

Conceptions of assessment and teacher burnout

Reza Pishghadam^{a*}, Bob Adamson^b, Shaghayegh Shayesteh Sadafian^c and Flora L. F. Kan^d

^aLanguage Education, Ferdowsi University of Mashhad, Mashhad, Iran; ^bEducation, Hong Kong Institute of Education, Hong Kong; ^cMA in TEFL, Ferdowsi University of Mashhad, Mashhad, Iran; ^dEducation, University of Hong Kong, Hong Kong

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Teacher burnout is an important phenomenon that affects the education system and society as a whole. Assessment represents a form of stress for teachers, and this study explores the association between teachers' assessment-related beliefs and their burnout level. To this end, the Teachers' Conceptions of Assessment (TCoA) inventory along with the Maslach Burnout Inventory were administered to a sample of Iranian teachers of English language. Multiple correspondence analysis and multiple regression analysis were employed for data analysis. The results reveal a significant relationship between TCoA and the three dimensions of burnout (emotional exhaustion, depersonalisation and reduced personal accomplishment). It is similarly found that conceiving of assessment as irrelevant to the life and work of teachers and learners is the best predictor of Depersonalisation and Personal Accomplishment, whereas Student Accountability is the best predictor of Emotional Exhaustion. Finally, the results are discussed and implications are provided in the context of education.

Keywords: teachers' conceptions of assessment; burnout; multiple correspondence analysis

1. Introduction

Assessment is an integral part of the education process and an important research topic. This notion is deemed specifically potent since it may simplify or impede the process of learning (Black & Wiliam, 1998). Of real interest is teachers' view of assessment. Teachers are considered to be at the heart of any educational system and are key factors in modifying assessment information to improved learning (Brown, Kennedy, Fok, Chan, & Yu, 2009).

Meanwhile, teachers may experience different psychological problems such as guilt (Hargreaves, 1994), self-sacrifice (Blackmore, 1996) and a sense of loss (Nias, 1991), which may affect their views, attitudes and practices in the classroom. Although teaching is often referred to as a labour of love, it is a stressful occupation (Hargreaves, 1998). Despite the fact that the reasons may vary, most teachers experience stress at some stages during their working life (Pishghadam & Sahebjam, 2012). Many teachers cope with long-term stress; others fail and experience burnout (Jennett, Harris, & Mesibov, 2003). The burnout phenomenon is, 'a chronic state of physical, emotional and mental exhaustion that arises in personnel from the

^{*}Corresponding author. Email: pishghadam@um.ac.ir

cumulative demands of their work' (Goddard, O'Brien, & Goddard, 2006, p. 857). It is mainly distinguished as the inability to be adequately concerned about and engaged with clients due to growing frustration, tension and anxiety (Shukla & Trivedi, 2008). Maslach (1984) clarified burnout as the lack of concern and enthusiasm toward the people one is working with. Further, he maintained that this negative response particularly affects people in roles that demand a large amount of interpersonal contacts or, as Kasinath and Kailaslingam (1995) put it, individuals who do 'people work'. A commonly accepted portrayal of burnout is, 'a three dimensional syndrome of emotional exhaustion, depersonalisation, and reduced personal accomplishment that occurs among individuals who work with people in some helping capacity' (Maslach, 1982, p. 3). Specifically, emotional exhaustion centres around the feeling of being overextended and exhausted by one's work. Depersonalisation is a feeling of ill-will and indifference toward the receivers of one's service. Personal accomplishment hinges on the positive feeling of competence, meaningfulness and achievement in one's work with people (Maslach, 1982).

The teaching profession is not exempt from burnout. Teachers can be viewed as 'people workers' with learners as their 'clients' (Shukla & Trivedi, 2008). Teacher burnout affects not only learners and the classroom environment but also society and educational processes. A teacher who is highly frustrated and detached from students cannot be beneficial to society, the educational system or the workplace (Shukla & Trivedi, 2008). Hence, burnout can be viewed as a major social dysfunction and, therefore, merits careful attention. Numerous studies (e.g. Maslach & Jackson, 1981; Pishghadam & Sahebjam, 2012) have been conducted in this area. Some have investigated the impact of burnout on productivity, health and work efficacy (e.g., Huebner & Huberty, 1984). Others have analysed its genesis (e.g. Maslach & Leiter, 1997). Many studies have been carried out to determine the sources of burnout in the teaching domain, as the two concepts may be directly tied together. For instance, age, gender and years of experience (Maslach & Jackson, 1981); personality traits (Schaufeli, 2003); emotional intelligence (Pishghadam & Sahebjam, 2012); and the classroom environment (Dorman, 2003) all have been identified as influential in teacher burnout.

Meanwhile, assessment – a dominant force in students' lives and a potential cause of anxiety to teachers - has gone largely unnoticed by researchers as a possible source of teacher burnout. Apart from anxiety, assessments (more specifically highstakes tests) bear some other negative effects that may alter teachers' views, leading them to experience burnout. As Shepard (2000) reports, in some circumstances, although students' assessment scores increase, the expected improvement does not take place in their learning. She adds that external testing may even de-skill or deprofessionalise teachers given that the focus of rewards or punishment is on schools and not teachers' ideas. A recent experience shows that all tests can have a corrupting influence on teachers and their teaching (Whitford & Jones, 2000). Lately, teachers' attitudes toward assessment have been investigated (Brown, 2004, 2008; Brown, Lake, & Matters, 2011; Kemp & Friesen, 2009). The way teachers conceive of assessment can strongly impact the way they make decisions and act in different situations. A person's attitude will determine the way he/she interprets the situations around himself/herself and his/her relationships with others (Pishghadam & Pourali, 2011). In the same vein, conceptions operate as a framework through which teachers perceive, respond to and interact with their teaching environment (Marton, 1981). Teachers' styles of thinking concerning different issues of pedagogical procedures

such as assessment intensely affect how they teach and what students may learn (Thompson, 1992). These attitudes are mostly influenced by teacher cognition. Borg (2009) declared that teacher cognition is what teachers think, know and believe, which can play a remarkable role in the way teachers act in the classroom. As teachers' conceptions influence their pedagogical engagement with students, it can be argued that those conceptions can also influence their disengagement with students – and thus their burnout level (Bibou-Nakou, Stoqiannidou, & Kiosseoqlou, 1999). The present study investigates the association between teachers' assessment-related beliefs and their level of burnout.

2. Theoretical framework

2.1. Burnout

2.1.1. Teacher burnout

Teachers experiencing burnout show chronic symptoms such as emotional exhaustion, fatigue and loss of feelings of accomplishment, which may affect their teaching performance either advertently or inadvertently. As a consequence, they find that their feelings toward their job, their students and even themselves have become more negative than in the past (Shukla & Trivedi, 2008). Furthermore, teachers suffering from burnout tend to communicate less frequently with their students and provide less information, praise and agreement to their ideas (Beer & Beer, 1992). A number of studies have provided evidence about the factors which may lead to increased risk of burnout.

2.1.2. Factors influencing teacher burnout

Previous studies have demonstrated that factors such as work pressure, lack of support and role clarity are highly influential on burnout rate (Kahill, 1988; Maslach & Goldberg, 1998). In Hong Kong, Lau (2002) found that, 'teaching language subjects does not seem to be a salient factor of teacher burnout while teaching students with lower academic ability is related to greater burnout in depersonalization' (p. 316). In regard to the relationship between burnout and different sources of teacher occupational stress, Lau's study also revealed that, 'heavy workload and time pressure had a large correlation with emotional exhaustion (r = .48) while student misbehaviour had a larger correlation with both depersonalisation (r = .356) and personal accomplishment (r = -.266)' (p. 319). Elsewhere, Schaufeli and Enzmann (1998) identified variables such as age, marital status and personality type as influential factors of teacher burnout. Additionally, unmarried participants were more apt to burnout than their married counterparts. In terms of personality traits, they concluded that there is a high level of burnout among people with low self-esteem and low levels of resilience. Schaufeli and Enzmann's (1998) findings concerning personality traits were reinforced in another way by Pishghadam and Sahebjam (2012), who studied the effects of personality and emotional intelligence on teacher burnout. Their analysis revealed that there is a significant relationship between emotional intelligence and personality types as well as the three dimensions of burnout. The results indicated that the best predictors for emotional exhaustion were neuroticism and extroversion, for depersonalisation were intrapersonal scale of emotional intelligence and agreeableness, and for personal accomplishment were interpersonal scale and conscientiousness. However, Schaufeli

and Enzmann's (1998) findings concerning age were in sharp contrast with the commonly held view that burnout takes time to evolve. In accordance, it is to some extent far from logical to expect beginning teachers to experience this widespread problem (Maslach & Jackson, 1981). Yet, Fimian and Blanton (1987) disputed this logic by comparing less experienced and more experienced teachers in terms of burnout syndrome. The results showed that the burnout level appeared to be nearly identical in both groups.

In sum, research findings have revealed that numerous factors exist which may contribute to teacher burnout. Taylor and Sobel (2001) reported that teachers may not have the required knowledge or experience to interact with or address issues concerning students from different backgrounds. Hence, the stress and adversity may end in occupational burnout. Similarly, students' discipline problems such as discourtesy and being noisy (Borg, Riding, & Falzon, 1991), along with parental expectations (McCormick, 1997), have been considered as major sources of stress and teacher burnout. Moreover, lack of access to facilities, and dissatisfaction with the physical environment or with working time were found to be strong organisational factors (Friedman, 1991).

On the whole, due to the importance of burnout, researchers have set out numerous studies to find out the probable reasons behind its emergence. However, it seems that education is still suffering from this preventable syndrome. Despite all the aforementioned factors which affect burnout, the need for further research is still felt. Therefore, this study focuses on assessment and teachers' understanding of assessment as another likely cause of burnout. In addition to their positive points, assessments may have some negative effects on education, such as teaching to the test (Whitford & Jones, 2000). In sum, it is assumed that these negative aspects of assessments along with the stress they are likely to impose on teachers based on the results they may obtain – such as failure of students or their teaching practices – may lead to burnout.

2.2. Teachers' conception of assessment

2.2.1. Assessment

Assessments are fundamental components of the teaching and learning process. Morris and Adamson (2010) define assessment as, 'those actions we undertake to obtain information about students' knowledge, attitudes or skills' (p. 127). The information collected can serve different purposes. It can be used as end-of-course evaluation of student achievement (summative assessment) and/or as on-going feedback to diagnose, predict and guide students to improve their future performance (formative assessment). Different stakeholders have different views on the purposes of assessment and amongst them, teachers' views are crucial because assessment results can inform them of the success or failure of their teaching approaches, as well as how effectively their students have learned. Teachers' views and attitudes with regard to assessment are affected by their cultural beliefs. Therefore, the context in which teachers view assessment should be taken into consideration (Brown, 2004). With a view to positioning the present study in the literature, previous studies on TCoA are reviewed.

2.2.2. Previous studies done on TCoA

In a project carried out in Canada, it was found that, 'regardless of grade level, 97% of teachers indicated that the primary purpose of collecting assessment data was to improve student learning, followed closely by improved instruction (96%) and improved communication with students (95%)' (Kemp & Friesen, 2009, p. 2). A study done in Sydney, exploring beginning teachers' perception of assessment, revealed that all participants believed the purpose of assessment was to provide a form of feedback to the teacher (Antzoulatos, 2008).

2.2.3. TCoA inventory and its application

Brown (2008) has developed an instrument for measuring TCoA – the TCoA inventory. He argues that teachers' beliefs about the purposes of assessment can be categorised into four major inter-correlated factors, which in turn can be grouped into two further categories: 'purpose' (categories 1–3) and 'anti-purpose' (category 4). These categories are described below:

Category 1: improvement

Assessment is for improving teaching and learning. The notion of *Improvement*, sometimes known as formative assessment or assessment *for* learning, has been proved to carry positive impacts on education. The considerable merit of the improvement notion is that assessment improves both students' learning and the quality of teaching (Black & Wiliam, 1998).

Category 2: school accountability

Assessment evaluates and holds schools and teachers accountable. This category reflects the belief that the purpose of assessment is for *School Accountability*, i.e. assessment results are used to publicly demonstrate that teachers and schools do a good job and reach required standards (Butterfield, Williams, & Marr, 1999).

Category 3: student accountability

Assessment ratifies students' learning and holds them accountable. The purpose of *Student Accountability* is that learners are individually accountable for their own learning. Placing learners into different classes or groups based on assessment results and entry selection examinations is an example of this kind (Brown, 2004). Practices applying this purpose include: assigning scores to students' works, granting certificates based on their performances and making decisions about future pathways based on the results (Guthrie, 2002).

Category 4: irrelevant

This category reflects the belief that assessment is irrelevant to the life and work of teachers and learners. *Irrelevant* as the final concept posits that the formal evaluation of students holds no legitimate position within pedagogical purposes perhaps because it is bad, unfair or causes unnecessary anxiety and damages learners' self-esteem. The idea of unreliability in assessment results may enrich this 'anti-purpose' belief (Brown, 2004).

With respect to the TCoA, Brown (2008) argues that there is a strong tension between the *accountability*- and *improvement*-oriented purposes of educational

assessment. In Hong Kong, where there is a strong public examinations system and cultural acceptance that examinations lead to enhanced social equity (Cheung, 2008), Brown et al. (2009) found that there was a strong and positive correlation between the belief that assessment is useful to *evaluate* students and assessment is for *improvement*. Brown, Hui, Yu, and Kennedy (2011) conducted another study on Hong Kong and South China teachers' conception of assessment, concluding that *accountability* was positively correlated with *improvement*. They argued that this association indicates that, 'teachers are persuaded that a powerful way to improve student learning is to examine them' (p. 314). In the studies carried out in New Zealand (Brown, 2011) and Queensland (Brown, Lake, & Matters, 2011), teachers specified the *improvement* of teaching and learning as the basic goal of assessment. In a recent study, Pishghadam and Shayesteh (2012) investigated Iranian EFL TCoA and found that teachers mainly believed that assessment makes *students* more *accountable*.

Last but not least, within the educational context of Iran and with regard to Brown's (2008) taxonomy of TCoA, it is expected that teachers are likely to consider assessment as School Accountability. Due to the tough competition which exists among the language institutes to attract more students, it is assumed that assessment intends to publicly show which institute does a better job. However, Pishghadam and Shayesteh (2012) found Student Accountability as the teachers' dominant view toward assessment in Iran. In this regard, given the fact that belief in either School or Student Accountability can undermine the role of teachers as active members of their working place, it also implies that teachers are under constant pressures and do not want to take responsibility for the assessments. These probable pressures may lead to teachers' emotional exhaustion, depersonalisation or low level of personal accomplishment, and eventually burnout.

3. Purpose and context of the study

Developing a better understanding of the beliefs teachers hold in terms of teaching, learning and specifically assessment can be beneficial owing to the fact that their beliefs are directly linked to the quality of education (Brown, 2004; Thompson, 1992). Assessments, as a key component of education, have some negative effects on teaching and learning. Similarly, they are a source of stress and anxiety not only for students but also for their teachers (Shepard, 2000). Consequently, it is hypothesised that teachers' different views toward this stressful phenomenon may increase the risk of burnout. In retrospect, the current paper investigates the relationship between Iranian TCoA and their burnout level, with a focus on the following points:

- First, to explore the relationship between a group of Iranian EFL teachers' beliefs about assessment and their burnout level;
- Second, to examine which teachers' beliefs best predict different forms of teacher burnout.

Within the context of Iran, English language education is basically viewed as a theory-oriented rather than a practice-oriented system: that is, speaking English is considered to have little use in society, instead, English language learners' primary intentions are to pass school tests, universities' entrance exams or international proficiency tests. Public schools in Iran do not, generally, have high success rates in

developing English language skills, so the majority of students wishing to pass tests or examinations in English attend private language schools. Over recent decades, English language institutes have undergone educational reforms to focus more on language functions, communicative needs and meaningful learning than in the past. Yet, public schools still tend to pursue their old rote learning policies of grammartranslation, including reading and translating texts, memorising vocabulary and practising grammar rules. Public schools are mainly run with government funding and provide their students with free education. In this system, decisions are made by the government and teachers deliver government policy by teaching from prescribed books and materials. Furthermore, in public schools, teachers are permanently employed and do not have the fear of losing their jobs; thus, there is no pressure to improve teaching practices. These schools offer the students a general programme which includes various subjects such as mathematics, science, history, Persian and English. Moreover, the students' mother tongue (i.e. Persian) is used as the medium of communication and teaching due to the fact that most of the teachers are not fluent in English. Students' learning is chiefly assessed through high-stakes and standardised tests. The test content of each course is generally decided by the teacher or government (Ministry of Education), while the minimum achievement criterion is set by the ministry which is 10 out of 20. Summative assessment plays a substantial role in making decisions about learners and their level of achievement. That is, their final score is the ultimate aim. Schools have two semesters in each year and students receive credentials at the end of each semester; however, the last semester is more significant since it reflects whether the learners are permitted to continue to the next grade.

The educational systems of language institutes are decentralised. Language schools charge tuition fees and depend on these fees or other non-public sources. Their only purpose is language education. They have the flexibility to establish different programmes, curriculums and assessment systems with regard to their learners' different needs. Selecting textbooks and materials together with the course content is done by the institutes and teachers have more freedom in administering their own materials and strategies. However, institute teachers are temporarily employed; where they do not attract more learners to the institute, they will be replaced immediately. Furthermore, the medium of communication and instruction is English and teachers are required to avoid the learners' mother tongue (i.e. Persian) in class. In this system, students' learning is measured through different tests designed by the institutes along with class activities, tasks and term projects. Approximately 60% of learners' total scores result from the qualitative and quantitative evaluation of their class performance (i.e. formative assessment); 10% from the midterm exam; and 30% from the final exam and interview. The minimum criterion for passing is usually 70 or 75 out of 100. Institutes have four or eight terms each year (i.e. one/two terms per season). At the end of each term, they provide their learners with credentials to proceed to the next level.

Inspecting the two contexts, it is believed that since institute teachers have more freedom and options in their job, they experience burnout less or later than their colleagues teaching at schools (Pishghadam, Shapoori, & Shayesteh, 2011). Moreover, given that unlike schools, institutes themselves (not the government) are the authorities in charge, it is assumed that their influence may be extended to teachers' perceptions toward different pedagogical issues and more specifically to assessment as well. Also, occasionally institute teachers are under considerable pressure to pass

their students on assessments, although they do not rightfully deserve to pass. The probable reasons may be that students pay the fees, or teachers and institutes wish to publicly show that they are doing a good job. In retrospect, teachers tend to think of School Accountability as the primary purpose of assessment. In sum, it is hypothesised that the teachers who hold more positive understandings of assessment are less susceptible to burnout.

4. Methodology

4.1. Participants

The sample used in this study consisted of 113 English language teachers working at different private language institutes in Mashhad, a city in northeastern Iran. From among the estimated 700 target population of EFL teachers in Mashhad, 20% (i.e. 140 teachers) were selected based on their willingness to participate. The selection was done according to simple sampling. Initially, 10 language institutes were randomly selected from among almost 50 institutes in Mashhad. Afterwards, teachers were asked to announce their willingness to participate. Ethical approval was obtained prior to commencing the study and collecting data. Participants were initially informed that their identities would not be revealed and their responses would be kept confidential and used for the purpose of research only. From 140 teachers who were invited to take part in the study, 120 teachers returned their questionnaires and seven questionnaires were discarded due to missing data.

The rationale behind selecting language institutes and not public schools was the role of assessment in each setting. As already mentioned, the educational policies within Iran's public schools are centralised. Decisions are made by the government and there exists less freedom on the part of the teachers to employ their own materials and strategies including assessment techniques. In return, high-stakes testing is dominant in this system. Teachers' lack of interest may also contribute to not paying enough attention to improved learning and thus disregarding assessments. In contrast, language institutes adopt a de-centralised educational policy allowing for more flexibility in establishing different programmes, course content and assessment techniques. Further, an internal testing system has replaced public schools' externally imposed testing policy. Accordingly, teachers' enthusiasm goes up along with their increased freedom and more efforts would be made to improve learning by employing various approaches such as assessment techniques.

The participants were both male (n = 36) and female (n = 77) teachers aged between 22 and 52 years old (Mean = 27) with a range of between 1 and 20 years of teaching experience (Mean = 5.5). The teachers had all majored in the various branches of English including English teaching (TEFL) (n = 83), English literature (n = 12) and English translation (n = 18) at BA (n = 9), MA (n = 89) or PhD (n = 15) level. It is necessary to mention that in Iran, people educated in diverse branches of English, with an acceptable level of knowledge and proficiency in English language, are allowed to teach English.

4.2. Instruments

To collect the required information, two instruments were administered to the sample: the Maslach Burnout Inventory (MBI) (Maslach & Jackson, 1981) and Teachers' Conceptions of Assessment inventory (Brown, 2006).

4.2.1. Maslach Burnout Inventory

In order to determine participants' level of burnout, a Persian adaptation of MBI (Maslach & Jackson, 1981) was utilized. The Persian adaptation of MBI was developed over two decades ago and shows accurate indexes of reliability and validity (Badri Gargari, 1995). The reliability of the instrument varied from .74 to .84 and the factorial structure was compatible with the original version. The Cronbach alpha reliability coefficient estimated for this study was equal to .81. The 22-item questionnaire is composed of three subscales: Emotional exhaustion, Depersonalisation and Personal accomplishment. The items are rated in two different ways. Firstly, by frequency, in which the items are scored on a 7-point frequency scale ranging from (0) 'never' to (6) 'everyday'. Secondly, by intensity, in which the items are scored on an 8-point scale ranging from (0) 'none' to (7) 'very much'. The higher the scores in both frequency and intensity, the more the participants experience the feeling of burnout. Since Maslach and Jackson (1981) suggested that the frequency scale is more useful for measuring burnout, this model was chiefly employed in the current study (see Appendix 1).

Teachers' conceptions of assessment

To measure teachers' beliefs about the purpose of assessment, a Persian translation of the TCoA inventory-III (Brown, 2006) was given to a sample of English language teachers. It must be noted that a pilot study was already done by Pishghadam and Shayesteh (2012) to verify and ensure the content validity of the Persian translation of TCoA. Moreover, the results of confirmatory factor analysis revealed that the translated version is compatible with the original one. Table 1 reports the results of the analysis. To confirm the uni-dimensionality of the scale, we applied Rasch measurement employing WINSTEPS software (Linacre, 2009). The overall analysis of the items yielded an item separation index of 5.07 with an item reliability of .91, and a person separation index of 4.18 with a person reliability of .88.

Table 1. Goodness of fit indices.

	χ^2	df	χ^2/df	GFI	TLI	CFI	RMSEA
TCoA	5.52	2	2.76	.97	.95	.99	.05

TCoA is a 27-item self-report questionnaire validated (via structural equation modelling (SEM)) and designed to elicit TCoA with respect to its four primary categories: Improvement, School Accountability, Student Accountability and Irrelevant. Two of the primary categories encompass sub-factors; Improvement had four firstorder factors (i.e. improves teaching, improves learning, is valid, describes student learning) and Irrelevant had three first-order factors (i.e. is ignored, is bad, is inaccurate). The response scale for the items is a six-point, positively packed, agreement rating scale; that is, there are two negative options (i.e. mostly disagree and strongly disagree) and four positive options (i.e. slightly, moderately, mostly and strongly agree) (Brown, 2004). The overall reliability for the instrument estimated by means of Cronbach alpha using the data in this study is .80 (see Appendix 2).

4.3. Methodology

A number of 113 EFL teachers filled out the Persian adaptation of MBI and the Persian translation of TCoA. The responses were then entered into and analysed with SPSS (version 20). The dependent variables were made up of Emotional exhaustion, Depersonalisation and Personal accomplishment and the independent variables were Improvement, Irrelevant, School Accountability and Student Accountability. To investigate the relationship between the dependent and independent variables, multiple correspondence analysis (MCA) was conducted. MCA may also be referred to as homogeneity analysis or principal component analysis for nominal data. MCA is an explanatory data technique employed to analyse categorical data (Benzecri, 1992). In fact, MCA groups 'different variables into a space in such a way that objects with similar profiles are close together, and based on the proximity of variables, the researcher is expected to group and analyse these graphical representations' (Pishghadam & Sahebjam, 2012, p. 230). In their study, Pishghadam and Sahebjam (2012) have considered a minimum number of 100 for running MCA. To do MCA, it was necessary to re-codify the MBI and TCoA scoring. Thus, low scores (up to percentile 33), medium scores (from percentiles 33 up to 66) and high scores (percentiles 66 and higher) were achieved. Thereafter, multiple regression analysis (MRA) was conducted to find out which of the teachers' conceptions best predict burnout dimensions.

5. Results

This study has investigated the relationship between English teachers' assessment-related beliefs with their levels of burnout. To examine the relationship, MCA was conducted. Further, to explore which teachers' conceptions are strong predictors of teacher burnout, MRA was performed.

To start with, Table 2 shows the descriptive statistics of the factors related to the two administered instruments: TCoA and MBI.

		N	Mean	Standard deviation
TCoA	Improvement	113	3.72	.791
	Irrelevant	113	3.47	.626
	School Accountability	113	3.41	.982
	Student Accountability	113	3.98	.871
MBI	Emotional Exhaustion	113	14.32	9.034
	Depersonalisation	113	3.89	4.830
	Personal Accomplishment	113	36.17	7.954

Table 2. Descriptive statistics for TCoA and MBI.

5.1. Multiple correspondence analysis

Figure 1 shows the results from the study by displaying the results from the TCoA inventory and the MBI. The plot demonstrates the relationships between the variables. The analysis presented a 75% level of adjustment, which manifests the accuracy rate of categorisation, thus highlighting three groupings. The row and column points which seem to be close together share identical profiles; whereas the ones

which are placed far from each other hold different profiles (Doey & Kurta, 2011). In accordance, close variable points are circled and labelled from Group A to Group C to simplify the interpretation (Cano-Garcia, Padilla-Munoz, & Carrasco-Ortiz, 2005).

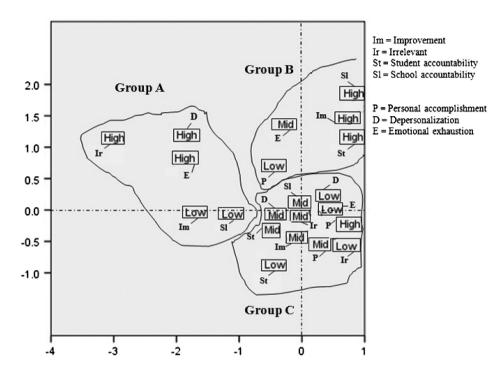


Figure 1. Joint description of TCoA and burnout level (MCA).

Figure 1 demonstrates that Group A includes teachers with high scores in Irrelevant and low scores in School Accountability and Improvement in association with high scores in Depersonalisation and Emotional Exhaustion. Group B represents teachers with high scores in Student Accountability, School Accountability and Improvement in association with medium scores in Emotional Exhaustion and low scores in Personal Accomplishment. Group C stands for the teachers with medium scores in Student Accountability, Improvement, Irrelevant and School Accountability along with low scores in Student Accountability and Irrelevant in relation to low scores in Depersonalisation and Emotional Exhaustion, medium scores in Personal Accomplishment and Depersonalisation and high scores in Personal Accomplishment.

5.2. Multiple regression analysis

The following section presents the results obtained from MRA using TCoA as predictors of burnout dimensions. Table 3 shows the correlations between dependent and independent variables.

	Emotional exhaustion	Depersonalisation	Personal accomplishment
Irrelevant Improvement School accountability Student accountability	.179	.343**	276**
	095	277**	.202*
	194*	208*	.019
	.020	158	.069

Table 3. Correlations between dependent and independent variables.

Notes: *Correlation is significant at the .05 level (two-tailed); **Correlation is significant at the .01 level (two-tailed).

5.2.1. Prediction of emotional exhaustion

Table 4 reveals that there is only one model with a single predictor. This indicates that School Accountability was examined as a predictor of Emotional Exhaustion.

Table 4. MRAs for emotional exhaustion.

Adjusted R ²							
Model	Predictors	\overline{R}	R^2	F	В	Std. error of the estimate	P
1	School accountability	.19	.03	.02	19	8.90	.000

In the model, it can be observed that R^2 equals 03. That is, in this regression model nearly 3% of the variance can be predicted from the independent variable. Simply put, the scores of School Accountability can predict 3% of the variance in Emotional Exhaustion; thus, it can be considered as a fair predictor of Emotional Exhaustion. Furthermore, the standard error of estimate displays the precision of a prediction model. The smaller the standard error of estimate, the better the prediction will be. The standard error of estimate is 8.90, which is an acceptable value. Beta coefficients similarly demonstrate that the association between School Accountability and Emotional Exhaustion is negative and significant (B = -.19, p < .05). It means having a low School Accountability is the best predictor of high scores in Emotional Exhaustion. That is, the teachers who barely view assessment as a tool to publicly show that teachers and schools are doing a good job are probably expected to become more emotionally exhausted by their profession compared to their colleagues with rather different perspectives toward assessment.

5.2.2. Prediction of depersonalisation

As Table 5 shows, there is merely one model with Irrelevant as the sole predictor.

Table 5. MRAs for depersonalisation.

Model	Predictors	R	R^2	Adjusted $R^2 F$	B	Std. error of the estimate	P
1	Irrelevant	.34	.11	.11	.34	4.55	.000

Based on Table 5, it can be seen that R^2 equals .11. It indicates that in the regression model, the scores of Irrelevant account for almost 11% of the variance in

Depersonalisation. Moreover, the standard error of estimate is 4.55, which shows the adequate accuracy of the prediction. Beta coefficients equally present that there is a significant positive correlation between Irrelevant and Depersonalisation (B=.34, p<.01). Hence, having a high score in Irrelevant is the best predictor of Depersonalisation, which means the teachers who propose that assessment does not own any pedagogical purpose and is irrelevant to teachers and learners are somewhat more expected to become indifferent toward their learners and experience burnout.

5.2.3. Prediction of personal accomplishment

Identically to the two aforementioned analyses, Table 6 indicates a single model holding Irrelevant as the exclusive predictor.

Table 6. MRAs for personal accomplishment.

Model	Predictors	R	R^2	Adjusted R ² F	В	Std. error of the estimate	P
1	Irrelevant	.27	.07	.06	27	7.68	.000

According to the table, R^2 equals .07, which means the scores of Irrelevant account for approximately 7% of the variance in Personal Accomplishment. Besides, the standard error of estimate is 7.68, which confirms the accuracy of prediction. Likewise, the relationship between Irrelevant and Personal Accomplishment is significantly negative (B = -.27, p < .01). This implies that having low scores in Irrelevant best predicts high scores in Personal Accomplishment. In other words, the teachers who do not believe in assessment as Irrelevant and account it as an effective instrument to educational intentions are expected to hold positive feelings of competence, meaningfulness and achievement; these teachers may experience burnout later than their counterparts.

6. Discussion

The results show that the four major TCoA are significantly correlated with teacher burnout level. As was illustrated, high scores in Irrelevant and low scores in School Accountability and Improvement are in association with high scores in Depersonalisation and Emotional Exhaustion. That is, the teachers who do not esteem assessment as a sign of school quality or an improvement tool for learning, and deem assessment negative, bad and unfair, may become exhausted, indifferent, and finally experience burnout to a higher degree. Moreover, it was found that high scores in Student Accountability, School Accountability and Improvement are significantly correlated with medium scores in Emotional Exhaustion and low scores in Personal Accomplishment. This finding seems to be very surprising, but if we consider the situation in Iran, the outcomes would be justifiable. One possible line of explanation is that private language institutes have a laissez-faire policy, based on which they make students pass the courses easily. Thus, examination is not very important and teachers are not supposed to design any exam. In this type of situation, when teachers do not have any control over the exam, though they have positive attitudes towards assessment, they are likely to experience burnout. Further, medium scores

in Improvement and School Accountability along with low to medium scores in Student Accountability and Irrelevant are in relation with low scores in Emotional Exhaustion, low to medium scores in Depersonalisation and medium to high scores in Personal Accomplishment. The overall picture of these complex associations is that teachers with negative attitudes to assessment are seemingly more susceptible to different dimensions of burnout.

Teachers' understanding of assessment can significantly predict teacher burnout. The best prediction of high scores in Emotional Exhaustion was provided by low scores in School Accountability. It means that the teachers who do not attempt to publicly show that teachers and schools are doing a good job, feel overextended and exhausted (Maslach, 1982; Pishghadam & Sahebjam, 2012) more than their colleagues who try their best in highlighting their work and the institute they are working at. This finding can be justified in the context of language learning in Iran, where teachers attribute their success or failure to their efforts in manifesting their teaching abilities and highlighting their individual role at the institute they are working at. Due to the tough competition which exists within different language institutes for absorbing more learners, teachers are probably better motivated to attract their authorities' attention and satisfaction, so as not to lose their jobs. Consequently, in accordance with what Clouse (1983) stated, in such cases that teachers lose the necessary motivation for competition, they probably experience burnout. The best prediction of high scores in Depersonalisation was produced by high scores in Irrelevant. It is entirely logical to infer that the teachers who account assessment as inaccurate, neglected or unfair (Brown, 2004), may become indifferent and lose their concern toward their learners and their profession (Maslach, 1982). Eventually, the best prediction of low scores in Personal Accomplishment resulted from high scores in Irrelevant. It is quite justifiable that the teachers who esteem assessment as negative, bad or unfair (Brown, 2004), seemingly do not hold feelings of competence, achievement or meaningfulness (Maslach, 1984); thus, they are likely to experience burnout more than their co-workers.

The results obtained as to the purpose of the study can be interpreted as having some implications for more effective education. First and foremost, in order to prevent this negative dysfunction, new programmes and innovative ways should be proposed to shift teachers' understanding of assessment from bad or unfair to serious and beneficial. To exemplify, more meaningful forms of classroom assessment should be devised to alleviate the negative effects of externally imposed tests and prevent negative views that the teachers may face at times (Shepard, 2000). Also, in order to foster positive ideas of assessment, institute managers and administrators should strongly avoid pushing their teachers to pass students who do not actually deserve to pass. As a matter of fact, in the East (including Iran) interpersonal relationships and emotional factors are highlighted more than those in the West (Norenzayan, Incheol, & Peng, 2007), which in turn may lead to teacher leniency towards assessment. Deeper still, within the educational context of Iran, individuals with adequate levels of proficiency are allowed to teach English. Therefore, teachers majoring in different branches of English other than English teaching (i.e. English literature or English translation) who have not gone through the pertinent university courses are not thoroughly acquainted with the significance of assessment. From this perspective, recruiting teachers who majored in TEFL would be a great help in changing the teachers' negative, unwanted attitudes toward assessment.

A second implication is that those who recruit teachers should pay close attention to the mindsets of the prospective teachers as teachers with negative attitudes towards assessment seem more prone to experiencing burnout. Third, the outcomes of this study present assessment insights in correlation with teacher burnout factors, which must be taken more seriously. In fact, in-service and pre-service teachers are expected to be more conscious of the possible effects of their assessment attitudes on their class performance and motivation.

All in all, the current paper addresses the dearth of empirical studies highlighting teachers' beliefs and also adds to the body of knowledge about teacher burnout. Nonetheless, due to our restricted sampling, caution must be exercised before the results of the present study are generalised to other contexts. In this vein, contexts sharing similar cultural or pedagogical attitudes such as decentralised educational systems which charge tuition fees, administer flexible programmes, curriculums and assessment techniques based on their learners' needs, and employ temporary teachers might make better use of the obtained results. To mention further limitations, this study did not have an equal number of participants from each gender which may cause generalisation to be slightly problematic. Moreover, since our sample teachers majored in different branches of English (i.e. TEFL, English literature and English translation), further research is recommended to investigate the views of teachers who majored in TEFL only. Besides, our findings were based on self-perceived measures of assessment, which can be different from the actual assessment process followed by or imposed on teachers. In fact, teachers may claim something which can be in contrast with the reality. Therefore, it is suggested that other researchers use observation to examine the correspondence between the actual assessment process and the teachers' conceptions of assessment. We should also mention that these selfreport measures do not enjoy a high level of validity and are susceptible to any kind of bias. Advertently or inadvertently, people may not submit accurate answers in order to look better or hide their actual self. Moreover, they may not even be fully aware of their real feelings or inner views. Accordingly, potential bias threatens the validity of these self-reports (Baer, 1998). Last but not least, to find the causal relationships between the variables of this study, further research applying SEM or Loglinear modelling (Hatch & Lazaraton, 1991) is strongly suggested.

The outcome of the study in question adds weight to the argument that burnout researchers would be well advised to pay extra attention to uncovered sources of burnout. In addition, our findings could be compared with those of other cultures and settings to find cross-cultural similarities and difficulties in terms of teacher burnout.

Notes on contributors

Reza Pishghadam has a PhD in Teaching English as a Foreign Language (TEFL). He is currently on the English faculty of Ferdowsi University of Mashhad, Iran. He is now an associate professor of TEFL, who teaches socio-psychological aspects of language education. Over the last five years, he has published more than 120 articles and books in different domains of English language education. In 2007, he was selected to become a member of the National Association of Elites of Iran. In 2010, he was classified as the distinguished researcher in humanities by the Ministry of Sciences, Research, and Technology of Iran. His current research interests are: psychology and sociology of language education, cultural studies, syllabus design, and language testing.

Bob Adamson is a professor of Curriculum studies at Hong Kong Institute of Education and the director of the UNESCO-UNEVOC Centre (Hong Kong). He is currently the head of the Department of International Education and Lifelong Learning in the Institute. He publishes in the fields of English language teaching, teacher education, comparative education, curriculum studies and higher education. His books include *China's English: A History of English in Chinese Education* (2004); *Comparative Education Research: Approaches and Methods* (coedited with Mark Bray & Mark Mason, 2007); and *The Reorientation of Higher Education: Challenging the East-West Dichotomy* (co-edited with Jon Nixon & Feng Su, 2012).

Shaghayegh Shayesteh Sadafian has an MA in TEFL from the Ferdowsi University of Mashhad, Iran. She has published a few articles in national and international journals. Her current research interests are psychology and sociology of language education.

Flora L.F. Kan is an associate professor of the Faculty of Education at the University of Hong Kong. She publishes in history education, curriculum studies and education policy.

References

- Antzoulatos, E. (2008). Beginning secondary teachers and student assessment: Perceptions and experiences of assessment as a pedagogical challenge. The University of Sydney, Faculty of Education and Social Work. Retrieved from http://ses.library.usyd.edu.au/bitstream/2123/5141/1/Ekaterini%20Antzoulatos%20Thesis 1.pdf
- Badri Gargari, R. (1995). *Psychological syndromes in teacher burnout and coping mechanisms* (Unpublished master's thesis). Tarbiat Modares University, Tehran, Iran.
- Baer, J. (1998). The case for domain specificity of creativity. *Creativity Research Journal*, 11, 173–177.
- Beer, J., & Beer, J. (1992). Burnout and stress, depression and self-esteem of teachers. *Psychological Reports*, 71, 1331–1336.
- Benzecri, J. P. (1992). Correspondence analysis handbook. New York, NY: Marcel Decker.
- Bibou-Nakou, I., Stoqiannidou, A., & Kiosseoqlou, G. (1999). The relation between teacher burnout and teachers' attributions and practices regarding school behavior problems. *School Psychology International*, 20, 209–217.
- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. Assessment in Education: Principles, Policy & Practice, 5, 7–74.
- Blackmore, J. (1996). Doing emotional labor in the education market place: Stories from the field of women management. *Discourse: Studies in the Cultural Politics of Education*, 17, 337–349.
- Borg, M. G., Riding, R. J., & Falzon, J. M. (1991). Stress in teaching: A study of occupational stress and its determinants, job satisfaction and career commitment among primary schoolteachers. *Educational Psychology*, 11, 59–75.
- Borg, S. (2009). Teacher cognition and language education. *ELT Journal*, 63, 183–186.
- Brown, G. T. L. (2004). TCoA: Implications for policy and professional development. Assessment in Education: Principles, Policy & Practice, 11, 301–318.
- Brown, G. T. L. (2006). TCoA: Validation of an abridged instrument. *Psychological Reports*, 99, 166–170.
- Brown, G. T. L. (2008). Conceptions of assessment: Understanding what assessment means to teachers and students. New York, NY: Nova.
- Brown, G. T. L. (2011). TCoA: Comparing primary and secondary teachers in New Zealand. *Assessment Matters*, *3*, 45–70.
- Brown, G. T. L., Hui, S. K. F., Yu, F. W. M., & Kennedy, K. J. (2011). TCoA in Chinese contexts: A tripartite model of accountability, improvement, and irrelevance. *International Journal of Educational Research*, 50, 307–320.
- Brown, G. T. L., Kennedy, K. J., Fok, P. K., Chan, J. K. S., & Yu, W. M. (2009). Assessment for student improvement: Understanding Hong Kong teachers' conceptions and practices of assessment. *Assessment in Education: Principles, Policy & Practice*, 16, 347–363.
- Brown, G. T. L., Lake, R., & Matters, G. (2011). Queensland TCoA: The impact of policy priorities on teacher attitudes. *Teaching and Teacher Education*, 27, 210–220.

- Butterfield, S., Williams, A., & Marr, A. (1999). Talking about assessment: Mentor-student dialogues about pupil assessment in initial teacher training. *Assessment in Education: Principles, Policy & Practice, 6*, 222–246.
- Cano-Garcia, F. J., Padilla-Munoz, E. M., & Carrasco-Ortiz, M. A. (2005). Personality and contextual variables in teacher burnout. *Personality and Individual Differences*, 38, 929–940.
- Cheung, T. Y. K. (2008). An assessment blueprint in curriculum reform. *Journal of Quality School Education*, 5, 23–27.
- Clouse, R. W. (1983). *Stress and burnout in the schools*. Washington, DC: National School Resource Network.
- Doey, L., & Kurta, J. (2011). Correspondence analysis applied to psychological research. *Tutorials in Quantitative Methods for Psychology*, 7, 5–14.
- Dorman, J. P. (2003). Relationship between school and classroom environment and teacher burnout: A LISREL analysis. *Social Psychology of Education*, 6, 107–127.
- Fimian, M. J., & Blanton, L. P. (1987). Stress, burnout, and role problems among teacher trainees and first-year teachers. *Journal of Occupational Behaviour*, 8, 157–165.
- Friedman, I. A. (1991). High- and low-burnout schools: School culture aspects of teacher burnout. *Journal of Educational Research*, 84, 325–333.
- Goddard, R., O'Brien, P., & Goddard, M. (2006). Work environment predictors of beginning teacher burnout. *British Educational Research Journal*, 32, 857–874.
- Guthrie, J. T. (2002). Preparing students for high-stakes test taking in reading. In A. E. Farstrup & S. J. Samuels (Eds.), *What research has to say about reading instruction* (pp. 370–391). Newark, DE: International Reading Association.
- Hargreaves, A. (1994). Changing teachers, changing times. London: Teachers' College Press.
- Hargreaves, A. (1998). The emotional practice of teaching. *Teacher and Teacher Education*, 14, 835–854.
- Hatch, E., & Lazaraton, A. (1991). The research manual: Design and statistics for applied linguistics. New York, NY: Newbury House.
- Huebner, E. S., & Huberty, T. J. (1984). Burnout among rural school psychologists. *Research in Rural Education*, 2, 95–99.
- Jennett, H. K., Harris, S. L., & Mesibov, G. B. (2003). Commitment to philosophy, teacher efficacy, and burnout among teachers of children with autism. *Journal of Autism and Developmental Disorders*, *33*, 583–593.
- Kahill, S. (1988). Symptoms of professional burnout: A review of the empirical evidence. *Canadian Psychology*, 29, 284–297.
- Kasinath, H. M., & Kailasalingam, H. M. (1995, May 29). Burnout among college teachers A study. *University News*, pp. 10–11.
- Kemp, S., & Friesen, D. (2009). Student assessment for teaching and learning: Teacher perceptions and practices. Saskatchewan Instructional Development & Research Unit, Faculty of Education, University of Regina. Retrieved from http://www.mcdowellfoundation.ca/main_mcdowell/projects/research_rep/180_student_assessment_for_teaching_and_learning.pdf
- Lau, S. Y. (2002). Teacher burnout in Hong Kong secondary schools (Unpublished PhD thesis). The Chinese University of Hong Kong, Hong Kong.
- Linacre, J. M. (2009). WINSTEPS Rasch programme. Version 3.63.0.
- Marton, F. (1981). Phenomenography describing conceptions of the world around us. *Instructional Science*, 10, 177–200.
- Maslach, C. (1982). Burnout, the cost of caring. Englewood Cliffs, NJ: Prentice Hall.
- Maslach, C. (1984). Understanding burnout: Definitional issues in analyzing a complex phenomenon. In W. S. Paine (Ed.), *Job stress and burnout: Research, theory, and intervention perspectives* (pp. 29–40). Thousand Oaks, CA: Sage.
- Maslach, C., & Goldberg, J. (1998). Prevention of burnout: New perspectives. *Applied and Preventive Psychology*, 7, 63–74.
- Maslach, C., & Jackson, S. E. (1981). *Maslach burnout inventory, research edition. Manual.* Palo Alto, CA: Consulting Psychologists Press.

- Maslach, C., & Leiter, M. P. (1997). The truth about burnout: How organizations cause personal stress and what to do about it. San Francisco, CA: Jossey-Bass.
- McCormick, J. (1997). Occupational stress of teachers: Biographical differences in a large school system. *Journal of Educational Administration*, 35, 18–38.
- Morris, P., & Adamson, B. (2010). *Curriculum, schooling and society in Hong Kong*. Hong Kong: Hong Kong University Press.
- Nias, J. (1991). Changing times, changing identities: Grieving for a lost self. In R. G. Burgess (Ed.), *Educational research and evaluation: For policy and practice* (pp. 139–156). London: Falmer Press.
- Norenzayan, A., Incheol, C., & Peng, K. (2007). Perception and cognition. In S. Kitayama & D. Cohen (Eds.), *Handbook of cultural psychology* (pp. 569–594). New York, NY: Guilford Press.
- Pishghadam, R., & Pourali, S. (2011). Metaphorical analysis of Iranian MA university students' beliefs: A qualitative study. *Higher Education Studies*, 1, 27–37.
- Pishghadam, R., & Sahebjam, S. (2012). Personality and emotional intelligence in teacher burnout. *The Spanish Journal of Psychology*, 15, 227–236.
- Pishghadam, R., Shapoori, M., & Shayesteh, S. (2011). NLP and its relationship with teacher success, gender, teaching experience, and degree: A comparative study. *World Journal of English Language*, 1, 2–8.
- Pishghadam, R., & Shayesteh, S. (2012). Conceptions of assessment among Iranian EFL teachers. *Iranian EFL Journal*, 8, 9–23.
- Schaufeli, W. B. (2003). Past performance and future perspectives of burnout research. *South African Journal of Industrial Psychology*, 29, 1–15.
- Schaufeli, W. B., & Enzmann, D. (1998). *The burnout companion to study and practice: A critical analysis*. London, UK: Taylor & Francis.
- Shepard, L. A. (2000). The role of assessment in a learning culture. *Educational Researcher*, 29, 4–14.
- Shukla, A., & Trivedi, T. (2008). Burnout in Indian teachers. *Asia Pacific Ocean Review*, 9, 320–334.
- Taylor, S. V., & Sobel, D. M. (2001). Addressing the discontinuity of students' and teachers' diversity: A preliminary study of pre-service teachers' beliefs and perceived skills. *Teaching and Teacher Education*, 17, 487–503.
- Thompson, A. G. (1992). Teachers' beliefs and conceptions: A synthesis of the research. In D. A. Grouws (Ed.), *Handbook of research on mathematics teaching and learning* (pp. 127–146). New York, NY: Macmillan.
- Whitford, B. L., & Jones, K. (2000). Kentucky lesson: How high stakes school accountability undermines a performance-based curriculum vision. In B. L. Whitford & K. Jones (Eds.), *Accountability, assessment, and teacher commitment: Lessons from Kentucky's reform efforts* (pp. 9–24). Albany, NY: State University of New York Press.

Appendix 1. Sample items of the MBI

Emotional exhaustion: I feel emotionally drained from my work.

Depersonalisation: I feel I treat some recipients as if they were impersonal objects. Personal accomplishment: In my work, I deal with emotional problems very calmly.

Appendix 2. Sample items of the TCoA

Improvement: Assessment is a way to determine how much students have learned from teaching.

Student Accountability: Assessment is assigning a grade or level to student work.

School Accountability: Assessment is an accurate indicator of a school's quality.

Irrelevant: Assessment is unfair to students.