposed model can be seen in Fig. 1. Previous studies found that emotions predicted burnout (e.g. Chang 2013; Keller et al. 2014a). Therefore, a path from emotions to burnout was drawn. Moreover, past research found that motivations were related to emotions (Vandercammen et al. 2014) and burnout (Fernet et al. 2012). Following this, paths from motivations to emotions and burnout were hypothesized. It is hypothesized that all three types of motivation are direct predictors of positive emotions, and inverse predictors of emotions. Moreover, it is expected that all three types of motivation are negative predictors of burnout dimensions. Finally, it is posited that positive emotions are inverse predictors of burnout dimensions, while negative emotions are direct predictors of burnout dimensions.

Method

Participants

A total number of 326 English language teachers (227 females, 95 males, and 5 unidentified gender) who were teaching at private language institutes from different cities of Iran took part in the study. The age range of the teachers was between 20 and 40 ($M = 27.88$, $SD = 4.20$). Among the participants, 27.6 % had a bachelor degree, 60.4 % had a master's, 11 % had a PhD, and 9 % did not identify their degree. They had a teaching experience between 1 and 21 years ($M = 5.93$, $SD = 3.92$). They all taught English to children between the age range of 10 and 14. Each class included 4 to 8 students. Children took up the English classes at private language institutes voluntarily. Each class took 90 min.

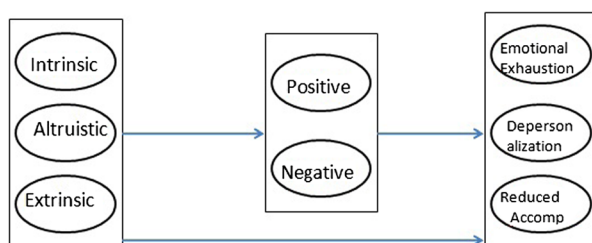


Fig. 1 Proposed affective-motivational model of burnout

Measures

The original questionnaires were in English, but for this study the Persian questionnaire was used in order to increase the return rate (Khajavy et al. 2016). Except for the burnout scale which was already translated to Persian, the other two scales were translated by the first researcher into Persian and then it was back-translated into English by an expert in translation. Back-translation was used to assure the accurate translation of the scales.

Teacher Emotions The Emotions Questionnaire for Teachers (EQT) designed and validated by Frenzel, Pekrun, and Goetz (2013) was used to assess enjoyment (e.g. I generally enjoy teaching), anxiety (e.g. I generally feel tense and nervous while teaching), and anger (e.g. I often feel annoyed while teaching). Moreover, the researchers developed items for pride (e.g. I am proud of my teaching), shame (e.g. I am generally ashamed of my teaching), and boredom (e.g. teaching sounds boring to me). Each emotion was measured by four items on a six-point Likert type scale ranging from 1 (strongly disagree) to 6 (strongly agree).

Teaching Motivations Teaching motivations were assessed using 15 items from Wong et al. (2014). Five items were used to measure altruistic motivation (e.g. teaching allows me to influence the next generations), six items were used to measure intrinsic motivation (e.g. I like teaching), and four items were used to measure extrinsic motivation (e.g. the salary is relatively high). Participants completed the scale on a six-point Likert type scale ranging from 1 (strongly disagree) to 6 (strongly agree).

Teacher Burnout The Persian adaptation of Maslach Burnout Inventory (MBI, Maslach and Jackson 1981) translated and developed by Azizi et al. (2008) was used to measure the three subscales of teacher burnout: emotional exhaustion (9 items, e.g. I feel used up at the end of the workday), depersonalization (5 items, e.g. I feel I treat some students if they were impersonal objects), and reduced personal accomplishment (8 items, e.g. I do not feel very energetic). Participants completed the scale on a six-point Likert type scale ranging from 1 (strongly disagree) to 6 (strongly agree).

Procedure

An online questionnaire was provided and sent to the participants. EFL teachers were identified through the personal contacts researchers had with them or through LinkedIn website. A list of 934 EFL teachers and their emails was provided. The online scale was sent to them by email. Of the 934 teachers who received the email, 326 teachers (response rate = 34.9 %)

responded to the scale. The low response rate is due to the fact that teachers' participation was voluntary.

Results

Preliminary Analyses

Before examining the measurement models and SEM, missing values, normality, and outliers were examined (Tabachnick and Fidell 2007). For missing values, Expectation-Maximization algorithm was used to impute the data. To identify univariate outliers, all the scores for a variable were converted to standard scores. A case is an outlier if its standard score is ± 3.0 or beyond. To find multivariate outliers, Mahalanobis D^2 was used. If the probability associated with its D^2 equals 0.001 or less, it is identified as multivariate outlier. D^2 follows a chi-square distribution with degrees of freedom equal to the number of variables included in the calculation. Following this, all the outliers were identified and deleted. Finally, normality was checked with skewness and kurtosis values. Values of kurtosis and skewness exceeding ± 2.0 indicate non-normal distribution. As Table 1 indicates, all variables had skewness and kurtosis values within the acceptable range of normality.

Construct Validity and Reliability of the Scales

In order to validate the scales used in this study, Confirmatory Factor Analysis (CFA) was conducted using Mplus 6.0. Maximum Likelihood (ML) estimator was used in this study.

Table 1 Descriptive statistics for all variables

	N of items	M	SD	α	skewness	kurtosis
1. Altruistic Mot	5	5.40	.64	.83	-.72	-.14
2. Intrinsic Mot	6	5.06	.53	.69	-.51	-.12
3. Extrinsic Mot	4	3.22	.90	.71	-.03	-.10
4. Enjoyment	4	5.15	.76	.88	-1.10	1.83
5. Anxiety	4	2.41	.84	.78	.98	1.04
6. Anger	3	1.74	.78	.68	1.26	1.51
7. Pride	3	4.98	.60	.64	-.84	1.46
8. Shame	3	2.51	1.14	.83	.93	.43
9. Boredom	4	1.86	.79	.79	.89	.18
10. Emotional Exhaustion	9	2.16	.85	.89	.92	.98
11. Depersonalization	5	1.81	.64	.66	.89	.52
12. Reduced accomplishment	8	2.22	.59	.77	.54	.56

First, construct validity of the teaching motivations was examined. The three-factor model showed good fit to the data ($\chi^2 = 193.36$, $df = 87$, $\chi^2/df = 2.22$, CFI = .94, TLI = .92, RMSEA = .05, SRMR = .04). The final model can be seen in Fig. 2.

Then, six-factor model of teacher emotions was examined. One item from shame, pride, and anger was removed due to very low factor loadings (less than the recommended value of .40, Kline 2011). The final model showed good fit to the data ($\chi^2 = 355.16$, $df = 172$, $\chi^2/df = 2.06$, CFI = .94, TLI = .93, RMSEA = .05, SRMR = .05). The model can be seen in Fig. 3.

Previous research by Maslach and Jackson (1981) produced a three-factor model of teacher burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment. Emotional exhaustion included 9 items, depersonalization included 5 items, and reduced personal accomplishment included 8 items.

The initial model showed good fit to the data ($\chi^2 = 348.14$, $df = 118$, $\chi^2/df = 2.95$, CFI = .93, TLI = .92, RMSEA = .06, SRMR = .05). The model can be seen in Fig. 4.

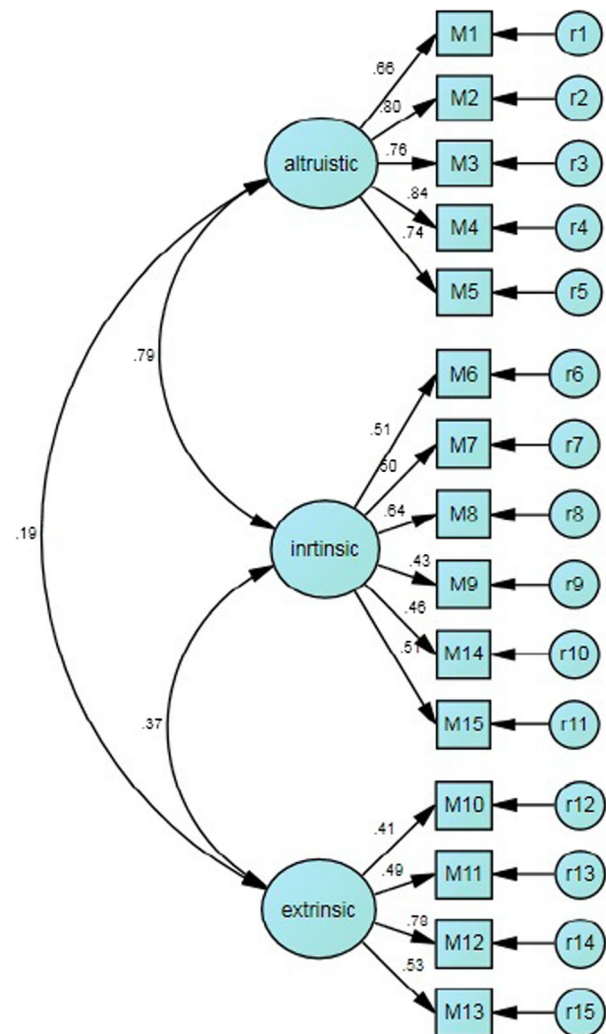


Fig. 2 Measurement model of teaching motivations

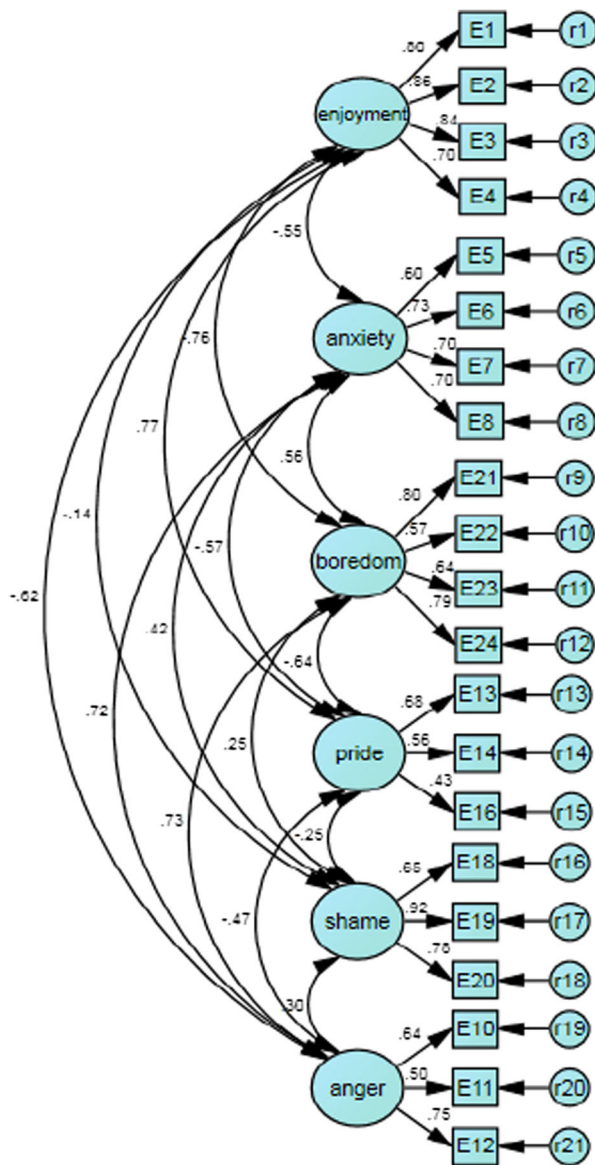


Fig. 3 Measurement model of emotions

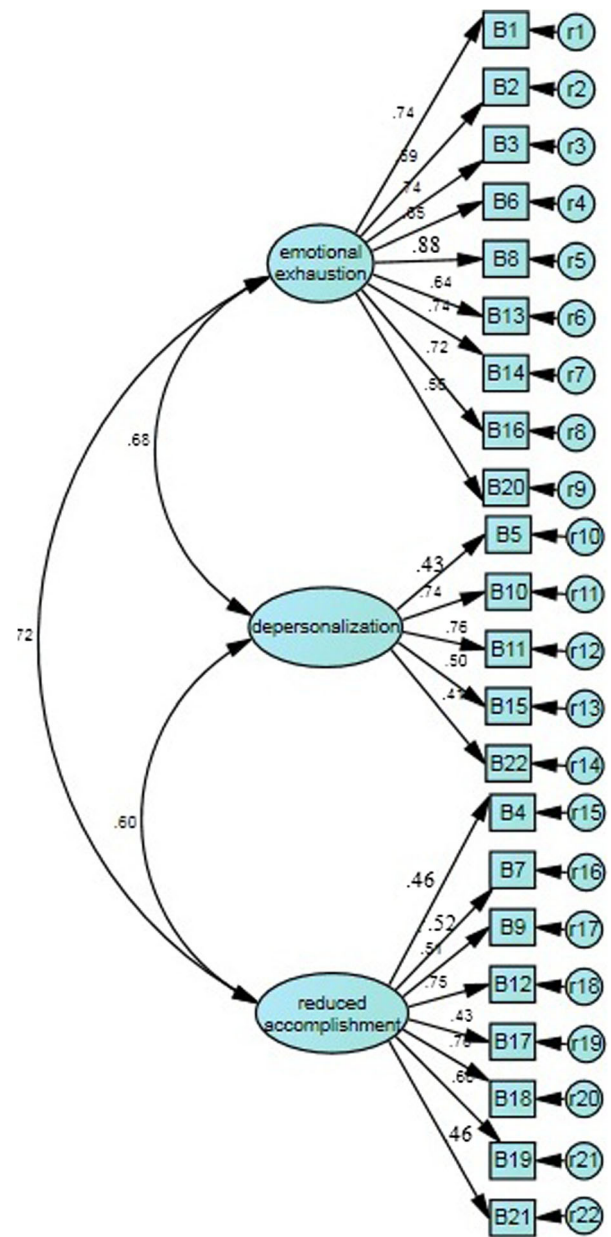


Fig. 4 Measurement model of burnout

Descriptive Statistics and Correlations

Descriptive statistics and Cronbach's alpha for all variables are reported in Table 1. As shown in Table 1, among the three subscales of teaching motivations, altruistic motivation had the highest mean ($M = 5.40$, $SD = .64$), followed by intrinsic ($M = 5.06$, $SD = .53$) and extrinsic motivations ($M = 3.22$, $SD = .90$).

Results of the correlation among the variables can be seen in Table 2. As Table 2 shows, altruistic motivation was positively and significantly related to enjoyment ($r = .40$, $p < .01$) and pride ($r = .42$, $p < .01$), and negatively related to anxiety ($r = -.13$, $p < .05$), anger ($r = -.20$, $p < .01$), and boredom ($r = -.31$, $p < .01$). Altruistic motivation was negatively and

significantly related to emotional exhaustion ($r = -.33$, $p < .01$), depersonalization ($r = -.36$, $p < .01$), and reduced personal accomplishment ($r = -.58$, $p < .01$). Intrinsic motivation was positively and significantly related to enjoyment ($r = .69$, $p < .01$) and pride ($r = .50$, $p < .01$), and negatively related to anxiety ($r = -.34$, $p < .01$), anger ($r = -.31$, $p < .01$), and boredom ($r = -.54$, $p < .01$). Intrinsic motivation was negatively and significantly related to emotional exhaustion ($r = -.53$, $p < .01$), depersonalization ($r = -.45$, $p < .01$), and reduced personal accomplishment ($r = -.60$, $p < .01$). Finally, extrinsic motivation was positively and significantly related to enjoyment ($r = .23$, $p < .01$) and pride ($r = .21$, $p < .01$), and

Table 2 Correlations among emotions, burnout, and teaching motivations

	1	2	3	4	5	6	7	8	9	10	11
Emotions											
1. Enjoyment											
2. Anxiety	-.43**										
3. Anger	-.40**	.47**									
4. Pride	.53**	-.35**	-.20**								
5. Shame	-.08	.34**	.24**	-.16**							
6. Boredom	-.63**	.43**	.48**	-.40**	.20**						
Burnout											
7. Emotional exhaustion	-.60**	.52**	.48**	-.38**	.24**	.67**					
8. Depersonalization	-.44**	.35**	.43**	-.29**	.31**	.37**	.58**				
9. Reduced accomplishment	-.60**	.44**	.37**	-.54**	.15**	.47**	.54**	.50**			
Teaching motivations											
10. Altruistic motivation	.45**	-.17**	-.23**	.45**	-.09	-.32**	-.33**	-.36**	-.58**		
11. Intrinsic motivation	.67**	-.35**	-.32**	.47**	-.05	-.54**	-.53**	-.45**	-.60**	.59**	
12. Extrinsic motivation	.23**	-.17**	-.12*	.21**	-.02	-.19**	-.30**	-.06	-.20**	.17**	.28**

negatively related to anxiety ($r = -.17$, $p < .01$), anger ($r = -.12$, $p < .05$), and boredom ($r = -.19$, $p < .01$). Extrinsic motivation was negatively and significantly related to emotional exhaustion ($r = -.30$, and reduced personal accomplishment ($r = -.20$, $p < .01$).

Emotions and Motivations

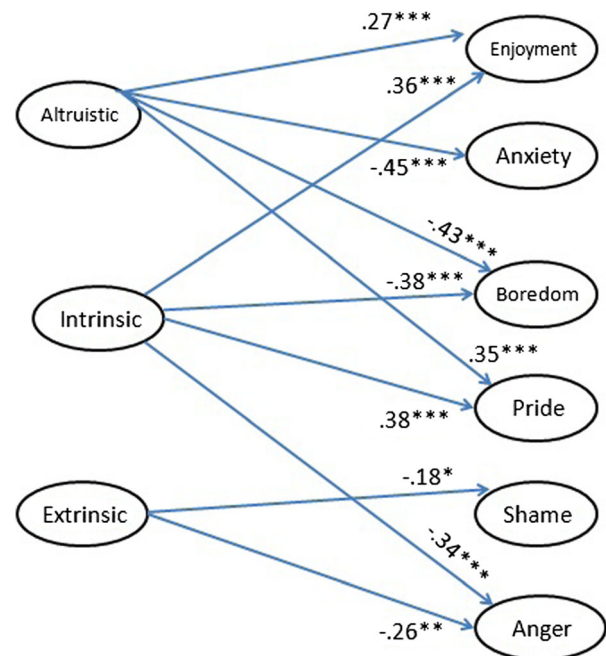
Two non-nested competing (nonhierarchical) models were proposed to see which model can better show the relations between these two constructs. In model1, emotions predicted motivations, and in model2, motivations predicted emotions. To check whether the models are different, χ^2 difference test was used. Moreover, to find which model is a better one, goodness-of-fit indices were taken into account. In addition to χ^2/df , CFI, TLI, RMSEA, and SRMR, other indices including AIC and BIC were taken into account for testing two non-nested competing models (Kline 2011). The model with lower AIC and BIC is considered as the best model.

Two models can be seen in Figs. 5 and 6. In model 1, where motivations predicted emotions, 10 out of 18 paths were significant. In model 2, where emotions predicted motivations, 9 out of 18 paths were significant. Non-significant paths were removed from the models. Fit indices for both models can be seen in Table 3.

Results of the chi-square difference test showed that the two models are significantly different from each other ($\Delta\chi^2 (\Delta\text{df}=12) = 89.58$, $p < .001$). By comparing the fit indices between the two models, it can be found that Model1 is a better fit than Model2. Therefore, the direction from motivations to emotions was considered as the basic model. Effect size (ES)

was also used to help the interpretation of the data. ES is used to estimate meaningfulness of statistically significant findings. Cohen's f^2 was used for calculating ES. The equation for computing f^2 is $f^2 = R^2/1 - R^2$. Interpretation of f^2 is as the following, $f^2 = 0.02$ small effect; $f^2 = 0.15$ medium effect; and $f^2 = 0.35$ large effect.

According to Model1, altruistic motivation positively predicted enjoyment ($\beta = .27$, $R^2 = .07$, $f^2 = .07$, small ES, $p < .001$) and pride ($\beta = .35$, $R^2 = .12$, $f^2 = .13$, small ES, $p < .001$), and negatively anxiety ($\beta = -.45$, $R^2 = .20$, $f^2 = .25$,

**Fig. 5** Motivations as predictors of emotions

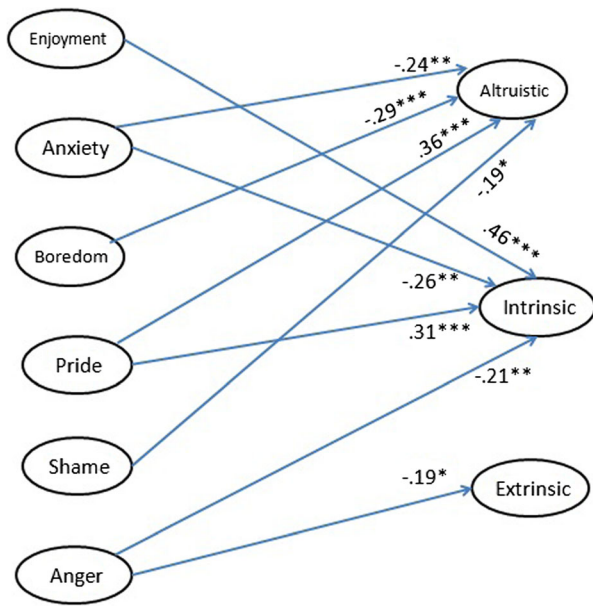


Fig. 6 Emotions as predictors of motivations

medium ES, $p < .001$) and boredom ($\beta = -.43$, $R^2 = .18$, $f^2 = .22$, medium ES, $p < .001$). Intrinsic motivation positively predicted enjoyment ($\beta = .36$, $R^2 = .13$, $f^2 = .15$, medium ES, $p < .001$) and pride ($\beta = .38$, $R^2 = .14$, $f^2 = .16$, medium ES, $p < .001$), and negatively boredom ($\beta = -.38$, $R^2 = .14$, $f^2 = .16$, medium ES, $p < .001$) and anger ($\beta = -.34$, $R^2 = .11$, $f^2 = .12$, small ES, $p < .001$). Finally, extrinsic motivation negatively predicted shame ($\beta = -.18$, $R^2 = .03$, $f^2 = .03$, small ES $p < .05$) and anger ($\beta = -.26$, $R^2 = .06$, $f^2 = .06$, small ES $p < .01$).

Emotions and Motivations as Predictors of Burnout

Based on the findings of the previous section with regard to the relations between emotions and motivations, a model of teacher burnout based on the teachers' emotions and teaching motivations was proposed. Composite variables were used for emotions to make the model easier for analysis and

interpretation. Enjoyment and pride were aggregated as positive emotions, and anxiety, anger, shame, and boredom were aggregated as negative emotions. The proposed model hypothesized that motivations affect emotions and burnout. Moreover, emotions were hypothesized to predict burnout. The model with all the significant paths can be seen in Fig. 7. Goodness-of-fit indices showed that the model fitted the data adequately ($\chi^2 = 1907.21$, $df = 837$, $\chi^2/df = 2.27$, CFI = .93, TLI = .92, RMSEA = .06, SRMR = .05).

As can be seen in Table 4, this model accounted for 25 % of the variance in positive emotions ($f^2 = .33$, medium ES), 13 % of the variance in negative emotions ($f^2 = .15$, medium ES), 37 % of the variance in emotional exhaustion ($f^2 = .58$, large ES), 40 % of the variance in depersonalization ($f^2 = .66$, large ES), and 26 % of the variance in reduced personal accomplishment ($f^2 = .35$, large ES). This shows that this model significantly and practically explains the variance of positive emotions, negative emotions, emotional exhaustion, depersonalization, and reduced personal accomplishment.

As Fig. 7 indicates, intrinsic motivation ($\beta = .48$, $R^2 = .23$, $f^2 = .29$, medium ES) and altruistic motivation ($\beta = .21$, $R^2 = .04$, $f^2 = .04$, small ES) directly predicted positive emotions. Moreover, intrinsic motivation ($\beta = -.36$, $R^2 = .13$, $f^2 = .15$, medium ES) was an inverse predictor of negative emotions. Extrinsic motivation did not predict any emotions.

Intrinsic motivation ($\beta = -.23$, $R^2 = .05$, $f^2 = .05$, small ES), altruistic motivation ($\beta = -.20$, $R^2 = .04$, $f^2 = .04$, small ES), and positive emotions ($\beta = -.28$, $R^2 = .07$, $f^2 = .07$, small ES) inversely predicted emotional exhaustion, while negative emotions ($\beta = .44$, $R^2 = .19$, $f^2 = .23$, medium ES) directly predicted emotional exhaustion.

Negative emotions ($\beta = .51$, $R^2 = .26$, $f^2 = .35$, large ES) and extrinsic motivation ($\beta = .20$, $R^2 = .04$, $f^2 = .04$, small ES) directly predicted depersonalization, and altruistic motivation ($\beta = -.29$, $R^2 = .08$, $f^2 = .08$, small ES) inversely predicted depersonalization.

Negative emotions ($\beta = .37$, $R^2 = .13$, $f^2 = .15$, medium ES) directly predicted reduced personal accomplishment, and altruistic motivation ($\beta = -.32$, $R^2 = .10$, $f^2 = .11$, small ES) inversely predicted reduced personal accomplishment.

Table 3 Fit indices of both models

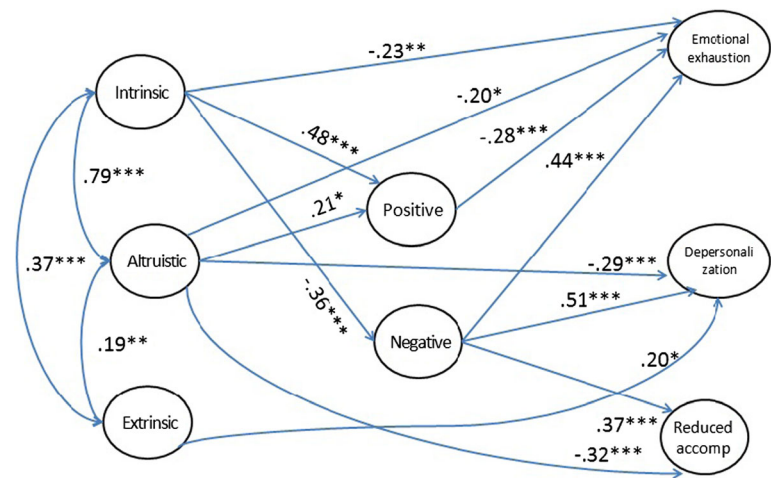
	Model1:motivations->emotions	Model2:emotions->motivations
χ^2	1173.26	1262.84
df	561	573
χ^2/df	2.09	2.20
CFI	.931	.915
TLI	.926	.908
RMSEA	.058	.061
SRMR	.041	.053
AIC	1383.26	1448.84
BIC	1780.88	1801.02

Discussion

Finding the causes of teacher burnout has attracted the attention of researchers, and different factors have been identified as sources of burnout. However, less attention has been given to affective-motivational factors of burnout (Fernet et al. 2012). The purpose of the current study was to examine a model of burnout based on emotions and motivation.

Descriptive statistics showed that the main reason for EFL teachers to teach English was altruistic motivation. In other words, teachers' contribution to society and students' progress

Fig. 7 Motivations and emotions as predictors of burnout



have a high influential role in motivating EFL teachers. Altruistic motivation was followed by intrinsic motivation for EFL teachers which shows the importance of enjoying the teaching activity as the second main reason of motivation. Descriptive statistics showed extrinsic motivation had a very low mean in comparison with altruistic and intrinsic motivations. Therefore, descriptive statistics indicated that altruistic and intrinsic factors are more influential in motivating EFL teachers than extrinsic factors and material gain. These results are consistent with Wong et al. (2014) and Gu and Lai (2012) who found the same pattern for teachers' motivations in Hong Kong.

First, two causal models of emotions and motivation were checked to find the model with better fit. Both models showed good fit to the data. However, the "motivation causing emotions" model showed better fit indices and also AIC and BIC indices indicated that "motivation causing emotions" model is a better model than "emotions causing motivation".

Based on "motivation causing emotions" model, different motivations teachers have for teaching cause different emotions for them. Teachers who were altruistically motivated enjoyed their teaching and were proud of it, and also they were less anxious and felt less boredom. Teachers who were intrinsically motivated enjoyed their teaching and were proud of it, and felt less boredom and anger. Teachers who were extrinsically motivated felt less shame and anger. However, the magnitude of these relations was different. Although both altruistic

and intrinsic motivations predicted enjoyment, intrinsic motivation was a stronger predictor than altruistic motivation. Again, although both altruistic and intrinsic motivations predicted pride, intrinsic motivation was a stronger predictor than altruistic motivation. From these two findings, it can be inferred that among the three types of motivation, intrinsic motivation is the major type for experiencing positive emotions among teachers. The highest level of positive emotions is experienced by teachers when they are intrinsically motivated. In other words, when teachers teach because they are interested in teaching activity itself, they experience positive emotions.

Extrinsic motivation had no effect on positive emotions. Therefore, when teachers teach due to external factors such as financial issues they do not experience positive emotions. However, results of this study indicated that extrinsic motivation decreased negative feelings of shame and anger. One possible reason is that having some sort of extrinsic motivation is better than having no motivation at all (i.e. amotivation, Dornyei 1994). Although amotivation was not assessed in this study, it is expected that amotivation would be positively related to negative emotions among teachers. For example, Khodadady and Khajavy (2013) found that amotivation is a positive predictor of anxiety among students.

Finally, a model of burnout based on affective-motivational factors was tested. Model showed good fit to the data. In this model, all four negative emotions were aggregated as a composite variable of negative emotions, and all two positive emotions were aggregated as a composite variable of positive emotions. Results of SEM showed that intrinsic motivation predicted positive emotions. This finding was in line with previous part which showed that intrinsic motivation was a predictor of enjoyment and pride. Intrinsic motivation was also an inverse predictor of negative emotions. When teachers teach because they enjoy teaching and they find teaching interesting, it is unlikely that they experience negative emotions. Altruistic motivation also predicted positive emotions. When

Table 4 Summary ES estimates for latent endogenous variables

Latent variable	R^2	f^2
Positive emotions	.25	.33
Negative emotions	.13	.15
Emotional exhaustion	.37	.58
Depersonalization	.40	.66
Reduced personal accomplishment	.26	.35

teachers teach due to students' progress and contribution to society, they experience positive emotions.

Positive emotion, intrinsic motivation, and altruistic motivation were inverse predictors of emotional exhaustion, while negative emotion was a direct predictor of emotional exhaustion. The finding that intrinsic motivation was an inverse predictor of emotional exhaustion is consistent with previous research (Cresswell and Eklund 2005; Fernet et al. 2012; Reichl et al. 2014. When teachers experience positive emotions, and teach due to their interest in teaching and students' progress, they are less prone to emotional exhaustion. On the other hand, experiencing negative emotions increases emotional exhaustion. This result is consistent with previous studies (Carson 2006; Keller 2014a). Among these four predictors of emotional exhaustion, negative emotion was the strongest predictor, followed by positive emotion, intrinsic motivation, and altruistic motivation, respectively. What can be inferred from this finding is that emotions (both positive and negative) have a more influential role than motivations. Therefore, although one cannot deny the important role of motivations in burnout process, emotions may have more effect than motivations.

Negative emotion and extrinsic motivation were direct predictors of depersonalization, and altruistic motivation was an inverse predictor of depersonalization. Negative emotion was the strongest predictor of burnout, followed by altruistic and extrinsic motivation. When teachers experience negative emotions in the classroom, they are depersonalized. The interesting finding is about the role of extrinsic and altruistic motivations in depersonalization. While altruistic motivation decreases depersonalization, extrinsic motivation increases depersonalization. Therefore, teachers who teach for external factors such as having a higher salary may have negative attitudes towards their students and colleagues and also may be indifferent to them, which stands against those teachers whose aim for teaching are social utility factors such as students' progress.

Finally, negative emotion was a direct predictor of reduced personal accomplishment and altruistic motivation was an inverse predictor of reduced personal accomplishment. Negative emotion was a stronger predictor than altruistic motivation. Therefore, teachers who are altruistically motivated have more belief in their own capabilities to successfully teach. Intrinsic and extrinsic motivations had no effect on reduced personal accomplishment.

Results of this study provide some pedagogical implications for teachers and teacher trainers. Teaching motivations affected emotions and different dimensions of burnout. Teachers who are intrinsically and altruistically motivated are less likely to feel burnout. Therefore, institutes which are hiring teachers could have an interview or they can give them a motivation scale to be aware of the students' reasons for teaching.

Experiencing negative emotions exacerbated burnout while experiencing positive emotions hinders burnout. Teachers should be aware of the emotions they feel in the classroom. They should know how to control their negative emotions and on the other side how to increase positive emotions in the classroom. Making a joyful classroom environment and building positive and trustful relations with students can decrease feeling of anxiety on both students and teachers.

There are some limitations that should be taken into account. First, this study only focused on teachers who are teaching at private language institutes in Iran. The motivational patterns, emotional experiences, and also the burnout syndrome may be different among EFL teachers who are teaching at state schools or universities. Therefore, future research needs to explore other contexts. Second, this study used a one-shot design to assess teachers' motivation, burnout, and emotions. As these constructs are not stable and change over time, changes could be taken into account using longitudinal studies that measure data on different time points.

Conclusion

This study aimed at exploring EFL teachers' motivations and testing a model of burnout based on affective-motivational factors. Results indicated that motivations predicted different emotions. Moreover, both motivations and emotions predicted different dimensions of burnout. These findings suggest the influential role of motivations and emotions in burnout.

Compliance with Ethical Standards

Conflict of Interest Gholam Hassan Khajavy declares that he has no conflict of interest. Behzad Ghonsooly declares that he has no conflict of interest. Azar Hosseini Fatemi declares that she has no conflict of interest.

Appendix

Altruistic Motivation

- M1-Teaching allows me to influence the next generations.
- M2-Being a teacher can help improve society.
- M3-Teaching is a meaningful job.
- M4-Teaching gives me a chance to serve as a positive role model for children/youth.
- M5-I want to help children/youth in their development

Intrinsic Motivation

- M6-The subject(s) I teach is/are important for students.
- M7-Good teachers are much needed.
- M8-I like teaching.
- M9-I feel more competent in teaching than in other jobs.
- M14-The skills I acquire in teaching can be transferred to other jobs in the future.
- M15-Teaching involves various kinds of work and so is not boring

Extrinsic Motivation

M10-The salary is relatively high.

M11-After pursuing an educational degree, it is natural that I become a teacher.

M12-It is a stable job.

M13-Teachers are generally respected

Enjoyment

E1-I generally enjoy teaching.

E2-I generally have so much fun teaching that I gladly prepare and teach my lessons.

E3-I generally teach with enthusiasm.

E4-I often have reasons to be happy while I teach.

Anxiety

E5-I generally feel tense and nervous while teaching.

E6-I am often worried that my teaching is not going so well.

E7-Preparing to teach often cause me to worry.

E8-I feel uneasy when I think about teaching.

Anger

E9-I often have reasons to be angry while I teach.

E10-I often feel annoyed while teaching.

E11-Sometimes I get really mad while I teach.

E12-Teaching generally frustrates me.

Pride

E13-I am proud of my teaching.

E14-Achievements my students have made in my classes make me proud of my teaching.

E15-I talk to my colleagues about how well I teach in my classes.

E16-I am proud of my knowledge of teaching.

Shame

E17-I am ashamed of my teaching.

E18-When I cannot answer my students' questions, I feel shameful.

E19-I am embarrassed that I cannot express myself well while teaching.

E20-I feel ashamed because I cannot provide quality instruction in my class.

Boredom

E21-Teaching sounds boring to me.

E22-Because the time drags I frequently look at my watch.

E23-Teaching the Materials are boring to me.

E24-Students and classroom environment make me bored.

Emotional Exhaustion

B1-I feel emotionally drained from my work.

B2-I feel used up at the end of the workday.

B3- I feel fatigued when I get up in the morning and have to face another day on the job.

B6- Working with people all day is really a strain on me.

B8- I feel burned out from my work.

B13- I feel frustrated by my job.

B14- I feel I am working too hard on my job.

B16- Working with people directly puts too much stress on me.

B20- I feel like I am at the end of my rope.

Depersonalization

B5- I feel I treat some students as if they were impersonal objects.

B10-I have become more callous toward people since I took this job.

B11-I worry that this job is hardening me emotionally.

B15- I do not really care what happens to some students.

B22- I feel students blame me for some of their problems.

Personal Accomplishment

B4- I can easily understand how my students feel about things.

B7- I deal very effectively with the problems of my students.

B9- I feel I am positively influencing other people's lives through my work.

B12- I feel very energetic.

B14- I feel I am working too hard on my job.

B16- Working with people directly puts too much stress on me.

B17- I can easily create a relaxed atmosphere with my students.

B18- I feel exhilarated after working closely with my students.

B19- I have accomplished many worthwhile things in this job.

B20- I feel like I am at the end of my rope.

B21- In my work, I deal with emotional problems very calmly.

References

- Aloe, A. M., Amo, L. C., & Shanahan, M. E. (2014). Classroom management self- efficacy and burnout: A multivariate meta-analysis. *Educational Psychology Review*, 26, 101–126.
- Azizi, L., Faizabadi, Z., & Salehi, M. (2008). Tahlile aameli ekteshafi va tayidi e porseshname farsudegie shoghli e Maslach dar karkonane daneshgahe Tehran [Exploratory and confirmatory factor analyses of Maslach Burnout Inventory among Tehran university employees]. *Motaleate ravanshenakhti [Psychological Studies]*, 4(3), 73–92.
- Carson, R. L. (2006). *Exploring the episodic nature of teachers' emotions as it relates to teacher burnout*. Purdue University, West Lafayette, Indiana.
- Carson, R. L. (2007). *Emotional regulation and teacher burnout: Who says that the management of emotional expression doesn't matter?*. Chicago, IL: Paper presented in the annual meeting of American Educational Research Association.
- Chang, M. L. (2009). An Appraisal Perspective of Teacher Burnout: Examining the Emotional Work of Teachers. *Educational Psychology Review*, 21(3), 193–218.
- Chang, M. L. (2013). Toward a theoretical model to understand teacher emotions and teacher burnout in the context of student misbehavior: Appraisal, regulation, and coping. *Motivation and Emotion*, 37(4), 799–817.
- Cresswell, S. L., & Eklund, R. C. (2005). Motivation and burnout among top amateur rugby players. *Medicine and Science in Sports and Exercise*, 37, 469–477.
- De Jesus, S. N. & Lens, W. (2005). An integrated model for the study of teacher motivation. *Applied Psychology: An International Review*, 54, 119–134.
- Deci, E. L., & Ryan, R. M. (1985). *Intrinsic motivation and self-determination in human behavior*. New York: Plenum.
- Dornyei, Z. (1994). Motivation and motivating in the foreign language classroom. *The Modern Language Journal*, 78, 273–284.
- Dornyei, Z. (2005). *The psychology of language learner: Individual differences in second language acquisition*. Mahwah, NJ: Lawrence Erlbaum.
- Fernet, C., Guay, F., & Senécal, C. (2004). Adjusting to job demands: The role of work self-determination and job control in predicting burnout. *Journal of Vocational Behavior*, 65(1), 39–56.
- Fernet, C., Senécal, C., Guay, F., Marsh, H., & Dowson, M. (2008). The Work Tasks Motivation Scale for Teachers (WTMST). *Journal of Career Assessment*, 16, 256–279.
- Fernet, C., Guay, F., Senécal, C., & Austin, S. (2012). Predicting intraindividual changes in teacher burnout: The role of perceived

- school environment and motivational factors. *Teaching and Teacher Education*, 28, 514–525.
- Frenzel, A. C. (2014). Teacher emotions. In L. Linnenbrink-Garcia & R. Pekrun (Eds.), *Handbook of emotions in education* (pp. 494–519). New York: Routledge.
- Frenzel, A. C., Pekrun, R., & Goetz, T. (2013). *Emotions Questionnaire for Teachers (EQT) - User's manual*. University of Munich: Department of Psychology: Munich.
- Friedman, I. A. (2000). Burnout in teachers: Shattered dreams of impeccable professional performance. *Journal of Clinical Psychology*, 56, 595–606.
- Gu, M., & Lai, C. (2012). Motivation and commitment: pre-service teachers from Hong Kong and Mainland China at a training institute in Hong Kong. *Teacher Education Quarterly*, 39(3), 45–61.
- Hargreaves, A. (1998). The emotional practice of teaching. *Teaching and Teacher Education*, 14(8), 835–854.
- Keller, M. M., Chang, M.-L., Becker, E. S., Goetz, T., & Frenzel, A. C. (2014a). Teachers' emotional experiences and exhaustion as predictors of emotional labor in the classroom: An experience sampling study. *Frontiers in Psychology*, 5, 1–10.
- Keller, M. M., Frenzel, A. C., Goetz, T., Pekrun, R., & Hensley, L. (2014b). Exploring teacher emotions: A literature review and an experience sampling study. In P. W. Richardson, S. Karabenick & H. M. G. Watt (Eds.), *Teacher Motivation: Theory and Practice* (pp. 69–82). New York: Routledge.
- Khajavy, G. H., Ghonsooly, B., Hosseini, A., & Choi, C. W. (2016). Willingness to communicate in English: A microsystem model in the Iranian EFL Classroom Context. *TESOL Quarterly*, 50(1), 154–180. doi:10.1002/tesq.204
- Khodadady, E., & Khajavy, G. H. (2013). Exploring the Role of Anxiety and Motivation in Foreign Language Achievement: A Structural Equation Modeling Approach. *Prota Linguarum*, 20, 269–286.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.) New York, NY: Guilford Press.
- Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Occupational Behavior*, 2, 99–113.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach burnout inventory manual* (3rd ed.). Palo Alto, CA: Consulting Psychologists Press.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397–422.
- Pietarinen, J., Pyhältö, K., Soini, T. & Salmela-Aro, K. (2013) Reducing teacher burnout: A socio-contextual approach. *Teaching and Teacher Education*, 35, 62–72.
- Reichl, C., Wach, F.-S., Spinath, F. M., Brünken, R. & Karbach, J. (2014). Burnout risk among first-year teacher students: The roles of personality and motivation. *Journal of Vocational Behavior*, 85, 85–92.
- Richardson, P. W., & Watt, H. M. G. (2006). Who chooses teaching and why? Profiling characteristics and motivations across three Australian universities. *Asia-Pacific Journal of Teacher Education*, 34, 27–56.
- Schaufeli, W. B., Enzmann, D. (1998). *The burnout companion to study and practice: a critical analysis*. Philadelphia: Taylor & Francis.
- Schaufeli, W. B., Enzmann, D., & Girault, N. (1993). Measurement of burnout: A review. In W. B. Schaufeli, C. Maslach & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research* (pp. 199–215). Philadelphia: Taylor & Francis.
- Sutton, R. E., & Wheatley, K. F. (2003). Teachers' emotions and teaching: A review of the literature and directions for future research. *Educational Psychology Review*, 15(4), 327–358.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston: Pearson Education.
- Taxer, J. L., & Frenzel, A. C. (2015). Facets of teachers' emotional lives: A quantitative investigation of teachers' genuine, faked, and hidden emotions. *Teaching and Teacher Education*, 49, 78–88.
- Thomson, M. M., Turner, J. E., & Nietfeld, J. L. (2012). A typological approach to investigate the teaching career decision: motivations and beliefs about teaching of prospective teacher candidates. *Teaching and Teacher Education*, 27, 579–588.
- Vandercammen, L., Hofmans, J., Theuns, P. (2014) Relating Specific Emotions to Intrinsic Motivation: On the Moderating Role of Positive and Negative Emotion Differentiation. *PLoS ONE* 9(12), e115396. doi:10.1371/journal.pone.0115396
- Watt, H. M. G., Richardson, P. W., Klusmann, U., Kunter, M., Beyer, B., Trautwein, U., et al. (2012). Motivations for choosing teaching as a career: an international comparison using the FIT-Choice scale. *Teaching and Teacher Education*, 28, 791–805.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4), 548–573.
- Williams, J., & Forgasz, H. (2009). The motivation of career change students in teacher education. *Asia-Pacific Journal of Teacher Education*, 37, 95–108.
- Wong, A.K.Y., Tang, S.Y.F., & Cheng, M.M.H. (2014). Teaching motivations in Hong Kong: Who will choose teaching as a fall back career in stringent Job market? *Teaching and Teacher Education*, 41(2):81–91.